

AtkinsRéalis



ISA Appendices

North East Combined Authority

October 2024

5231282

NORTH EAST LOCAL TRANSPORT PLAN

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No table of figures entries found.



Appendix A. Scoping Consultation Response



Consultation Body	Consultation Response	Where addressed in the ISA
Transport for the North	<p>Transport for the North (TfN) is generally supportive of the proposed scope of the ISA.</p> <p><i>Plan, Policy and Strategy Review</i></p> <ol style="list-style-type: none"> <li>1. Relevant TfN plans and strategies should be considered within the review of relevant plans, policies and programmes, and key evidence to utilise in your baseline review. In particular: <ol style="list-style-type: none"> <li>a. TfN’s Strategic Transport Plan: Transforming the North (2024), Strategic Transport Plan - Transforming the North Transport for the North, 2024 - Transport for the North - Transport for the North <li>b. TfN’s Strategic Transport Plan: People and Place Framework (2024), People-and-Place-Framework.pdf (transportforthenorth.com) <li>c. TfN’s Strategic Transport Plan: Vision, Strategic Ambitions and SMART Objectives (2024), STP2-Vision-Strategic-Ambitions-SMART-Objectives.pdf (transportforthenorth.com) <li>d. TfN’s Strategic Transport Plan – Integrated Sustainability Appraisal Main Report and Appendices (2024) Annex-5a-ISA2-Main-Report.pdf (transportforthenorth.com) <li>e. TfN’s Strategic Transport Plan – Habitats Regulation Assessment and Appendices (2024) Annex-5c-TfN-HRA-Main-Report-and-Appendices.pdf (transportforthenorth.com) <li>f. The Northern Powerhouse Independent Economic Review – 2023 Update (TfN and NP11) NPIER-2023-Summary-Report-For-Final-Publication.pdf (transportforthenorth.com) <li>g. TfN’s Freight and Logistics Strategy (2022) TFN_Freight_Logistics_DOC_Nov_2022.pdf (transportforthenorth.com) <li>h. TfN International Connectivity and Aviation Policy Position Statement (2022) International Connectivity and Aviation Policy Position Statement Transport for the North - Transport for the North 	<p>Noted.</p> <p>Publicly available TfN plans and strategies have been added to Appendix B of the ISA Report and impact considered within framework accordingly.</p>



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- i. TfN's Connecting Communities: Socially Inclusive Transport Strategy for the North of England (2023) Connecting communities | The socially inclusive transport strategy for the North of England - Transport for the North
 - j. TfN: Transport and social exclusion in the North in 2023/24 Transport and social exclusion in the North in 2023/24 - Transport for the North - Transport for the North
 - k. TfN analysis using its Transport-Related Social Exclusion Tool (2022) Transport-related social exclusion in England (transportforthenorth.com)
 - l. TfN's Community Severance Visualiser and accompanying report: 'Community Severance across England' Community severance across England - Transport for the North - Transport for the North Community severance across England (transportforthenorth.com)
 - m. Clean Mobility Policies using TfN's Clean Mobility Tool Transport For The North Map
 - n. Quantified Carbon Reduction Dashboard, TfN, restricted public access (North East CA officers do have access) – allows interrogation of North East CA surface transport carbon emissions.
 - o. TfN Travel Choices Research – please contact us if you would like to access the fuller range of findings for different place types What's a fair fare? - Transport for the North - Transport for the North
 - p. TfN Electric Vehicle Charging Infrastructure Framework, containing information on existing charging infrastructure coverage - TfN EV Charging Infrastructure Framework (windows.net)

-
- 2. TfN agrees that the ISA Objectives and criteria as laid out within the scoping report, provide a sound and robust framework against which to assess the new North East LTP, subject to the following comments:
 - a. Objective 1, *Air Quality* – the assessment aid questions refer to AQMAs, meeting National Air Quality Objectives and statutory targets in the Environment Act 2021. TfN's STP contains an objective to reduce to zero the proportion of the North's Major Road Network by length that exceeds WHO Nitrogen Dioxide exposure limits by 2045. WHO limits are more conservative
-

Decision Aid Question included in assessment framework.



	and adherence with them is likely to lead to better health outcomes. North East CA should consider whether 'contribution to meeting WHO NOx limits' may be a useful assessment aid.	
	b. Objective 5, <i>Biodiversity</i> – the assessment aid questions for this objective might usefully mention the need to support Local Nature Recovery Strategies specifically, and also to work with local nature recovery groups such as Nature North and their 'Green Connected Pathways' proposition (admittedly it does refer to 'Nature Recovery Network').	Decision Aid Question updated in assessment framework to include support of Local Nature Recovery Strategies.
	TfN finds that, in general the breadth of consideration contained within the ISA Objectives framework and accompanying assessment aid questions is exemplary, with particularly well considered criteria for the HIA and EqIA specific sub-objectives	Noted.
The Environment Agency	The Environment Agency is generally supportive of the proposed ISA report and welcomes the inclusion of plans such as the River Basin Management and Flood and Coastal Risk Management.	Noted.
	<i>Other Strategies/Plans to consider:</i>	
	1. The Third National Adaptation Programme (NAP3) and the Fourth Strategy for Climate Adaptation Reporting (publishing.service.gov.uk)	Plans and strategies have been added to Appendix B of the ISA Report and impact considered within framework accordingly.
	2. The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 – Transposed WFD Legislation	
	3. DEFRA 2023 - Plan for Water: our integrated plan for delivering clean and plentiful water	
	4. DEFRA 2022 – Drainage and wastewater management plans: guiding principles for the water industry	
	5. Northumbrian Water – Drainage and Wastewater Management Plan (DWMP)	
	6. North East Combined Authority – Environment, Coasta; and Rural Portfolio	
	<i>General comments and text suggestions:</i>	
	Following the Making Space for Nature report or known more widely as the Lawton Report with the overarching principles still influencing our thinking: Bigger, Better, more joined up, a number of recommendations have been made.	Issues with water quality and water quantity picked up under 'Water Resources and Water Quality' SEA topic.



-
1. Greenhouse gas emissions and a changing climate page 34:
 - Implications / Opportunities for LTP
 - LPT should to link to RBMP, FCRMP, LNRS for the declining state of Nature and WQ as well as the impacts from too little/too much water
 - They should also look at the North East CA Portfolio for the Environment, Rural and Coastal Investment Plan.

-
2. Biodiversity, Fauna and Flora and Geodiversity page 37
Implications for LTP
 - Pg 37 suggested altering text to: Opportunities for new habitat **creation, enhancement and nature connectivity** associated with transport developments should be explored,
 - Pg 38 suggested altering text to: avoid the fragmentation of green **and blue** infrastructure, which contributes to protecting natural habitats and biodiversity;
 - Pg 38 suggested altering text to: enhancement of the green **and blue** infrastructure through, for example, footpaths, cycle lanes and other public rights of ways **and appropriate design/alteration/replacement/mitigation of waterbody crossings/culverts to reduce the heavily modified impacts on nature.**
- Implications / opportunities table (Section 6.4) updated to reflect recommendations.

-
3. Water Resources and Water Quality pg 39/40
Implications / Opportunities for LTP
 - Pg 39/40 suggested altering text to: this section should refer to Nature based Solutions (NbS) and link to Natural Flood Management (NFM) options to realise wider benefits.
- Implications / Opportunities Table (Section 6.4) Updated to reflect recommendation

-
4. Water – Protect and enhance the water environment page 92
 - Pg 92 suggested altering text to: Minimise and remove/mitigate physical alterations to water bodies?
- Decision Aid Questions updated in assessment framework.
-



	<ul style="list-style-type: none"> Pg 92 suggested altering text to: Protect, enhance and create green infrastructure contributing to improvements in the quality of surface water run-off? 	
Association of Directors of Public Health North East (ADPH NE)	<p>The ADPH NE believes the overall approach is good, and welcome the fact the appraisal is being included along beside the LTP. They are particularly encouraged by the addition of the non-statutory HIA and Rural Proofing elements.</p> <p><i>Summary of feedback:</i></p> <p>1. Methodology and approach</p> <ul style="list-style-type: none"> Considerable public health expertise and knowledge of our local communities exists within the North East Public Health family. When undertaking the assessment, we would be happy to offer advice on potential health impacts related to particular topics or groups. From our own practice and experience we have found the process of undertaking the appraisal to be helpful and as important as the written document that is produced. For example, the process of engaging with communities and key stakeholders. Will the appraisal process gather insights from population groups included? We welcome the focus on identifying unintended consequences and negative impacts in addition to positives during the appraisal process. We have reviewed the scoring system and when the overarching scores are generated, is there a way of ensuring that some of the nuances affecting particular groups are not lost in the overall summary? For example 'older people' feels very broad, and it may be more appropriate to consider people with physical mobility issues We would ideally recommend that the team undertaking the HIA element of the ISA have a public health professional background, for example a Masters in Public Health degree or UK Public Health Register registration. <p>2. Objectives</p> <p>The objectives for the HIA are good. We have made suggestions on some additional subobjectives to consider and ways in existing ones could be strengthened:</p>	<p>Noted.</p> <p>A meeting between the Public Health Directors, the North East CA's Inclusion Team and the consultants completing the ISA on behalf of the North East CA (AtkinsRéalis) was held on 10th October 2024. The meeting sought to seek the PHDs advice on the Health Impact Assessment and Equalities Impact Assessment proposed methodologies and framework derived. Feedback received has been incorporated into the revised approach for this assessment.</p> <p>A meeting between the Public Health Directors, the North East CA's Inclusion Team and the consultants completing the ISA on</p>



- HIA: Improve the street environment to create healthier, safer and more pleasant places for people to spend time in or travel through (will the LTP result in streets being improved e.g. domains of healthy streets model? Will the LTP create places designed to enhance personal safety?)
- HIA: Involve, support, and empower communities to design and develop schemes that address their transport needs (will the LTO strengthen community-led solutions to transport, where public transport does not reach? Will the LTP build on communities' strength and assets, using an asset based community development approach?)
- HIA: Road safety and personal safety are included together in one subobjective. Could these be separated out as different issues?
- HIA: Healthy transport workforce (will the LTP support a healthy and resilient workforce to deliver a reliable public transport system? Are appropriate skills being developed to support future workforce?)
- EqIA subobjective 1: currently about accessibility to services, facilities, and amenities. Could there be a separate subobjective about access to, and experience using transport infrastructure – public transport, walking/cycling paths (i.e. welcoming and friendly to age, disability, learning disabilities, literacy, cultures)
- EqIA does not currently include personal safety, only road safety, could this be included too?

behalf of the North East CA (AtkinsRéalis) was held on 10th October 2024. The meeting sought to seek the PHDs advice on the Health Impact Assessment and Equalities Impact Assessment proposed methodologies and framework derived. PHDs were content with the approach presented for the strategic level of assessment but it was agreed that commitment to undertaking a detailed project level HIA and EqIA would be included in the LTP that will pick up when more detail as and when schemes come forward.

3. Groups to be considered

It is not clear from the scoping report which groups will be included in the HIA. We recommend that at a minimum the following groups are included:

- People living on a low income, in deprivation or poverty including people who are long term unemployed
- Children living in poverty
- People living in rural areas who do not have access to a car

A meeting between the Public Health Directors, the North East CA's Inclusion Team and the consultants completing the ISA on behalf of the North East CA (AtkinsRéalis) was held on 10th October 2024. The meeting sought to seek the PHDs advice on the framework derived for the Health



- People with mobility issues, including older populations and those with physical disabilities.
- People who may be worried about personal safety when using transport
- People living with mental ill health
- People living with long term conditions , or disability, including learning disabilities
- Carers

Using this approach to identify those groups who may be impacted by the LTP will help to ensure that any potential inequalities are considered and addressed. For example, when considering air quality, there will be a disproportionate impact on people living in deprived areas, as major roads and junctions tend to be in more deprived areas – housing is less desirable and therefore cheaper.

Impact Assessment and the Equalities Impact Assessment. Updates to the vulnerable and protected characteristic groups identified in the assessment where revised to reflect specific issues in the region, for example children living in poverty, high levels of unemployment and people living in rural areas without cars. In addition, note of the need to consider impacts on coastal communities, in addition to rural communities, and those with physical and/or mental conditions has been incorporated into the assessment framework

4. Resources

We ideally recommend that the ISA is assured through the use of appropriate local data and intelligence to ensure health impacts specific to the North East are appraised. We have collated a range of resources that may be useful to support this process:

- OHID Fingertips <https://fingertips.phe.org.uk/>
- Health Impact Assessment of Transport Initiatives: https://www.scotphn.net/wp-content/uploads/2016/02/03686_NHSHIAGuideFinal1.pdf
- Transport and Health Science Group resource: <https://www.transportandhealth.org.uk/health-on-the-move-2/hotm2/>
- Healthy Streets: <https://www.healthystreets.com/>
- Health Literacy toolkit: <https://library.nhs.uk/health-information/>

Data and reports included in baseline and review of PPP tables as necessary, and impact considered within framework accordingly.

Listed below are the Local Authority Joint Strategic Needs Assessments:



- Northumberland: <https://jsnaa-northumberland.hub.arcgis.com/>
 - Specific section on Public and Community Transport - <https://storymaps.arcgis.com/stories/afcc1e698c1d434a98d3014d79944c0f>
- Newcastle: <https://new.newcastle.gov.uk/budget-policies-performance-data/policies/health/joint-strategic-needs-assessment-jsna>
- Gateshead: <https://www.gatesheadjsna.org.uk/>
 - Specific transport section – <https://www.gatesheadjsna.org.uk/article/6407/Headline-data>
- North Tyneside: <https://my.northtyneside.gov.uk/category/605/joint-strategic-needs-assessment-jsna>
- South Tyneside: <https://www.southtyneside.gov.uk/article/8598/Overview>
- Sunderland: <https://www.sunderland.gov.uk/article/19965/Sunderland-Joint-Strategic-Needs-Assessment>
- County Durham: <https://www.durhaminsight.info/health-and-social-care/jsna/>

Historic England

Historic England consider the report has identified the majority of plans and programmes which are of relevance to the development of the Transport Plan, and that the report has established an appropriate Baseline against which to assess the Plan’s proposals, and it has put forward a suitable set of Objectives and Indicators. Overall, they believe it provides the basis for the development of an appropriate framework for assessing the significant effects which this plan may have on the historic environment.

Noted.

Main Report

Implication / opportunity updated.

Comments

Page 46: Table 6-1 - Object

- LTP should aim to protect and preserves designated and non-designated heritage assets and their contexts and settings,
- Whilst the general thrust of this is reasonable, we do not consider it is strong enough in its wording

Suggested Change



-
- LTP should aim to protect conserve and preserve enhance designated and non-designated heritage assets and their settings in a manner according to their significance

Main Report

Comments

Page 91: Table 7-1 ISA Objective 8 – Object in part

- We suggest the following changes to better align with terminology for the historic environment set out in national policy and legislation.
- It is possible to include WHS's within the second question e.g. (such as World Heritage Sites, Scheduled Monuments, Listed Buildings and structures, Registered Parks and Gardens, Registered Battlefields and Conservation Areas).
- Setting forms part of the contribution to significance of a heritage asset rather than being separate from it, and therefore we recommend the use of 'including setting' instead of 'and setting'.
- In terms of noise, pollutants and visual intrusion these are all likely setting impacts and as such this would be better considered under the second and third questions.
- With regards promoting transport schemes which tackle traffic congestion in the regions historic villages, towns and cities, this needs careful consideration as although a scheme may help to reduce congestion it could also lead to impact on significance of heritage assets which would be harmful overall.

Suggested Change

- Protect and enhance **the significance** of cultural heritage assets **including** their settings, and the conservation and enhancement of the wider historic environment
- ~~Affect the integrity of~~ **Conserve and enhance the significance of** designated heritage assets **including** their settings (such as Scheduled Monuments, Listed Buildings and structures, Registered Parks and Gardens, Registered Battlefields and Conservation Areas)?

Historic Environment objective and associated decision aid questions amended as per comments.



-
- Conserve and enhance the significance of non-designated heritage assets (e.g. locally important buildings and archaeological remains, including newly discovered heritage assets) **including** their settings?
 - ~~Lead to harm to the significance of heritage assets, for example from the generation of noise, pollutants and visual intrusion?~~
 - Promote transport schemes which tackle traffic congestion in the region's historic villages, towns and cities, **whilst conserving and enhancing the historic environment**
-

Appendices

Comments

Page 6-7: Appendix A. Review of Plans, Policies and Legislation

- We are unsure why the World Heritage Convention 1972 has been listed twice

Suggested Change

- Delete repetition of World Heritage Convention 1972
 - Delete – ‘A revised version of the European Convention on the Protection of Archaeological Heritage was signed on 1992 and is known as the Valletta Treaty which updates the previous Convention and makes conservation and enhancement of archaeological heritage a goal of urban and regional planning policies, from Convention for the Protection of the Architectural Heritage (1985) as it relates to archaeological heritage not architectural heritage.
 - Delete - ‘Charter for the Protection and Management of Archaeological Heritage (1990)
-

Appendices

Comments

Appendix B. Baseline and Contextual information B.5 Historic Environment

- World Heritage Sites - World Heritage are inscribed rather than designated.
 - Conservation Areas – ‘Additional housing development in the Plan Area may be inappropriately located or designed to pose a risk to listed building and
-

PPPs and baseline information updated in Appendix B and C respectively, in line with consultation comment.



conservation areas and their settings. Without a co-ordinated strategic approach to development and infrastructure there is an increased potential for this risk to result.’ – This also extends to other types of development such as transport infrastructure.

- Listed Buildings – it would be useful to know the source here as our NHLE records show small differences in numbers.
 - County Durham 3,102
 - Gateshead 249
 - Newcastle upon Tyne 774
 - North Tyneside 224
 - Northumberland – 5619
 - South Tyneside 195
 - Sunderland 373

Suggested Change

- World Heritage Sites are ~~designated~~ **inscribed** to meet the UK’s commitments under the UK’s commitments under the World Heritage Convention and the sites are designated for their globally important cultural or natural interest and require appropriate management and protection measures.
- ‘Additional ~~housing~~ development in the Plan Area may be inappropriately located or designed to pose a risk to listed building and conservation areas and their settings. Without a co-ordinated strategic approach to development and infrastructure there is an increased potential for this risk to result’



Appendix B. Review of Plans Policies and Legislation

Note: It is the purpose of this review of Plans, Policy and Legislation to demonstrate the context of the LTP and associated ISA and to show how these are broadly influenced in setting Objectives for both. It is considered that the context has been well established through the previous ISA for the North East Transport Plan and as such this review utilises information gathered at that stage. Where necessary this has been supplemented to reflect key legislation changes, additions and removals.

It is important to note that the following review of Plans, Policies and Legislation is not to be considered an exhaustive list and elements may have been superseded. Note in particular that while the United Kingdom has left the European Union, EU Directives are still important to note as they form the basis for a range of existing UK legislation and policy approaches.

International	
Bern Convention (1979)	<p>The Bern Convention is a binding international legal instrument for nature conservation that covers the natural heritage of the European continent and some African states. It was adopted in Bern, Switzerland in 1979 and came into force in 1982. The convention aims to promote cooperation between the signatory countries in order to conserve wild flora and fauna and their natural habitats and to protect endangered migratory species. Its key objectives are:</p> <ul style="list-style-type: none"> ▫ To conserve flora, fauna and natural habitats, particularly those which are vulnerable or endangered. ▫ To promote co-operation between member states. ▫ To ensure that national and regional planning policy takes conservation into account. ▫ To promote awareness and education on conservation.
Bonn Convention (1979)	<p>The 1979 Bonn Convention, also known as the Convention on the Conservation of Migratory Species of Wild Animals (CMS), is an environmental treaty under the United Nations Environment Programme. It aims to protect and conserve the agreed species of migratory birds and wild animals through conservation of their habitats and resources.</p>
Convention on Biological Diversity 2010	<p>Sets out a conservation plan to protect global biodiversity, and an international treaty to establish a fair and equitable system to enable nations to co-operate in accessing and sharing the benefits of genetic resources. The new global vision is “By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential to all people”.</p>
Doha Amendment to the Kyoto Protocol	<p>The Kyoto Protocol on Climate Change (1997) has been amended. In Doha, Qatar, on 8 December 2012, the "Doha Amendment to the Kyoto Protocol" was adopted. New commitments for Annex I Parties to the Kyoto Protocol agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020.</p>
Glasgow Climate Pact (2021)	<p>The agreements reached at the COP26 through the Glasgow Climate Pact include reducing coal emissions by 40% as well as a pledge to phase out fossil</p>



	fuel subsidies. While no firm dates were set for these goals, the pact also included the goals of ending deforestation and cutting 30% of methane emissions by 2030.
Ramsar Convention (1971)	An international framework for the conservation of wetland habitats and the resources therein. Member states are required to designate a minimum of one suitable, wetland site, protect the ecology of any designated wetlands and to include conservation of wetlands within their national land use planning system.
The Convention on Biological Diversity (1992)	The Convention on Biological Diversity (CBD), also known as the Biodiversity Convention, is a multilateral treaty that was opened for signature at the Earth Summit in Rio De Janeiro in 1992. It is a key document related to sustainable development and falls under the United Nations Environment Programme (UNEP). The CBD aims to conserve biodiversity and promote its sustainable use. It also promotes the fair, equitable sharing of the benefits arising out of the utilisation of genetic resources.
Rio Declaration (1992)	The Declaration sets out 27 principles to enable the global community to work towards international agreements that respect the interests of all and protect the integrity of the global environmental and developmental system. It recognises the integral and interdependent nature of the Earth.
Johannesburg Declaration (2002)	The Johannesburg Declaration on Sustainable Development. The 2002 Declaration built upon the principles established through the Rio Declaration and further developed principles of sustainable development and sought international commitment to these Sustainable Development Principles.
The UN Millennium Declaration and Millennium Development Goals (2002)	<ul style="list-style-type: none"> ▫ Eradicate extreme poverty and hunger; ▫ Achieve universal primary education; ▫ Promote gender equality and empower women; ▫ Reduce child mortality; ▫ Improve maternal health; ▫ Combat HIV, AIDs, Malaria and other diseases; ▫ Ensure environmental sustainability; and ▫ Develop a global partnership for development.
UN Framework Convention on Climate Change (UNFCCC) 1992, Kyoto Protocol to the UN Framework on Climate Change (1997), Paris Agreement (2015).	A series of international agreements setting targets and legally binding agreements for industrialised countries to cut their greenhouse gas emissions, signed by 194 states in 1992. The Kyoto Protocol, which was signed in 1997 and ran from 2005 to 2020, was the first implementation of measures under the UNFCCC. The Kyoto Protocol was superseded by the Paris Agreement, which entered into force in 2016.
Strategic Plan for Biodiversity 2011-2020	<p>This plan provides an overarching framework on biodiversity, not only for the biodiversity related conventions, but for the entire United Nations system and all other partners engaged in biodiversity management and policy development. This includes the Aichi Biodiversity Targets, for the 2011-2020 period. Some of the Aichi Biodiversity Targets are:</p> <ul style="list-style-type: none"> ▫ At least halve and, where feasible, bring close to zero the rate of loss of natural habitats, including forests;



	<ul style="list-style-type: none"> ▫ Establish a conservation target of 17% of terrestrial and inland water areas and 10% of marine and coastal areas; ▫ Restore at least 15% of degraded areas through conservation and restoration activities; and ▫ Make special efforts to reduce the pressures faced by coral reefs.
Paris Agreement	<p>The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC), dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, signed in 2016.</p> <p>The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change.</p> <p>This strategy involved energy and climate policy including the so-called 20/20/20 targets, namely the reduction of CO₂ emissions by 20%, the increase of renewable energy's market share to 20%, and a 20% increase in energy efficiency.</p>
World Heritage Convention 1972	<p>This convention noted that the cultural heritage and the natural heritage are increasingly threatened with destruction not only by the traditional causes of decay, but also by changing social and economic conditions which aggravate the situation with even more formidable phenomena of damage or destruction, and considered that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world.</p>
World Summit on Sustainable Development, Johannesburg (2002)	<p>The 2002 World Summit on Sustainable Development in Johannesburg adopted a Political Declaration and Implementation Plan which included provisions covering a set of activities and measures to be taken in order to achieve development that takes into account respect for the environment.</p>
European	
Convention for the Protection of the Architectural Heritage (1985)	<p>Reinforces and promotes policies for the conservation and enhancement of Europe's heritage. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.</p>
European Green Deal (2020)	<p>This deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring no net emissions of greenhouse gases by 2050, economic growth decoupled from resource use and no person and no place is left behind. A set of proposals have been proposed by the European Commission to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Important topics addressed by this deal include:</p> <ul style="list-style-type: none"> ▪ Transforming our economy and societies. This will; <ul style="list-style-type: none"> ▫ Reduce emissions ▫ Create jobs and growth ▫ Address energy poverty ▫ Reduce external energy dependency



	<ul style="list-style-type: none"> ▫ Improve out health and wellbeing ▪ Making transport sustainable for all <ul style="list-style-type: none"> ▫ The EC proposes more ambitious targets for reducing CO₂ emissions of new cars and vans: <ul style="list-style-type: none"> ▫ 50% reduction of emissions by vans by 2030 ▫ 0 emissions from new cars by 2035
Air Quality Directive (2008/50/EC)	<p>Merges most existing air quality legislation into a single directive that sets standards and target dates for reducing concentrations of fine particles, which together with coarser particles known as PM₁₀ already subject to legislation, are among the most dangerous pollutants for human health. Under the directive Member States are required to reduce exposure to PM_{2.5} in urban areas by an average of 20% by 2020 based on 2010 levels. It obliges them to bring exposure levels below 20 micrograms/m³ by 2015 in these areas.</p> <p>Throughout their territory Member States will need to respect the PM_{2.5} limit value set at 25 micrograms/m³.</p> <p>As of the 26th October 2022, the Commission has proposed to revise the Ambient Air Quality Directives as part of the European Green Deal to align the air quality standard more closely with the recommendations of the World Health Organisation.</p>
Urban Wastewater Treatment Directive (91/271/EEC)	<p>The Directive protects the water environment from the adverse effects of discharges of urban wastewater and from certain industrial discharges. It concerns the collection, treatment and discharge of urban wastewater. The Commission revised the directive in 2022 which aims to:</p> <ul style="list-style-type: none"> ▫ reduce pollution, energy use and greenhouse gas emissions, ▫ improve water quality by addressing remaining urban wastewater pollution, ▫ improve access to sanitation especially for the most vulnerable and marginalised, ▫ make industry pay to treat micropollutants, ▫ require EU countries to monitor pathogens in wastewater, ▫ lead to a more circular sector. <p>By 2040, the new rules will:</p> <ul style="list-style-type: none"> ▫ save almost EUR 3 billion per year across the EU, ▫ reduce greenhouse gas emissions by over 60% compared to 1990, ▫ decrease water pollution by more than 365 thousand tonnes, ▫ cut microplastics emissions by 9%.
Drinking Water Directive (2020/2184/EU)	<p>The Directive concerns the access to and quality of water intended for human consumption. Its objective is to protect human health from adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.</p> <p>The directive was recast in December 2020, with the main pillars of EU drinking water policy as follows:</p> <ul style="list-style-type: none"> ▫ protect human health by ensuring the quality of water intended for human consumption, ▫ ensure that drinking water quality is controlled through standards based on the latest scientific evidence,

	<ul style="list-style-type: none"> ▫ secure efficient and effective monitoring, assessment and enforcement of drinking water quality, ▫ provide Europeans with adequate, timely and appropriately information, and ▫ to improve access to water intended for human consumption. <p>The directive applies to all water, either in its original state or after treatment, intended for drinking, cooking, food preparation or other domestic purposes in both public and private premises, regardless of its origin and whether it is supplied from a distribution network, supplied from a tanker or put into bottles or containers, including spring waters; all water used in any food business for manufacturing, processing, preserving or marketing of products or substances intended for human consumption.</p>
Directive on Bathing Water (76/160/EEC); and Directive 2006/7/EC repealing Directive 76/160/EEC (from 2014)	The Directive establishes provisions for the monitoring and classification of bathing water quality; the management of bathing water quality; and the provision of information to the public on bathing water quality. Member States are required to annually identify all bathing waters and define the length of the bathing season.
Blueprint to Safeguard Europe's Water Resources (2021)	The Blueprint aims to tackle the obstacles which deter action to safeguard Europe's water resources, based on extensive evaluation of the existing policy. It's long-term aim is to ensure the sustainability of all activities that impact on water, securing the availability of good-quality water for sustainable and equitable water use.
Directive on the Assessment and Management of Flood Risks (2007/60/EC)	Concerns the assessment and management of flood risk and requires Member States to assess if all water courses and coastlines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk. Also reinforces the rights of the public to access this information and to have a say in the planning process.
Directive on the assessment of the effects of certain plans and programmes on the environment (SEA Directive) (2001/42/EC)	<p>The SEA Directive applies to a wide range of public plans and programmes (e.g. on land use, transport, energy, waste, agriculture, etc). An SEA is mandatory for plans/programmes which are:</p> <ul style="list-style-type: none"> ▫ prepared for agriculture, forestry, fisheries, energy, industry, transport, waste/ water management, telecommunications, tourism, town & country planning or land use and which set the framework for future development consent of projects listed in the EIA Directive, <p>OR</p> <ul style="list-style-type: none"> ▫ have been determined to require an assessment under the Habitats Directive.
EU Thematic Strategy on Air Quality (2005)	This thematic strategy on air pollution establishes interim objectives for air pollution in the EU and proposes appropriate measures for achieving them. It recommended that legislation be modernised, be better focused on the most serious pollutants and that more is done to integrate environmental concerns into other policies and programmes.
Ambient Air Quality and Cleaner Air for	This Directive includes the following key elements:



Europe Directive (2008/50/EC)	<ul style="list-style-type: none"> ▫ The merging of most of existing legislation into a single directive (except for the fourth daughter directive) with no change to existing air quality objectives* ▫ New air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives – exposure concentration obligation and exposure reduction target ▫ The possibility to discount natural sources of pollution when assessing compliance against limit values ▫ The possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. <p>As of the 26th October 2022, the Commission has proposed to revise the Ambient Air Quality Directives as part of the European Green Deal to align the air quality standard more closely with the recommendations of the World Health Organisation.</p>
Clean Air Programme for Europe 2013	<p>This programme contains measures to ensure that existing targets are met in the short term, and new air quality objectives for the period up to 2030. The package also includes support measures to help cut air pollution, with a focus on improving air quality in cities, supporting research and innovation, and promoting international cooperation. By 2030, and compared to business as usual, the clean air policy package is estimated to:</p> <ul style="list-style-type: none"> ▫ avoid 58 000 premature deaths across Europe, ▫ save 123 000 km² of ecosystems from nitrogen pollution (more than half the area of Romania), ▫ save 56 000 km² protected Natura 2000 areas (more than the entire area of Croatia) from nitrogen pollution, ▫ save 19 000 km² forest ecosystems from acidification.
A Clean Planet for all: A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy (2018)	<p>The aim of this long-term strategy is to confirm Europe's commitment to lead in global climate action and to present a vision that can lead to achieving net-zero greenhouse gas emissions by 2050 through a socially-fair transition in a cost-efficient manner. It underlines the opportunities that this transformation offers to European citizens and its economy, whilst identifying challenges ahead.</p>
Mainstreaming sustainable development into EU policies: 2009 Review of the European Union Strategy for Sustainable Development	<p>It provides an overview of the progress made at EU level on the seven key challenges and cross-cutting themes since the last report in October 2007. These key challenges are:</p> <ul style="list-style-type: none"> • Climate change and clean energy; • Sustainable transport; • Sustainable consumption and production; • Conservation and management of natural resources; • Public health; • Social inclusion, demography and migration; and • Global poverty and sustainable development challenges



Energy Efficiency Directive (EU/2023/1791)	The 2023 Energy Efficiency Directive establishes 'energy efficiency first' as a fundamental principle of EU energy policy, meaning energy efficiency must be considered by EU countries in all relevant policy and major investment decisions taken in the relevant sectors. It is key for the EU to comply with the commitment of the Global Pledge to double the global rate of energy efficiency improvements from about 2% to over 4% by 2030. The directive follows a proposal for a recast directive on energy efficiency put forward by the Commission in July 2021, as part of the EU Green Deal package. The 2021 proposal presented by the Commission in May 2022 aims to decrease the EU's dependency on fossil fuel imports from Russia.
EU Environmental Noise Directive (2002)	This Directive concerns noise from road, rail and air traffic and from industry. It focuses on the impact of such noise on individuals, complementing existing EU legislation which sets standards for noise emissions from specific sources.
EU Water Framework Directive (2000)	The purpose of the Directive is to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. It will ensure all aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands meet 'good status' by 2015. Directive Objectives consist of: <ul style="list-style-type: none"> ▫ Prevent deterioration of the status of all surface water and groundwater bodies; ▫ Protect, enhance and restore all bodies of surface water and groundwater with the aim of achieving good surface water and groundwater status by 2015; and ▫ To produce River Basin management Plans (RBMP) for each river basin district identified, with environmental objectives for each water body to protect and improve the water environment and a programme of measures to progress towards achieving these objectives.
EU Floods Directive (2007)	The Floods Directive requires Member States to engage their government departments, agencies and other bodies to draw up a Preliminary Flood Risk Assessment. Flood Risk Management Plans can then be produced to indicate to policy makers, developers, and the public the nature of the risk and the measures proposed to manage these risks.
EU Birds Directive 2009/47/EC	Directive 2009/47 /EC is the codified version of Council Directive 79/409/EEC as amended. The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It sets broad objectives for a wide range of activities, although the precise legal mechanisms for their achievement are at the discretion of each Member State. The Transport Plan should aim to avoid or minimise transport related impacts on wildlife and habitats and ensure that it meets with statutory constraints imposed by the Directive.
Fresh Water Fish Directive (2006/44/EC)	The Directive concerns the quality of fresh waters and applies to those waters designated by the Member States as needing protection or improvement in order to support fish life. The aim of the Directive is to protect or improve the quality of those running or standing fresh waters which support, or which, if pollution were reduced or eliminated, would become capable of supporting, fish belonging to:



	<ul style="list-style-type: none"> ▫ indigenous species offering a natural diversity; species the presence of which is judged desirable for water management purposes by the competent authorities of the Member States.
Groundwater Directive (2006/118/EC)	Establishes a regime which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater. Establishes quality criteria taking account of local characteristics. Member States have to establish standards at the most appropriate level and take into account local or regional conditions. It requires groundwater quality standards to be established by the end of 2008; pollution trend studies to be carried out by using existing data and mandatory WFD data; pollution trends to be reversed so that environmental objectives are achieved by 2015; measures to prevent or limit inputs of pollutants into groundwater; reviews of technical provisions of the directive to be carried out in 2013 and every six years thereafter; compliance with good chemical status criteria. This directive was replaced by the WFD at the end of 2013.
Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna (92/43/EEC)	Aims to protect wild plants, animals and habitats. Directive created a network of protected areas called Natura 2000 sites, including Special Areas of Conservation (SACs) – supporting rare, endangered or vulnerable natural habitats, plants and animals (other than birds), and Special Protection Areas (SPAs) – supporting significant numbers of wild birds and their habitats.
EU Habitats Directive (1992)	The Habitats Directive builds on the Birds Directive by protecting natural habitats and other species of wild plants and animals. Together with the Birds Directive, it underpins a European network of protected areas known as Natura 2000. This network includes SPA classified under the Birds Directive and a new set of international nature conservation areas introduced by the Habitats Directive, Special Areas of Conservation (SAC).
European Landscape Convention	Promotes landscape protection, management and planning, and European co-operation on landscape issues. The Convention recognizes that the landscape is shaped by natural and cultural influences. Highlights the importance of developing landscape policies dedicated to the protection, management and creation of landscapes, and establishing procedures for the general public and other stakeholders to participate in policy creation and implementation.
Eumatic Strategy for Soil Protection (2006)	The overall objective of this strategy is protection and sustainable use of soil, based on the following guiding principles: Preventing further soil degradation and preserving its functions: When soil is used and its functions are exploited, action has to be taken on soil use and management patterns, and When soil acts as a sink/receptor of the effects of human activities or environmental phenomena, action has to be taken at source. Restoring degraded soils to a level of functionality consistent at least with current and intended use, thus also considering the cost implications of the restoration of soil.
EU Soil Strategy for 2030	The strategy sets out a framework and concrete measures to protect and restore soils, and ensure that they are used sustainably. Visions and objectives to achieve healthy soils by 2050 have been set along with concrete actions by 2030.



The strategy aims to ensure that by 2050:

- all EU soil ecosystems are healthy and more resilient and can therefore continue to provide their crucial services,
- there is no net land take and soil pollution is reduced to levels that are no longer harmful to people's health or ecosystems,
- protecting soils, managing them sustainably and restoring degraded soils is a common standard.

This strategy is a key deliverable of the EU biodiversity strategy for 2030 and will contribute to the objectives of the European Green Deal.

Actions set out by the strategy are as follows:

- tabling a dedicated legislative proposal on soil health by 2023 to enable the objectives of the EU soil strategy and achieve good soil health by 2050
- making sustainable soil management the new normal, by proposing a scheme for land owners to get their soils tested for free, promoting sustainable soil management through the CAP and sharing best practices
- considering proposing legally binding objectives to limit drainage of wetlands and organic soils and to restore managed and drained peatlands to mitigate and adapt to climate change
- investigating streams of excavated soils and assessing the need and potential for a legally binding "soil passport" to boost circular the economy and enhance reuse of clean soil
- restoring degraded soils and remediating contaminated sites
- preventing desertification by developing a common methodology to assess desertification and land degradation
- increasing research, data and monitoring on soil mobilising the necessary societal engagement and financial resources

European Soils Charter (2003)

The Charter recognises that:

- Soil is a precious asset;
- Soil is a limited resource which is easily destroyed;
- Land has a wide variety of uses and a proper planning policy is needed by Governments for urban development and civil engineering projects;
- Farmers and foresters must preserve the soils quality;
- Soil must be protected from erosion and pollution;
- Further research and collaboration is required to ensure the wise use and conservation of soil.

Eighth EU Environmental Action Plan to 2030 (2022)

This action plan will be guiding European environment policy until 2030. In order to give more long-term direction it sets out a vision beyond that, of where it wants the Union to be by 2050:

"In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society."

	<p>It identifies six priority objectives:</p> <ul style="list-style-type: none"> ▫ achieving the 2030 greenhouse gas emission reduction target and climate neutrality by 2050, ▫ enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, ▫ advancing towards a regenerative growth model, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to a circular economy, ▫ pursuing a zero-pollution ambition, including for air, water and soil and protecting the health and well-being of Europeans, ▫ protecting, preserving and restoring biodiversity, and enhancing natural capital, ▫ reducing environmental and climate pressures related to production and consumption (particularly in the areas of energy, industry, buildings and infrastructure, mobility, tourism, international trade and food system). <p>Other key aspects include the need for full integration of environmental requirements and considerations into other policies and to make EU cities more sustainable.</p>
EU Landfill Directive	The Directive sets a reduction target of 75% of the 1995 levels and 35% of the 1995 levels of waste sent to landfill by 2013 and 2020 respectively.
EU Waste Framework Directive 2008/98/EC (2008)	<p>The original aim of the Waste Framework Directive was to lay the basis to turn the EU into a recycling society and contained 5 key steps in the waste hierarchy concept:</p> <ul style="list-style-type: none"> ▫ Prevention ▫ Reuse ▫ Recycle ▫ Recovery ▫ Disposal <p>The revised Waste Directive introduces new provisions aimed at boosting waste prevention and recycling as part of the waste hierarchy and clarifies key concepts such as the definition of waste, recovery and disposal.</p> <p>The framework also sets out the following management principles which require waste to be managed:</p> <ul style="list-style-type: none"> ▫ without endangering human health and harming the environment ▫ without risk to water, air, soil, plants or animals ▫ without causing a nuisance through noise or odours ▫ and without adversely affecting the countryside or places of special interest
European Climate Change Programme	The programme aims to deliver the Kyoto Protocol commitments to reduce greenhouse gas emissions to 8% below 1990 levels by 2012.
Limiting Global Climate Change to 2 degrees Celsius - The way ahead for	This proposes that the EU pursues in the context of international negotiations the objective of 30% reduction in greenhouse gas emissions (GHG) by developed countries by 2020 (compared to 1990 levels). This is necessary to ensure that the world stays within the 2°C limit. Until an international agreement is concluded, and without prejudice to its position in international

2020 and beyond (2007)	<p>negotiations, the EU should already now take on a firm independent commitment to achieve at least a 20 % reduction of GHG emissions by 2020. Other targets include:</p> <ul style="list-style-type: none"> ▫ Improve the EU's energy efficiency by 20 % by 2020. ▫ Increase the share of renewable energy to 20 % by 2020
Environmental Liability Directive 2004/35/CE (2004)	<p>The purpose of this Directive is to establish a framework of environmental liability based on the 'polluter pays' principle, to prevent and remedy environmental damage.</p>
EU Emissions Trading Scheme (EU ETS) (2009 Revision)	<p>The 2005 EU ETS has run in two phases and is now in its third phase, running from 2013 to 2020. In 2009 there was a major revision in order to strengthen the system. Due to the 2009 revision phase 3 is significantly different from phases 1 and 2 and is based on rules which are more harmonised than before. The objectives and requirements have been changed from a system of recuing emissions to a nationally agreed cap, to a single, EU-wide cap.</p>
EU Climate Change Adaptation Strategy (2013)	<p>This strategy sets out how the European Union can adapt to the unavoidable impacts of climate change and become climate resilient by 2050. The Strategy has four principle objectives: to make adaptation smarter, swifter and more systemic, and to step up international action on adaptation to climate change.</p>
EU Strategy on Adaptation to Climate Change (2021)	<p>The EU strategy on adaptation to climate change aims at making Europe more climate-resilient. Taking a coherent approach by complementing the activities of Member States, it supports action by promoting greater coordination and information-sharing and by ensuring that adaptation considerations are addressed in all relevant EU policies.</p>
EU Biodiversity Strategy for 2030	<p>This strategy is a comprehensive long-term plan to protect nature and reverse degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030. AS a core part of the European Green Deal, it will also support green recovery following the Covid-19 pandemic. Specific commitments and actions to be delivered by 2030 include:</p> <ul style="list-style-type: none"> ▫ Establishing a lager EU-wide network of protected areas on land and at sea ▫ Launching an EU nature restoration plan ▫ Introducing measures to enable the necessary transformative change ▫ Introducing measures to tackle the global biodiversity challenge
The pan-European programme on transport, health and environment (THE PEP)	<p>The PEP is included in the RTP SEA. However since then governments have adopted the Paris Declaration - City in Motion: People First! In April 2014 at the Fourth High-level Meeting on Transport, Health and Environment, giving renewed political impetus to THE PEP. Five priority goals were agreed to be reached by 2019 and concrete mechanisms to achieve them. The goals are:</p> <ul style="list-style-type: none"> ▫ No. 1: To contribute to sustainable economic development and stimulate job creation through investment in environment- and health-friendly transport; ▫ No. 2: To manage sustainable mobility and promote a more efficient transport system; ▫ No. 3: To reduce emissions of transport-related greenhouse gases, air pollutants and noise;

	<ul style="list-style-type: none"> ▫ No. 4: To promote policies and actions conducive to healthy and safe modes of transport; and ▫ No. 5: To integrate transport, health and environmental objectives into urban and spatial planning policies
European Landscape Convention (Florence Convention) (2000)	Convention promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues. The European Landscape Convention introduced a Europe-wide concept centring on the quality of landscape protection, management and planning and covering the entire territory, not just outstanding landscapes. Through its ground-breaking approach and its broader scope, it complements the Council of Europe's and UNESCO's heritage conventions.
A European Green Deal	<p>This deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring no net emissions of greenhouse gases by 2050, economic growth decoupled from resource use and no person and no place is left behind. A set of proposals have been proposed by the European Commission to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Important topics addressed by this deal include:</p> <p>Transforming our economy and societies. This will;</p> <ul style="list-style-type: none"> ▫ Reduce emissions ▫ Create jobs and growth ▫ Address energy poverty ▫ Reduce external energy dependency ▫ Improve our health and wellbeing ▫ Making transport sustainable for all ▫ The EC proposes more ambitious targets for reducing CO2 emissions of new cars and vans: <ul style="list-style-type: none"> ▫ 50% reduction of emissions by vans by 2030 ▫ 0 emissions from new cars by 2035
Convention on Access to Information, Public Participation in Decision making and Access to Justice in Environmental Matters (Aarhus Convention) 2001	The Aarhus Convention is a multilateral environmental agreement through which the opportunities for citizens to access environmental information are increased and transparent and reliable regulation procedure is secured. It encourages access to information, public participation and access to justice.
Environmental Noise Directive (2002/49/EC)	<p>This Directive relates to the assessment and management of environmental noise and is the main EU instrument to identify noise pollution levels and to trigger the necessary action both at Member State and at EU level.</p> <p>To pursue its stated aims, the Environmental Noise Directive focuses on four action areas:</p> <ul style="list-style-type: none"> determining exposure to environmental noise and assessing its health effects at single dwelling level ensuring that information on environmental noise and its effects is made available to the public



	<p>preventing and reducing environmental noise</p> <p>preserving environmental noise quality in areas where it is good</p> <p>The Directive applies to noise to which humans are exposed, particularly in built-up areas, in public parks or other quiet areas in an agglomeration, in quiet areas in open country, near schools, hospitals and other noise-sensitive buildings and areas. It does not apply to noise that is caused by the exposed person himself, noise from domestic activities, noise created by neighbours, noise at workplaces or noise inside means of transport or due to military activities in military areas.</p> <p>The Directive requires Member States to prepare and publish, every 5 years, noise maps and noise management action plans for:</p> <ul style="list-style-type: none"> ▫ agglomerations with more than 100,000 inhabitants ▫ major roads (more than 3 million vehicles a year) ▫ major railways (more than 30.000 trains a year) ▫ major airports (more than 50.000 movements a year, including small aircrafts and helicopters) <p>▪ The Directive serves as a knowledge base to amend or introduce noise limits on road, railway and aircraft vehicles.</p>
National Emissions Ceilings Directive (2016/2284/EU)	This directive sets 2020 and 2030 emissions reduction commitments for sulfur dioxide, nitrogen oxides, non-methane volatile organic compounds, ammonia and fine particulate matter. It requires that national air pollution control programmes be drawn up, adopted and implemented and that emissions of those pollutants and the other pollutants referred to in Annex I, as well as their impacts, be monitored and reported. It also ensures that the emissions ceilings for 2010 set in the earlier directive remain applicable for Member States until the end of 2019.
WHO Guidelines for Community Noise 1999	The World Health Organisation (WHO) publication entitled 'Guidelines for Community Noise' (1999), provides guidance with regard to recommended internal and external noise levels for various building uses, outlining the potential health impacts associated with noise. Specifically, the document recommends internal and external noise levels that would provide an acoustic environment that is conducive to uninterrupted speech and sleep.
WHO Night Noise Guidelines for Europe 2009	The World Health Organisation (WHO) Night Noise Guidelines for Europe (NNG) 2009 are health-based guidelines and are to be considered an extension and update to the WHO Guidelines for Community Noise 1999. WHO NNG provides evidence based policy advice to member states in the development of future legislation and policy action in the area of control and surveillance of night noise exposure.
Renewable Energy Directive (EU/2023/2413)	The Renewable Energy Directive is the legal framework for the development of clean energy across all sectors of the EU economy, supporting cooperation between EU countries towards this goal. The directive sets an overall renewable energy target of at least 42.5% binding at EU level by 2030, but aiming for 45%. There will be an 18-month period to transpose most of the directive's provisions into national law, with a shorter deadline of July 2024 for some provisions related to permitting for renewables.
The Europe 2020 Strategy – The	The Europe 2020 Strategy is the European Union's growth strategy for the next decade and aims at establishing a smart, sustainable and inclusive economy



Resource Efficiency Roadmap 2011

with high levels of employment, productivity and social cohesion. The Resource Efficiency Roadmap is part of the Resource Efficiency Flagship of the Europe 2020 Strategy.

The Roadmap outlines how Europe will transform the economy into a sustainable one by 2050. It proposes ways to increase resource productivity and decouple economic growth from resource use and its environmental impact. It illustrates how policies interrelate and build on each other. The Roadmap provides a framework in which future actions can be designed and implemented coherently. It sets out a vision for the structural and technological change needed up to 2050, with milestones to be reached by 2020. These milestones illustrate what will be needed to put Europe on a path to resource efficient and sustainable growth.

Road map to a Single European Transport Area 2011

The European Commission adopted a roadmap of 40 concrete initiatives to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment. At the same time, the proposals aimed to dramatically reduce Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050.

By 2050, key goals will include:

- No more conventionally fuelled cars in cities.
 - 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions.
 - A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport.
 - All of which will contribute to a 60% cut in transport emissions by the middle of the century.
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National

Environment Act 2021

The Environment Act sets out that the Secretary of State may by regulations set long-term targets in respect of any matter which relates to (a) the natural environment, or (b) people's enjoyment of the natural environment. A long-term target in respect of at least one matter within each of the four priority areas: (a) air quality; (b) water; (c) biodiversity; (d) resource efficiency and waste reduction.

The Act specifically requires the Secretary of State to set by future regulation statutory targets for the recovery of the natural world in two priority areas: air quality (PM_{2.5} air quality target) and biodiversity (species abundance target) and includes an important new target to reverse the decline in species abundance by the end of 2030. The Secretary of State must also prepare an environmental improvement plan for significantly improving the natural environment for a period no shorter than 15 years.

The Act will also deliver:

- A cycle of environmental monitoring and reporting;
- Environmental Principles embedded in domestic policy making; and
- Office for Environmental Protection to uphold environmental law.

Key relevant provisions:

Biodiversity Net Gain - The Act places a statutory requirement for developments to deliver biodiversity improvements and will require all planning permissions in England (subject to exemptions) to be granted subject to a new

general pre-commencement condition that requires approval of a biodiversity gain plan.

The planning authority can only approve the biodiversity gain plan if the biodiversity value attributable to a development exceeds the pre-development biodiversity value of the onsite habitat by 10% (known as the 'biodiversity gain objective').

The biodiversity plan must set out the steps taken to achieve the 'biodiversity gain objective', which could be through minimising the adverse effects of the development on habitats, the identification of the pre and post development onsite biodiversity value, details of registered offsite biodiversity value allocated to the development and biodiversity credits purchased, and any other information that may be required by regulations.

There will be flexible mechanisms available to increase the biodiversity value to demonstrate a 10% biodiversity net gain. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. For such developments, arrangements to minimise their adverse effects and improvements, must be delivered onsite.

Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

Onsite enhancements must be secured by planning condition, s106 obligation or a conservation covenant, which is a written agreement that is registrable as a local land charge, between a landowner and a 'responsible body' that binds a landowner and its successors to do/not do something on the land for a conservation purpose.

Offsite enhancements must be secured under either a s106 agreement or a conservation covenant and be registered in the new, publicly available, biodiversity gain site register.

Waste and resource efficiency - The Act gives wide ranging powers to make regulations about who producer obligations should apply to and which products or materials should be covered. These powers are intended to prevent waste/reduce the amount of a product that becomes waste and increase re-use, redistribution, recovery and recycling. Producers can get ahead of these regulations, and minimise any eventual requirements to pay disposal costs, by designing products with these objectives in mind.

Water resources management plans, drought plans and joint proposals - The Act requires more collaboration (joint proposals) between water companies on managing supply and demand, resilience and environmental improvements, through their statutory water management plans,

Water quality - The Secretary of State may by regulations amend or modify any legislation to which this section applies for the purpose of:

- (a) making provision about the substances to be taken into account in assessing the chemical status of surface water or groundwater;
- (b) specifying standards in relation to those substances or in relation to the chemical status of surface water or groundwater.

A Green Future: Our
25 Year Plan to
Improve the

This 25 Year Environment Plan (25YEP) sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air



Environment, UK Government (2018)	<p>and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. Ten key goals are specified:</p> <ul style="list-style-type: none"> Clean air Clean and plentiful water Thriving plants and wildlife A reduced risk of harm from environmental hazards such as flooding and drought Using resources from nature more sustainably and efficiently Enhanced beauty, heritage and engagement with the natural environment Mitigating and adapting to climate change Minimising waste Managing exposure to chemicals Enhancing biosecurity <p>To deliver on these goals, six areas of action are identified:</p> <ul style="list-style-type: none"> ▫ Using and managing land sustainably ▫ Recovering nature and enhancing the beauty of landscapes ▫ Connecting people with the environment to improve health and wellbeing ▫ Increasing resource efficiency, and reducing pollution and waste ▫ Securing clean, productive and biologically diverse seas and oceans ▫ Protecting and improving global environment <ul style="list-style-type: none"> ▪ The plan emphasises the assumed benefits of the UK's departure from the EU in allowing for a reorganisation and reprioritisation of the UK's efforts related to the environment. Specific examples are not given, however the challenging targets listed, as summarised above, do offer strong opportunities to set high environmental standards.
Environmental Improvement Plan 2023	<p>The 25 Year Environment Plan (25YEP) set out the Governments vision for a quarter-of-a century of action to help the natural world regain and retain good health. The government is required to a refresh of the plan every 5 years, a commitment set into law in the Environment Act 2021. This document represents the first such review of the 25YEP. It reinforces the intent of the 25YEP. Where the 25YEP set out the framework and vision, this document sets out the plan to deliver.</p>
The Natural Choice: Securing the Value of Nature, Defra (2011)	<p>It sets out its ambition as 'We want to improve the quality of our natural environment across England, moving to a net gain in the value of nature. We aim to arrest the decline in habitats and species and the degradation of landscapes. We will protect priority habitats and safeguard vulnerable non-renewable resources for future generations. We will support natural systems to function more effectively in town, in the country and at sea. We will achieve this through joined-up action at local and national levels to create an ecological network which is resilient to changing pressures.'</p>
UK Marine Policy Statement 2011	<p>This Marine Policy Statement (MPS) is the framework for preparing Marine Plans and taking decisions affecting the marine environment.</p> <p>The MPS will facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the high level marine objectives and thereby:</p>



	<ul style="list-style-type: none"> ▫ Promote sustainable economic development; ▫ Enable the UK's move towards a low-carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects; ▫ Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and our heritage assets; and ▫ Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues.
Marine and Coastal Access Act 2009	The Act introduced a revised system of marine management and licensing, including marine planning which makes provisions for general government marine environment policies, as well as those policies of the devolved administrations. It also made changes to the management of marine, migratory and freshwater fisheries, marine conservation, as well as recreational access to the English and Welsh coasts.
The Culture White Paper	<p>The Culture White Paper was published in March 2016 and sets out the governments ambition and strategy for the cultural sectors, it states that the government will:</p> <ul style="list-style-type: none"> ▫ Extend international aid support to the protection of cultural heritage and antiquities and help countries to recover from acts of cultural destruction through a new £30 million cultural protection fund. ▫ Ratify the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict and its two Protocols, subject to legislation. ▫ Share the UK's expertise in cultural development and protection with partners around the world, particularly those in developing countries and countries experiencing or emerging from conflict.
Historic England advice notes	The purpose of this Good Practice Advice note is to provide information on good practice to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the National Planning Policy Framework (NPPF) and the related guidance given in the National Planning Practice Guide (PPG).
National Planning Policy Framework (NPPF) (2023)	<p>The National Planning Policy Framework which sets out the government's planning policies for England was revised in September 2023. The most relevant chapters are as follows:</p> <ul style="list-style-type: none"> ▫ Chapter 2: Achieving Sustainable Development ▫ Chapter 9: Promoting Sustainable Transport ▫ Chapter 13. Protecting Green Belt Land ▫ Chapter 14: Meeting the challenge of climate change, flooding and coastal change ▫ Chapter 15: Conserving and enhancing the natural environment ▫ Chapter 16: Conserving and enhancing the historic environment
UK Net Zero Strategy 2021	The UK's new Net Zero Strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet our net zero target by 2050. It sets out, for the first time, how the UK Government plans to deliver its emissions targets of Net Zero in 2050 and a 78% reduction from 1990 to 2035



	<p>(-63% relative to 2019). It puts forward an achievable and affordable vision that will bring net benefits to the UK.</p> <p>It is an ambitious and comprehensive strategy that marks a significant step forward for UK climate policy, setting a globally leading benchmark. Further steps will need to follow quickly to implement the policies and proposals mapped out in the Net Zero Strategy if it is to be a success.</p>
Climate Change Act 2008 and its 2050 Target Amendment Order, 2019	<p>The Act aims to improve carbon management, helping the transition towards a low-carbon economy in the UK and to demonstrate UK leadership internationally. Key provisions of the Act include:</p> <ul style="list-style-type: none"> ▫ a legally binding target of at least an 80% cut in greenhouse gas emissions by 2050 and a reduction in emissions of at least 34% by 2020 (both against 1990 baseline). Note the 2050 target has now been amended to Net Zero ▫ a carbon budgeting system that caps emissions over five-year periods; ▫ creation of the Committee on Climate Change; ▫ further measures to reduce emissions, including measures on biofuels; ▫ a requirement for the Government to report at least every five years on the risks to the UK of climate change, and to publish a programme setting out how these will be addressed. The Act also introduces powers for Government to require public bodies and statutory undertakers to carry out their own risk assessment and make plans to address those risks
UK Climate Change Risk Assessment, Defra (2017)	<p>The assessment identifies the top six areas of inter-related climate change risks for the UK as;</p> <ul style="list-style-type: none"> ▫ Flooding and coastal change risks to communities, businesses and infrastructure; ▫ Risks to health, well-being and productivity from high temperatures; ▫ Risks of shortages in the public water supply for agriculture, energy generation and industry; ▫ Risks to natural capital including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity; ▫ Risks to domestic and international food production and trade; and ▫ New and emerging pests and diseases and invasive non-native species affecting people, plants and animals.
UK Climate Change Risk Assessment 2022	<p>This is the third five-year assessment of the risks of climate change on the UK, as required by the Climate Change Act 2008. The risk assessment considers 61 UK-wide risks and opportunities across multiple sectors of the economy. The following eight are prioritised for action in the next two years:</p> <ul style="list-style-type: none"> ▫ risks to the viability and diversity of terrestrial and freshwater habitats and species from multiple hazards ▫ risks to soil health from increased flooding and drought ▫ risks to natural carbon stores and sequestration from multiple hazards ▫ risks to crops, livestock and commercial trees from multiple climate hazards ▫ risks to supply of food, goods and vital services due to climate-related collapse of supply chains and distribution networks



	<ul style="list-style-type: none"> ▫ risks to people and the economy from climate-related failure of the power system ▫ risks to human health, wellbeing and productivity from increased exposure to heat in homes and other buildings ▫ multiple risks to the UK from climate change impacts overseas
Clean Growth Strategy 2017	<p>The Clean Growth Strategy deals specifically with the challenge of trying to grow the UK's economy whilst reducing its emissions. This issue is dealt with across multiple strategies, and several sectors have a large role to play. This strategy details the approach of each sector and sets out key policies for each. The guiding principles of the Clean Growth Strategy are to, through nurturing low carbon technologies, processes, and systems:</p> <ul style="list-style-type: none"> ▫ meeting the UK's domestic commitments at the lowest possible net cost to UK taxpayers, consumers, and businesses; and ▫ maximising the social and economic benefits for the UK from this transition. <ul style="list-style-type: none"> ▪ The key policies to achieve this are sorted into the following categories: ▪ accelerating clean growth; <ul style="list-style-type: none"> ▫ improving business and industry efficiency (25% of emissions); ▫ improving our homes (13% of emissions); ▫ accelerating the shift to low carbon transport (24% of emissions); ▫ delivering clean, smart, flexible power (21% of emissions); ▫ enhancing the benefits and value of our natural resources (15% of emissions); ▫ leading in the public sector (2% of emissions); and ▫ government leadership in driving clean growth. <p>Regarding transport, the primary aim described in detail is a pathway to, by 2032, achieve a 32% reduction in carbon emissions compared to 1990, by:</p> <ul style="list-style-type: none"> ▫ accelerating uptake of ULEVs; ▫ developing a more efficient and low carbon freight system; ▫ a cleaner public transport system; ▫ a reduction in the number of shorter journeys made by car; and ▫ a near doubling of sustainable bioenergy used in the transport sector.
Carbon Plan: Delivering our low carbon future 2011	<p>This plan sets out how the UK will achieve decarbonisation within the framework of energy policy: to make the transition to a low carbon economy while maintaining energy security, and minimising costs to consumers, particularly those in poorer households. It outlines the progress so far in terms of emissions as well the future vision in order to cut emissions by 80% by 2050.</p>
Planning Practice Guidance – Climate Change 2015	<p>Advises how planning can identify suitable mitigation and adaptation measures in plan-making and the planning application process to address the potential impacts of climate. An amendment was made to the guidance in 2019 regarding local authorities' power in setting higher energy performance standards than the building regulations in their local plan.</p>
The Road to Zero, 2018	<p>The Road to Zero strategy is a broad governmental “next steps” policy that outlines an ambition to decarbonise transport, and to strengthen the UK's offering in design and manufacturing of zero emission vehicles, and the role of zero emission road</p>



vehicles in the government's Industrial Strategy. The strategy is aligned to other national policies mentioned in this section.

The policy sets targets for 50-70% of new car sales, and up to 40% of new van sales to be ultra-low emission by 2030. To support this, emphasis is given to several key policies:

- reducing emissions from the vehicles already on our roads;
- driving the uptake of the cleanest vehicles;
- reducing emissions from heavy goods vehicles (HGVs) and road freight;
- putting the UK at the forefront of the design and manufacturing of zero emission vehicles; and
- supporting the development of one of the best electric vehicle infrastructure networks in the world
- supporting local actions.

The strategy sets out in detail the challenges brought about by the emissions of road transport, and the specifics of how different types of road transport produce these emissions. The strategy also acknowledges the difficulty in maintaining a required level of road use for vital travel, commerce, and services, whilst restricting vehicle choice. Given the significant consequences of failing to act to reduce emissions, the report strikes a balance to prioritise reductions in emissions and maintain economic growth.

Although the strategy refers to changes in travel modes for certain types of journeys, the emphasis of the report lies with maintaining a required level of road travel, with reductions in emissions achieved through encouraging a high proportion of low-emission vehicles on the roads.

Environment Bill Policy Statement 2020	The Government's Environment Bill Policy Statement introduces new incentives, actions and planning tools to drive further improvements for nature. The Bill introduces a mandatory requirement for Biodiversity Net Gain in the planning system, to ensure that new developments contribute to the recovery of biodiversity and this requirement can also create new green spaces for local communities to enjoy. It also adds a new concept of Local Nature Recovery Strategies.
Environment Act 1995	The Environment Act 1995 updates much of the earlier legislation on the areas that it extends to. The Act comprises: <ul style="list-style-type: none"> ▫ Part 1 the Environment Agency and the Scottish Environmental Protection Agency, ▫ Part II Contaminated Land and Abandoned Mines, ▫ Part III National Parks ▫ Part IV Air Quality, ▫ Part V Miscellaneous, General and Supplemental Provisions (e.g. waste, mineral planning permissions, hedgerows, drainage, fisheries etc.).
Environmental Protection Act (1990)	This act brings in a system of integrated pollution control for the disposal of wastes to land, water and air. There are three parts of the Act. These are: <ul style="list-style-type: none"> ▫ Part I- establishes integrated pollution control and gives Local Authorities new powers to control air pollution from a range of prescribed processes; ▫ Part II- improves the rules on waste disposal; and



	<ul style="list-style-type: none"> ▫ Part III- covers statutory nuisances and clean air
The Natural Environment and Communities Act 2006 (NERC Act)	<p>The Act establishes an independent body - Natural England - responsible for conserving, enhancing and managing England's natural environment for the benefit of current and future generations. Natural England will work in close partnership with other organisations and bodies that have a major role in relation to the natural environment, in particular the Environment Agency, the Forestry Commission, English Heritage and local authorities. It established the Commission for Rural Communities and reconstitutes the Joint Nature Conservation Committee. Details of the act include:</p> <ul style="list-style-type: none"> ▫ Nature Conservation in the UK ▫ Wildlife ▫ Sites of Special Scientific Interest ▫ National Parks and the Broads ▫ Rights of way ▫ Inland Waterways ▫ Flexible Administrative Arrangements.
Natural Environment White Paper (2011)	<p>The Natural Environment White Paper has four ambitions:</p> <ul style="list-style-type: none"> ▫ Protecting and improving our natural environment; ▫ Growing a green economy; ▫ Reconnecting people and nature International; and ▫ EU leadership. <p>It looks at ecosystem services provided by natural systems and promotes a step-change in nature conservation which makes sustainable use of natural capital and natural networks by working at a landscape scale. It aims to ensure that by 2020 17% of England is managed effectively to safeguard biodiversity. Since it's publication, Defra has published periodic Natural Environment White Paper implementation update newsletters, the most recent being implemented in October 2014.</p>
UK Biodiversity Plan (1994)	<p>This document represents the first United Kingdom biodiversity action plan. It contains three sections;</p> <ul style="list-style-type: none"> ▫ Section 1 – describes the UK's biological resources and their global importance as well as the range of biodiversity within the UK from a historical and geological importance ▫ Section 2- describes the UK's strategy and programmes and examines threats, problems and opportunities of biodiversity. ▫ Section 3- draws the components of the action plan together and provides a forward work programme
Biodiversity 2020: A strategy for England's wildlife and ecosystem services	<p>This is a new biodiversity strategy for England which builds on the Natural Environment White Paper and provides a comprehensive picture of how the government are implementing international and EU commitments.</p> <p>It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. It builds on the successful work that has gone before, but also seeks to deliver a real step change</p>
UK Biodiversity Framework (2024)	<p>This UK Biodiversity framework sets out four objectives for cross-UK work relating to biodiversity policy and supporting evidence:</p>

	<ol style="list-style-type: none"> 1. To contribute to informing and developing the UK's position in international agreements and policy making, 2. To coordinate collective achievement of the UK's international obligations, 3. To enable and support country input to reporting required under the UK's international obligations, 4. To inform each other of domestic policy developments and collaborate to achieve shared aims where there is benefit in doing so at a UK level. <p>This framework refreshes the “broad enabling structure” of the 2012 framework in the context of the new commitments by:</p> <ul style="list-style-type: none"> ▫ setting out the shared objectives for co-operation and collaboration between the four countries of the UK; ▫ establishing a governance structure for overseeing and achieving the shared objectives.
National Forest Inventory	This programme monitors woodland and trees within Great Britain. It includes the most in depth survey carried out on Britain's woodland and trees to date. The NFI provides an extensive and unique record of key information about our forests and woodlands. Woodland surveys and compiled forest inventories have been carried out at 10-15 year intervals since 1924.
Ancient Woodland Inventory	The AWI is a provisional guide and map based tool to the location of Ancient and long established Woodland. Ancient woodland is defined as land that is currently wooded and has been continually wooded in England at least since 1600. This type of woodland has important biodiversity and cultural values by its virtue of its antiquity.
A Strategy for England's Trees, Woods and Forests (2007)	<p>Aims to provide a resource of trees, woods and forests where they can contribute environmental, economic and social benefits now and for future generations; to ensure that existing and newly planted trees, woods and forests are resilient to climate change and contribute to biodiversity and natural resources adjusting to a changing climate; to protect and enhance water, soil, air, biodiversity and landscape, and the cultural and amenity values of trees and woodland; to increase the contribution that trees, woods and forests make to quality of life; and to improve the competitiveness of woodland businesses and promote development of new/improved markets for sustainable woodland products and ecosystem services.</p> <p>It seeks to do this through the long-term sustainable management of trees, woods and forests; by seeking 'the right tree in the right place'; by effective use of public investment; and by ensuring synergies with other Government policies.</p>
The England Trees Action Plan 2021-2024 (2021)	This plan sets out the government's long-term vision for the treescape it wants to see in England by 2050 and beyond. It provides a strategic framework for implementing the Nature for Climate Fund and outlines over 80 policy actions the governments is taking over this Parliament to help deliver this vision. Some of these include England having at least 12% woodland cover by mid-century, contributing to net-zero carbon emissions.
Salmon and Freshwater Fisheries Act 1975	The Act dictates which methods of fishing for salmon, trout and freshwater fish are an offence and also includes offences against the use and dealing with roe, spawning and unclean fish. The Act also deals with problems of pollution

	<p>making it an offence to knowingly permit the flow of poisonous matter and polluting effluents into river courses.</p> <p>Part II of the Act deals with obstructions to the passage of fish, including fishing weirs, screens and sluices; dictating when and where they can be used.</p> <p>Part III explains the proper times of fishing, selling and exporting fish.</p>
Wildlife and Countryside Act of 1981	The Act prohibits certain methods of killing or taking wild animals; amends the law relating to protection of certain mammals; restricts the introduction of certain animals and plants; amends the Endangered Species (Import and Export) Act 1976; amends the law relating to nature conservation, the countryside and National Parks; and amends the law relating to public rights of way.
Conservation of Habitats and Species Regulations 2010	The Conservation of Habitats and Species Regulations 2010 (also known as the Habitats Regulations) consolidate amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. These regulations implement the EU Habitats Directive, providing provisions for the selection, designation, registration, and notification of sites to be protected for the conservation of natural habitats and wild fauna and flora.
Conservation of Habitats and Species Regulations 2017 (as amended)	<p>The 2017 regulations transposed the land and marine aspects of the Habitats Directive and certain elements of the Wild Birds Directive. The main changes to these regulations are as follows:</p> <ul style="list-style-type: none"> ▫ the creation of a national site network within the UK territory comprising the protected sites already designated under the Nature Directives, and any further sites designated under these Regulations, ▫ the establishment of management objectives for the national site network (the 'network objectives') ▫ a duty for appropriate authorities to manage and where necessary adapt the national site network as a whole to achieve the network objectives, ▫ an amended process for the designation of Special Areas of Conservation (SACs), ▫ arrangements for reporting on the implementation of the Regulations, given that the UK no longer provides reports to the European Commission, ▫ arrangements replacing the European Commission's functions with regard to the imperative reasons of overriding public interest (IROPI) test where a plan or project affects a priority habitat or species, ▫ arrangements for amending the schedules to the Regulations and the annexes to the Nature Directives that apply to the UK.
National Parks and Access to Countryside Act 1949 (as amended)	<p>The Act established powers to declare National Nature Reserves (NNRs); to notify sites of Sites of Special Scientific Interest (SSSI's) and for local authorities to establish Local Nature Reserves (LNRs).</p> <p>These provisions were strengthened by the Wildlife & Countryside Act 1981. An NNR is an area which is among the best examples of a particular habitat. NNRs are of national importance. They are in many cases owned and managed by the statutory authority, (for example English Nature), but not always. An NNR, unlike an SSSI, has to be managed appropriately to retain its special status.</p>

Natural Environment and Rural Communities Act 2006	<p>Section 40 of the Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the ‘biodiversity duty’.</p> <p>The aim of the biodiversity duty is to raise the profile of biodiversity in England and Wales, so that the conservation of biodiversity becomes properly embedded in all relevant policies and decisions made by public authorities.</p>
Guidance on Complying with the biodiversity duty 2023	<p>The guidance is intended to assist local authorities in meeting the Biodiversity Duty. The conservation of biodiversity is highly dependent on the extent to which it is addressed in infrastructure and development projects and how well the planning process integrates biodiversity into planning and development control policies.</p> <p>Core Strategies and Local Development Plan Strategies set out the overarching policy framework for the plan area. Strategic objectives and policies should be developed for biodiversity, including objectives for enhancement and conservation. Consideration should also be given to how biodiversity enhancement can be used to bring about more sustainable development, through integration with other policy objectives and other land uses, for example housing and economic development, health, education and social inclusion.</p>
DfT Outcome Delivery Plan: 2021-2022	<p>This delivery plan sets out how the following priority outcomes will measure our success, and how we will ensure we continuously improve:</p> <ul style="list-style-type: none"> ▫ Improve connectivity across the UK and grow the economy by enhancing the transport network, on time and on budget, ▫ Build confidence in the transport network as the country recovers from COVID-19 and improve transport users’ experience, ensuring that the network is safe, reliable, and inclusive, ▫ Tackle climate change and improve air quality by decarbonising transport (this outcome reflects DfT’s contribution to the BEIS-led cross-cutting net zero outcome). <p>The strategic objective of this plan is to increase our global impact, which is about boosting our influence and maximising trade by having an innovative, outward-facing approach.</p>
Decarbonising Transport: Setting the Challenge 2020	<p>Setting the Challenge is a policy and baselining report, establishing the groundwork from which a latter 2020 Transport Decarbonisation Plan (TDP) will work. It is not a plan in itself. The TDP was planned to be published ahead of the 2020 United Nations Framework Convention on Climate Change Conference in November 2020. No word has been given on a delayed release date, given the postponement of the conference to November 2021 due to the Coronavirus pandemic.</p> <p>Regardless, it is intended that the TDP will put forward a credible implementation plan for how ambitious greenhouse gas and decarbonisation targets will be met across the whole UK transport network.</p> <p>Setting the Challenge therefore investigates the role of transport in carbon and other greenhouse gas emissions, and gives the current position of each transport mode, in terms of emission levels, compared to historical emissions, describes related current governmental aims and targets, and lists current policies aiming to deliver planned targets and future work.</p>



The priorities for the Government, further distilled in the ministerial foreword, appear to be as follows:

- Public transport and active travel will be the natural first choice for our daily activities. We will use our cars less and be able to rely on a convenient, cost-effective and coherent public transport network.
- From motorcycles to HGVs, all road vehicles will be zero emission. Technological advances, including new modes of transport and mobility innovation, will change the way vehicles are used.
- Our goods will be delivered through an integrated, efficient and sustainable delivery system.
- Clean, place-based solutions will meet the needs of local people. Changes and leadership at a local level will make an important contribution to reducing national GHG emissions.
- The UK will be an internationally recognised leader in environmentally sustainable, low carbon technology and innovation in transport.
- We will lead the development of sustainable biofuels, hybrid and electric aircraft to lessen and remove the impact of aviation on the environment and by 2050, zero emission ships will be commonplace globally.

Transport Act 2000

The aim of the Act is to give effect to the Government's strategy for an integrated transport policy set out in the White Paper "A New Deal for Transport: Better for Everyone" (Cm 3950) published in July 1998.

This Act contains measures to create a more integrated transport system and provide for a public-private partnership for National Air Traffic Services Ltd ("NATS"). The Act aimed to improve quality in local passenger transport services such as helping limit traffic congestion and improving air quality as well introducing road user charges and workplace parking levies to help tackle congestion.

The use of railways was promoted through the Strategic Rail Authority and makes provision for the better regulation of the railway industry.

Local Transport Act 2008

This act makes further provision in relation to local transport authorities, the provision and regulation of road transport services and the subsidising of passenger transport services. It looks at important areas of public transport such as local bus services and sets out proposals for a more consistent approach to local transport planning. It plans to reform the existing laws on road pricing schemes for local authorities who wish to have schemes in their areas.

Door to door – A Strategy for Improving Sustainable Transport Integration 2013

The 'Door to door' strategy describes the government's vision for integrated sustainable journeys. It sets out what is wanted from transport providers and what is being done across the department to support door-to-door journeys.

The strategy focuses on 4 core areas which need to be addressed so that people can be confident in choosing greener modes of transport:

- accurate, accessible and reliable information about different transport options for their journey
 - convenient and affordable tickets, for an entire journey
 - regular and straightforward connections at all stages of the journey and between different modes of transport
 - safe and comfortable transport facilities
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<p>National Policy Statement for National Networks 2014</p>	<p>The 'National networks national policy statement' sets out the:</p> <ul style="list-style-type: none"> ▫ need for development of road, rail and strategic rail freight interchange projects on the national networks ▫ the policy against which decisions on major road and rail projects will be made ▫ Baseline information relating to relevant environmental, social and economic issues was also released as part of a draft consultation. The NPS will be used by the Secretary of State as a primary basis for making decisions on development consent applications for national networks.
<p>Roads Investment Strategy 2: 2020 - 2025</p>	<p>The second Road Investment Strategy outlines the policy drivers for the allocation of £27.4 billion investment into the SRN in the period 2020-2025, that will also have an influence beyond, looking to prepare the SRN to align with net zero targets by 2050. The Government Objectives document set this direction early, with the full RIS2 providing detail. The Government Objectives sets out the vision for the SRN, by 2050, to be:</p> <ul style="list-style-type: none"> ▫ a network that supports the economy; ▫ a safer and more reliable network; ▫ a greener network; ▫ a more integrated network; and ▫ a smarter network. <p>These objectives are echoed in more detail in the full RIS2 as well as a roadmap for delivering the vision, focusing on economic growth, housing, tackling emissions, safety, resilience, and innovation, as well as efforts to place users at the heart of everything.</p> <p>RIS2 also sets specific monitoring targets for Highways England to ensure:</p> <ul style="list-style-type: none"> ▫ improving safety for all; ▫ fast and reliable journeys; ▫ a well maintained and resilient network; ▫ being environmentally responsible; ▫ meeting the needs of all users; and ▫ achieving real efficiency.
<p>The Road to Growth: our Strategic Economic Growth Plan (2017)</p>	<p>A strategic economic growth plan to maximise the economic impact of the strategic road network (SRN). It sets out practical steps to increase economic contribution in four areas:</p> <ul style="list-style-type: none"> ▫ Supporting business productivity and competitiveness, and enabling the performance of SRN-reliant sectors ▫ Providing efficient routes to global markets through international gateways ▫ Stimulating and supporting the sustainable development of homes and employment spaces ▫ Providing employment, skills and business opportunities within our sector



Highways England Growth and Housing Fund (2015)	<p>The Road Investment Strategy established a £100 million Growth and Housing Fund (GHF) to be administrated by Highways England. It provides leverage and flexibility for Highways England to support Local Enterprise Partnerships, local authorities and the private sector to mobilise development sites that require prompt investment in the network to allow them to progress quickly.</p> <p>Maximum investment in an individual scheme is £5 million though £10 million may be considered. It can provide capital investment to bridge funding gaps in highway works and associated transport infrastructure which are preventing economic and housing sites from being progressed. Only schemes that demonstrate that the intervention would be a complement to and not a replacement for other funds from private or public sources are eligible.</p>
Network Rail Delivery Plan 2019-2024	<p>Network Rail’s management of rail infrastructure is split regionally. At a national level, however, Network Rail has set out how it will spend funding allocated to it by the Government in Control Period 6 (CP6, 2019-2024), through a new operational structure, to deliver the below objectives.</p> <p>Over CP6, Network Rail has a vision to be “a company that is on the side of passengers and freight users”, with the purpose to “connect people to places and goods, driving economic growth.” It frames its activities around six themes:</p> <ul style="list-style-type: none"> ▫ safety; ▫ efficiency; ▫ sustainable growth; ▫ people; ▫ train service delivery; and ▫ customers and communities. <p>Each of these themes features individual targets related to the running of the rail network.</p>
Inclusive Transport Strategy 2018	<p>The DfT’s Inclusive Transport Strategy outlines the Government’s plans to achieve equal access for disabled people across the transport network. The strategy details work already undertaken and sets out rights for disabled travellers going forwards, as well as efforts that will be made to raise awareness of issues surrounding physical access, access to information, and training for staff on the transport network.</p> <p>The primary ambition listed is for “disabled people to have the same access to transport as everyone else, and to be able to travel confidently, easily, and without extra cost.” This is framed by the target to achieve equal access by 2030, with assistance where physical infrastructure remains a barrier.</p> <p>The strategy also puts forward various funding streams and updated to guidance with the intention of upgrading physical infrastructure across the country, and monitoring programmes to track delivery of the strategy.</p>
A connected society – A strategy for tackling loneliness, 2018	<p>This strategy notes the importance on local transport links and infrastructure in supporting social networks and facilitating interaction, key elements in combating loneliness.</p>
Countryside and Rights of Way Act 2000 (CROW Act)	<p>This Act contains five Parts and 16 Schedules and provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation, and</p>



	<p>provides for better management of Areas of Outstanding Natural Beauty (AONB).</p> <p>The Act is compliant with the provisions of the European Convention on Human Rights, requiring consultation where the rights of the individual may be affected by these measures.</p>
Securing the Future – Delivering the UK Sustainable Development Strategy (2005)	<p>The Strategy takes account of developments since the 1999 Strategy, both domestically and internationally; the changed structure of government in the UK with devolution to Scotland, Wales and Northern Ireland; greater emphasis on delivery at regional level and the new relationship between government and local authorities. It highlights the renewed international push for sustainable development from the World Summit on Sustainable Development in Johannesburg in 2002.</p>
National Infrastructure Strategy (2020)	<p>This strategy sets out the government's plans to deliver on an infrastructure revolution: a radical improvement in the quality of the UK's infrastructure to help level up the country, strengthen the Union and put the UK on a path to net zero emissions by 2050. As the government helps the economy to recover following COVID-19, it will also seek to address the long-term issues that that have held back UK infrastructure. The strategy sets out how the government will:</p> <ul style="list-style-type: none"> ▫ Boost growth and productivity across the whole of the UK, levelling up and strengthening the Union, ▫ Put the UK on the path to meeting its net zero emissions target by 2050, ▫ Support private investment, ▫ Accelerate and improve delivery of infrastructure projects.
Strategy on Disability Access	<p>The strategy sets out 100 immediate commitments supported by £1.6bn of funding alongside an agenda for future reform. The strategy is focused on improving inclusion in the workplace, tackling the disability employment gap – currently at 28.6% - and making sure children with special educational needs and disabilities are at the heart of the strategy, including:</p> <ul style="list-style-type: none"> ▫ Piloting an Access to Work Adjustments Passport to help smooth the transition into employment and support people changing jobs. Pilots will be taking place this year focussing on young people leaving education and veterans leaving the armed forces. The Adjustments Passport will capture the in-work support needs of the individual and empower them to have confident discussions about adjustments with employers. It will also set an expectation with the employer that specialist aids and appliances move when their employee progresses in work or moves post. ▫ Investing £300 million to create places, improve existing provision in schools and make accessibility adaptations for children and young people with Special Educational Needs and Disabilities. <p>The strategy outlines new technology making rail journeys easier and more accessible including:</p> <ul style="list-style-type: none"> ▫ Enabling disabled passengers to contact staff from their seat on the train with the new support in place by end of March 2022, with DfT supporting innovative projects that will improve communication for disabled passengers and others with reduced mobility on rail services.



	<p>Projects will be supported with between £50k and £400k and will use new technology to make using the railways easier and more accessible.</p> <p>The Disability Strategy also covers a range of other areas including access to justice, culture and the arts. It marks the first cross-government endeavour to improve disabled people’s everyday lives with legislation, policy and funding from across all corners of government.</p>
National Disability Strategy (2021)	<p>This strategy sets out the actions the government will take to take to improve the everyday lives of all disabled people. It is split into three parts:</p> <ul style="list-style-type: none"> ▪ Part 1: immediate commitments to improving disabled people’s lives ▪ Part 2: including disabled people in policy making and service delivery ▪ Part 3: summary of actions each government department will take ▪ This national strategy recognises and builds on the progress that has been made since the Disability Discrimination Act.
Disability Action Plan (2024)	<p>This plan sets out the immediate actions the government will take in the coming year to improve disabled people’s everyday lives. It also lays the foundations for longer-term change. This plan compliments the National Disability Strategy and other significant UK government reform programmes and specific work to continuously improve equal access to opportunities, in line with the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The government is committed to:</p> <ul style="list-style-type: none"> ▫ Support disabled people who want to be elected to public office, ▫ Include disabled people’s needs in emergency and resilience planning, ▫ Include disabled people’s needs in climate-related policies, ▫ Improve information and outcomes for families in which someone is disabled, ▫ Make playgrounds more accessible, ▫ Help businesses understand the needs of and deliver improvements for disabled people, ▫ Explore if the UK could host the Special Olympics World Summer Games, ▫ Support people who have guide and assistance dogs, ▫ Help the government measure how effective its policies and services are for disabled people, ▫ Research issues facing disabled people in the future, ▫ Make government publications and communications more accessible, ▫ Improve understanding of the cost of living for disabled people, ▫ Promote better understanding of the UNCRPD across government, ▫ Monitor and report progress of the Disability Action Plan.
Children’s Environment and Health Action Plan for Europe (CEHAPE) 2004	<p>This Plan outlines the regional priority goals that are put in place to ensure the effective action of various principles to protect children’s health especially those children who are deemed more at risk due to various factors such as unsafe environments and physical factors. It outlines those children most at risk as being poor, underprivileged children or those who live in adverse conditions such as war zones.</p>



	<p>It also outlines the need for internal collaboration to achieve these priority goals from all of the EU and governing bodies. As well as promoting national children’s environment and health action plans.</p>
<p>Health Impact Assessment in Strategic Environmental Assessment (2001)</p>	<p>This is a review of Health Impact Assessment concepts, methods and practices to support the development of a protocol on Strategic Environmental Assessment which adequately covers health impacts. It discusses how decisions taken outside of the health sector can affect the health of individuals and populations by modifying their physical and social environment, and how this in turn affects social and economic development.</p> <p>It describes methods, procedures and practices to carry out health impact assessments of policies, plans and projects, highlighting the similarities with and opportunities for integrating health impact assessment within strategic environmental assessments, and other forms of impact assessment under use.</p> <p>It also draws attention to the opportunities for achieving health benefits and avoiding health costs by considering health impacts early in the planning process. It is aimed at inspiring policy makers to include health considerations early in their planning process by showing how different perspectives can feasibly be incorporated into everyday decisions.</p>
<p>Fixing the foundations: Creating a more prosperous nation, HM Government (2015)</p>	<p>This document sets out a 15-point plan that the government will put into action to boost the UK’s productivity growth, centred around two key pillars: encouraging long-term investment, and promoting a dynamic economy. It sets out the government’s long-term strategy for tackling the issues that matter most for productivity growth.</p>
<p>A Children’s Environment and Health Strategy for the United Kingdom (2009)</p>	<p>This document provide an overview of current activities in the UK. Following a public consultation process, recommendations will be made on the measures necessary to improve children’s and young people’s environmental health in the UK as well as encouraging a coherent cross-government approach. This strategy aims to build on and complement policies and activities already undertaken by government departments, devolved administrations, local and regional authorities and the National Health Service (NHS). Some areas for improvement highlighted in this strategy include:</p> <ul style="list-style-type: none"> ▫ counteracting the increased number of overweight and obese children and young adults, coupled with improving the amount of physical activity they undertake ▫ addressing concerns regarding the number of children whose asthma is affected by air pollution and the effects of air pollution on the long-term lung function of children
<p>Healthy Lives, Healthy People: Our strategy for public health in England (2010)</p>	<p>This white paper sets out the government’s long-term vision for the future of public health in England. The aim is to create a ‘wellness’ service (Public Health England) and to strengthen both national and local leadership.</p> <p>The plans set out put local communities at the heart of public health. It states that central control will end and give local government the freedom, responsibility and funding to innovate and develop their own ways of improving public health in their area. There will also be real financial incentives to reward their progress on improving health and reducing health inequalities, and greater transparency so people can see the results they achieve.</p>
<p>Towards Social Investment for</p>	<p>This document, alongside a series of Staff Working Documents, form the Social Investment Package. This outlines a policy framework for redirecting</p>



Growth and Cohesion 2014 - 2020	Member States policies where needed towards social investment throughout life, with a view to ensuring the adequacy and sustainability of budgets for social policies and for the government and private sector as a whole.
Air Quality Standards Regulations 2010	These regulations sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO2). As well as having direct effects, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems. It also incorporates the 4th air quality daughter directive that sets targets for levels in outdoor air of certain toxic heavy metals and polycyclic aromatic hydrocarbons.
Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007	This Air Quality Strategy sets out air quality objectives and policy options to further improve air quality in the UK from today into the long term. As well as direct benefits to public health, these options are intended to provide important benefits to quality of life and help to protect our environment.
Clean Air Strategy, 2019	<p>The Clean Air Strategy explains how the UK Government will tackle all sources of air pollution, sets out policy direction, and outlines measures that will drive the move to zero emission transport modes. The strategy links into other national level policies, outlining the same targets and strategies across multiple documents.</p> <p>The strategy includes numerous aims and goals, many drawn from other policy documents, that are collated in brief in the executive summary. These are framed in the following topics:</p> <ul style="list-style-type: none"> ▫ protecting the nation's health; ▫ protecting the environment; ▫ securing clean growth and innovation; ▫ action to reduce emissions from transport; ▫ action to reduce emissions at home; ▫ action to reduce emissions from farming; ▫ action to reduce emissions from industry; and ▫ leadership at all levels. <p>The Clean Air Strategy effectively summarises government policy with an impact on air quality from multiple different areas. Multiple government initiatives are listed where action has been taken by central government. Of particular importance, and reinforced by the Clean Air Strategy, is the adoption of challenging and enforceable local Air Quality Strategies.</p>
Making Space for Nature - A review of England's Wildlife Sites and Ecological Network (2010)	<p>The review looked at England's wildlife sites and whether they are capable of responding and adapting to the growing challenges of climate change. It makes 24 recommendations for practical action to Make Space for Nature and achieve a coherent and resilient ecological networks. Five themes unite them:</p> <p>We need to continue the recent progress in improving the management and condition of wildlife sites, particularly our SSSIs. We also make recommendations for how these should be designated and managed in ways that enhance their resilience to climate change.</p> <p>We need to properly plan ecological networks, including restoration areas. Restoration needs to take place throughout England. However, in some</p>

areas, both the scale of what can be delivered to enhance the network, and the ensuing

There are a large number of surviving patches of important wildlife habitat scattered across England outside of SSSIs, for example in Local Wildlife Sites. We need to take steps to improve the protection and management of these remaining wildlife habitats. 'Protection' will usually be best achieved through incentive-based mechanisms, but at times may require designation.

We need to become better at deriving multiple benefits from the ways we use and interact with our environment. There are many things that society has to do that may seem to have rather little to do with nature conservation, but could have, or even should have if we embrace more radical thinking; flood management by creating wetlands is an obvious example. We need to exploit these 'win-win' opportunities to the full. Being better at valuing a wider range of ecosystem services would help this process.

We will not achieve a step-change in nature conservation in England without society accepting it to be necessary, desirable, and achievable. This will require strong leadership from government and significant improvements in collaboration between local authorities, local communities, statutory agencies, the voluntary and private sectors, farmers, landowners and other land-managers and individual citizens.

Delivering a healthy natural environment. Ecosystem approach action plan, Defra (2010)

The plan has priority areas for action that will be fundamental to the success and to securing wider engagement at the national, regional and local levels:

- Priority area 1: Promoting joined-up working within Defra and the Defra network to deliver environmental outcomes more effectively
- Priority area 2: Identifying opportunities for mainstreaming an ecosystems approach
- Priority area 3: Using case studies that demonstrate the benefits of taking an ecosystems approach
- Priority area 4: Developing ways of valuing ecosystem services

The Great Britain Invasive Non-Native Species Strategy, Defra (2015)

This Strategy aims to address invasive non-native species (INNS) issues in Great Britain, maintaining the approach of the 2008 Strategy and the 2003 policy review. The vision is that if this Strategy is fully implemented, biodiversity, quality of life and economic interests in GB will be better protected against the adverse impacts of INNS because there will be:

- widespread awareness and understanding of the risks and adverse impacts associated with INNS, and greater vigilance against these;
 - integration of INNS within the broader biosecurity agenda;
 - a strong sense of shared responsibility across government, key stakeholder organisations, land managers and the general public for action and behaviour that will reduce the threats posed by INNS;
 - a guiding framework for national, regional and local mitigation, control or eradication initiatives helping to reduce the detrimental impact of INNS; and
 - improved co-ordination and co-operation on INNS issues at a European and international level.
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State of Natural Capital Annual Report 2020, Natural Capital Committee (2020)	This report sets out the work done by the committee since March 2019. It sets out what should be included in the Environment Bill and the progress made to date on the goals of the 25 Year Environment Plan.
A narrative for conserving freshwater and wetland habitats in England, Natural England (2016)	This narrative provides an overview of circumstances relating to the conservation of freshwater and wetland habitats in England, considering their ecological function, the natural and anthropogenic factors affecting them, the principles that should be applied to their management, and the respective roles of the main policy mechanisms involved in their conservation. It covers all running and standing water habitats, of whatever size, and terrestrial wetland habitats including bogs, fens, swamp and wet woodland.
The Third National Adaptation Programme (NAP3) and the Fourth Strategy for Climate Adaptation Reporting (2023)	<p>This third National Adaptation Programme (NAP3) sets out the actions that the government will take to adapt to the impacts of climate change from 2023-2028, building on and developing the approach from previous rounds since 2012. It sets out how we will maintain living standards and protect our environment by making sure the country is resilient and can effectively adapt to changes in our climate.</p> <p>The UK government's vision for adaptation is for a country that effectively plans for and is fully adapted to the changing climate, with resilience against each of the identified climate risks.</p> <p>NAP3 is more ambitious than NAP2, taking a comprehensive approach and responding to every risk and opportunity in the Climate Change Risk Assessment, as well as widening the scope to international risks impacting the UK.</p>
Air Quality Plan for Nitrogen Dioxide in the UK, 2017	<p>Jointly produced by the DfT and DEFRA, this national plan determines an approach for areas with the worst levels of traffic-related air pollution to mitigate the effects. It sets out the framework for Clean Air Zones, allowing for targeted action to improve air quality in the "shortest possible time" as required by legal obligations to meet NO₂ concentration thresholds.</p> <p>The document also sets out plans for ending the sale of new, conventional petrol and diesel cars and vans by 2040. The plan argues that NO₂ accumulation is a local issue, as the pollutants do not disperse widely like greenhouse gasses. In line with this local approach, the plan sets out support to local authorities, including:</p> <ul style="list-style-type: none"> ▫ setting up a £255 million Implementation Fund; ▫ establishing a Clean Air Fund; and ▫ providing £100m for retrofitting and new low emission buses. <p>The plan outlines the introduction of several new funding streams that local authorities can utilise to finance measures to reduce NO₂ emissions.</p>
Heritage Protection for the 21st Century 2007	The paper sets out a vision of a unified and simpler heritage protection system, which will have more opportunities for public involvement and community engagement. The proposed system will be more open, accountable and transparent. It will offer all those with an interest in the historic environment a clearer record of what is protected and why; it will enable people who own or manage historic buildings and sites to have a better understanding of what features are important; it will streamline the consent procedures and create a more consultative and collaborative protection system.



	It is predominantly aimed for England and Wales with some UK wide elements.
Ancient Monuments and Archaeological Areas Act 1979	Under the Act a monument which has been scheduled is protected against any disturbance including unlicensed metal detecting. Permission must be obtained for any work which might affect a monument above or below ground. English Heritage gives advice to the Government on each application. In assessing an application the Secretary of State will try to ensure any works on protected sites are beneficial to the site or are essential for its long term sustainability.
Planning (Listed Buildings and Conservation Areas) Act 1990	Governs special controls in respect of buildings and areas of special architectural or historic interest. Any alteration, extension or demolition of a listed building in a way that affects its character as a building of special interest requires Listed Building Consent.
Environmental Damage (Prevention and Remediation) (England) Regulations 2015	These regulations came into force on 19th July 2015. They impose obligations on operators of certain activities requiring them to prevent or remediate environmental damage. They apply to damage to protected species, natural habitats, sites of special scientific interest (SSSIs), water and land.
The Setting of Heritage Assets, Historic Environment Good Practice Advice in Planning 3 (2017)	The document sets out guidance, against the background of the National Planning Policy Framework (NPPF) and the related guidance given in the Planning Practice Guide (PPG), on managing change within the settings of heritage assets, including archaeological remains and historic buildings, sites, areas, and landscapes.
Strategic Environmental Assessment, Sustainability Appraisal, Historic Environment (2016)	The purpose of the advice note is to support all those involved in assessing the effects of certain plans on the historic environment. It offers advice on heritage considerations during the Sustainability Appraisal and Strategic Environmental Assessment process, and on implementing historic environment legislation, the relevant policy in the National Planning Policy Framework (NPPF) and the related guidance given in the Planning Practice Guidance (PPG) as well as the Marine Policy Statement.
National Parks and Access to the Countryside Act 1949	This was an act that made provision for National Parks and the establishment of a National Parks Commission. It was also to confer on the Nature Conservancy and local authorities' powers for the establishment and maintenance of nature reserves, it made further provision for the recording, creation, maintenance and improvement of public paths and for securing access to open country and to amend laws relating to rights of way.
UK National Ecosystem Assessment Follow-on (2014)	The UK NEA (2011) advanced a 'settings' or place-based approach to cultural ecosystem services (CES). This approach highlighted a range of cultural goods and benefits associated with peoples' interactions with the natural environment. The UK NEAFO refines and elaborates this approach. It understands CES as both the environmental spaces (e.g. parks and beaches) within which people interact with the natural environment and the cultural practices (e.g. exercising and playing) that define these interactions and spaces. More generally these environmental spaces and practices are understood to shape and reflect a wider set of cultural (collective or shared) values about ecosystems.
National Infrastructure	The Plan brings together the government's plans for economic infrastructure over the next 5 years with those to support delivery of housing and social



<p>Delivery Plan 2016–2021, Infrastructure and Projects Authority (HM Government) (2016)</p>	<p>infrastructure. This is reflected by the government’s commitment to invest over £100 billion by 2020-21, alongside significant ongoing private sector investment in infrastructure. This investment will drive wider economic benefits, including:</p> <ul style="list-style-type: none"> ▫ supporting growth and creating jobs in the short term as projects are built – especially where public investment is used to attract private investment ▫ raising the productive capacity of the economy in the long term as the benefits of new infrastructure are felt; reduced transaction costs; larger and more integrated labour and product markets; and better opportunities to collaborate and innovate ▫ driving efficiency – enabling greater specialisation and economies of scale ▫ boosting international competitiveness – attracting inward investment and enabling trade with foreign partners
<p>Creating a better place: Our ambition to 2020, Environment Agency (2018)</p>	<p>This outlines the Environment Agency’s ambitions for how it planned to protect and improve natural resources, alongside Defra’s proposed 25-year environment plan, leading up to the year 2020. Its principles are;</p> <ul style="list-style-type: none"> ▫ Put people and wildlife first: our goal is to create a better place for them. ▫ 80/20: we will focus on the 20% that makes 80% of the difference. ▫ Support local priorities: every place and community has its own needs.
<p>Contaminated Land (England) Regulations 2006</p>	<p>Outlines the regulations on contaminated land in order to prevent new land becoming contaminated by polluting substances whilst also tackling historic contamination of sites as it poses risks to human health and the environment.</p>
<p>Safeguarding our Soils: a strategy for England 2009</p>	<p>The purpose of this strategy is to highlight the areas in which soil will be prioritised and to focus attention on tackling degradation threats. The vision of this paper is to try and ensure that by 2030, all England’s soils will be managed sustainably and deprecation threats tackled successfully and that this will improve the quality of England’s soils and safeguard their ability to provide essential services for future generations. Key topics include:</p> <ul style="list-style-type: none"> ▫ Better protection for agricultural soils ▫ Protecting and enhancing stores of soil carbon ▫ Building the resilience of soils to a changing climate ▫ Preventing soil pollution ▫ Future research and monitoring
<p>Planning for the Future: A guide to working with Highways England on planning matters (2015)</p>	<p>This document describes the approach taken to engage in the planning system and the issues looked at when considering draft planning documents and planning applications. It is aimed at local authorities, developers, Local Enterprise Partnerships (LEPS), community groups and others involved in plan making/development management in respect of land close to any part of the Strategic Road Network (SRN).</p>
<p>Our Waste, Our Resources: A Strategy for England,</p>	<p>The strategy sets out the plan to double resource productivity and eliminate avoidable waste of all kinds (including plastic waste) by 2050. It sets out how England will:</p>



HM Government (2018)	<ul style="list-style-type: none"> ▫ preserve our stock of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy ▫ minimise the damage caused to our natural environment by reducing and managing waste safely and carefully deal with waste crime.
Flood and Water Management Act 2010	<p>This act provides for a better, more comprehensive management of flood risk for people, homes and businesses, helps safeguard community groups from unaffordable rises in surface water drainage charges and protects water supplies to the consumer. The key concepts include:</p> <ul style="list-style-type: none"> ▫ Flood and Coastal Erosion Risk Management ▫ Strategies for Natural flood and coastal erosion ▫ The establishment of regional flood and coastal communities.
River Basin Management Plans	<p>These plans set out how organizations, stakeholders and communities will work together to improve the water environment. A RBD covers an entire river system, including river, lake, groundwater, estuarine and coastal water bodies and are designed to protect and improve the quality of the water environment. The last update to these plans was in 2022 which describes the challenges that threaten the water environment and how these challenges can be managed.</p>
Flood Risk Regulations 2009	<p>The Regulations identify and take action in areas with the most significant flood risks. The purpose of the Act is to:</p> <ul style="list-style-type: none"> ▫ Introduce the concept of flood risk management and the framework for the delivery of flood and coastal erosion risk management through national and local strategies ▫ Provide new definitions, for example “flood”, “surface runoff”, “Risk Management Authorities”, Lead Local Flood Authority” ▫ Establish the roles and responsibilities of the different risk management authorities
Flood and Water Management Act 2010	<p>The Bill responds to recent pressure to introduce legislation to address the threat of flooding and water scarcity, both of which are predicted to increase with climate change. Key areas include:</p> <ul style="list-style-type: none"> ▫ requires the Environment Agency to create a National Flood and Coastal Erosion Risk Management Strategy, which a number of organisations will have to follow ▫ requires leading local flood authorities to create local flood risk management strategies ▫ enables the Environment Agency and local authorities more easily to carry out flood risk management works ▫ introduces a more risk-based approach to reservoir management ▫ changes the arrangements that would apply should a water company go into administration ▫ enables water companies more easily to control non-essential uses of water, such as the use of hosepipes ▫ enables water companies to offer concessions to community groups for surface water drainage charges ▫ requires the use of sustainable drainage systems in certain new developments.



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Water Resources Act 1991	<p>This Act aims to prevent and minimise pollution of water. The policing of this act is the responsibility of the Environment Agency. Under the act it is an offence to cause or knowingly permit any poisonous, noxious or polluting material, or any solid waste to enter any controlled water.</p> <p>Silt and soil from eroded areas are included in the definition of polluting material. If eroded soil is found to be polluting a water body or watercourse, the Environment Agency may prevent or clear up the pollution, and recover the damages from the landowner or responsible person.</p>
Water Act 2003 (as amended)	<p>The four broad aims of the Act are:</p> <ul style="list-style-type: none"> ▫ the sustainable use of water resources; ▫ strengthening the voice of consumers;



	<ul style="list-style-type: none"> ▫ a measured increase in competition; and ▫ the promotion of water conservation.
Water Industry Act 1991	The Act sets out the main powers and duties of the water and sewerage companies, and replaces those set out in the Water Act 1989, and defined the powers of the Director General of Water Services (now the Water Services Regulation Authority (Ofwat)).
Water for Life White Paper, Defra (2011)	The White Paper describes a vision for future water management in which the water sector is resilient, in which water companies are more efficient and customer focused and in which water is valued as the precious resource it is. And it explains that we all have a part to play in the realisation of this vision.
Preparing for a drier future: England's water infrastructure needs, National Infrastructure Commission (2018)	<p>This document sets out the National Infrastructure Commission's advice on how to address England's water supply challenges and deliver the appropriate level of resilience for the long term. The Commission's central finding is that government should ensure increased drought resilience in England by enhancing the capacity of the water supply system. This will require a twin-track approach combining demand management (including leakage reduction) with long-term investment in supply infrastructure.</p> <p>To achieve this, the Commission recommends that government ensure plans are in place to deliver additional supply and demand reduction of at least 4,000 million litres per day (Ml/day).</p>
National Policy Statement for Water Resources Infrastructure, Defra (2023)	<p>The NPS sets out the need and government's policies for, development of nationally significant infrastructure projects (NSIPs) for water resources in England. The objectives of this NPS are as follows:</p> <ul style="list-style-type: none"> ▫ To provide a clear national planning policy that facilitates the examination and determination of applications for NSIPs for water resources in England; ▫ To set out the need for nationally significant water resources infrastructure and the role of WRMPs in identifying and satisfying the need. This will provide clarity and confidence on eligible NSIP schemes to inform water company's long term plans; ▫ To provide the primary basis for examination by the Examining Authority and for decisions by the Secretary of State on development consent applications for water resources infrastructure; ▫ To provide guidance to potential NSIP developers on the relevant infrastructure, generic impacts and general siting considerations that may need to be taken into account when planning for the development of water resources infrastructure; ▫ To provide policy and guidance on generic impacts to support any relevant local planning authorities in preparing their local impact reports, which they will be invited to prepare under section 60 of the Planning Act; to guide the development of NSIPs that support the government's sustainability goals and objective to enhance the environment ▫ To provide guidance, where relevant, in respect of applications for infrastructure schemes that include, or have impacts upon, water resources infrastructure.

Waste (England and Wales) Regulations 2011	<p>These regulations implement the revised EU Waste Framework Directive 2008/98 which sets requirements for the collection, transport, recovery and disposal of waste. It outlines that it is a requirement for businesses to confirm that they have applied the waste management hierarchy when transferring waste and include a declaration to this effect on their waste transfer note or consignment note. The regulations apply to businesses that:</p> <ul style="list-style-type: none"> ▫ Produce waste ▫ Import or export waste ▫ Carry or transport waste ▫ Keep or store waste ▫ Treat waste ▫ Dispose of waste ▫ Operate as waste brokers or dealers
National Review of Waste Policy in England 2011	<p>This document is a review of waste policy in England and is guided by a waste hierarchy which is a guide to sustainable waste management and a legal requirement. Key objectives are the use of more sustainable approaches to the use of materials and to improve the service to householders and businesses in order to deliver environmental benefits and support economic growth. This review covers a range of topics including:</p> <ul style="list-style-type: none"> ▫ Sustainable use of materials and waste prevention ▫ Regulations and enforcement ▫ Food waste ▫ Energy recovery ▫ Infrastructure and planning ▫ Next steps in waste policy.
Waste Management Plan for England (2021)	<p>This document provides an analysis of the current waste management situation in England and fulfils the mandatory requirements of article 28 of the revised Waste Framework Directive (rWFD).</p> <p>The plan does not introduce new policies or change the landscape of how waste is managed in England. Its core aim is to bring current waste management policies under the umbrella of one national plan.</p>
Waste Prevention Programme for England 2021	<p>This programme sets out government’s priorities for managing resources and waste, in line with the resources and waste strategy for England. It aims to move to a circular economy, keeping products and materials in circulation at the highest value for as long as possible which includes reuse, repair and remanufacture of products and materials. After consulting on this programme, a policy approach was decided encompassing the following three themes:</p> <ul style="list-style-type: none"> ▫ Designing out waste ▫ Systems and services ▫ Data and information
Resource Security Action Plan 2012	<p>This document was developed in response to private sector concerns about the availability of some raw materials. It details how the government recognises these issues, provides a framework for business action to address resource risks, and sets out a high level actions to build on the developing partnership between government and businesses to address resource concerns.</p>



Environmental Noise Regulations 2006	<p>The European Environmental Noise Directive (END) is implemented in England by The Environmental Noise (England) Regulations 2006 and seeks to manage the impact of environmental noise through strategic noise mapping and the preparation and implementation of noise Action Plans. Under these regulations, the second round of strategic noise mapping has been undertaken and updated Noise Action Plans have been prepared.</p>
Noise Policy Statement for England 2010	<p>The objectives of the Noise Policy Statement for England (NPSE) sets out three noise levels to be defined by the noise assessor: These are as follows:</p> <ul style="list-style-type: none"> ▫ NOEL – No Observed Effect Level. This is the level below which no effect can be detected. Below this level there is no detectable effect on health and quality of life due to noise. ▫ LOAEL – Lowest Observed Adverse Effect Level. This is the level above which adverse effects on health and quality of life can be detected. ▫ SOAEL – Significant Observed Adverse Effect Level – This is the level above which significant adverse effects on health and quality of life can occur. <p>The NPSE considers that the noise levels above the SOAEL would be seen to have, by definition, significant adverse effects and would be considered unacceptable. Where the assessed noise levels fall between the LOAEL and the SOAEL noise levels the policy statement requires that:</p> <p>“all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development. This does not mean that such adverse effects cannot occur but that efforts should be focused on minimising such effects”</p> <p>Where noise levels are below the LOAEL it is considered there will be no adverse effect. Once the noise levels are below the NOEL there will be no observable change. For the present guidance a numerical definition of LOAEL is given by the WHO Guidelines for Community Noise and BS8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings.</p>
Road Safety Act 2006	<p>The provisions contained in the Act are designed to improve road safety and help achieve casualty reduction targets. The Act creates a new criminal offence of causing death by careless, or inconsiderate, driving. This offence was introduced because of public concern about deaths on the roads and the minimal sentence allowed under the law as it was before the introduction of the Act.</p> <p>The provisions of the Act cover:</p> <ul style="list-style-type: none"> ▫ Drink driving ▫ Speeding ▫ New offences ▫ Penalties and enforcement ▫ Driver training ▫ Driver fatigue ▫ Driver and vehicle licensing ▫ Motor insurance
Transport Investment Strategy 2017	<p>The Transport Investment Strategy sets out how the Government proposes to allocate funding to transport projects supporting its goals for economic growth</p>



and infrastructure improvements. The strategy also seeks to put the travelling public at the heart of transport decision making. Four headline objectives are set out to support this, covered below.

The strategy also stresses the need for decision-making to be more focussed and undertaken at a more local level than previously, endorsing sub-national transport bodies and aiming to create institutional decision-making frameworks.

The four key objectives of transport investment are listed as:

- create a transport network that works for users, wherever they live;
- improve productivity and rebalance growth across the UK;
- enhance our global competitiveness by making Britain a more attractive place to invest; and
- support the creation of new housing.

In the process of pursuing these objectives, it is also expected that the Government will:

- ensure our investment consistently meets the needs of users and helps to create a balanced economy;
- focus on getting the best value out of the network and our investment;
- retain a resolute focus on delivery; and
- remain adaptable in the face of change.

Planning Act 2008	The Act created a new development consent regime for major infrastructure projects in the fields of energy, transport, water, waste water, and waste. The Act sets out the thresholds above which certain types of infrastructure development are considered to be nationally significant and require development consent.
Energy Act 2023	This Act will make provision about energy production and security and the regulation of the energy market. It includes provisions on: <ul style="list-style-type: none"> ▫ Carbon dioxide storage and transport ▫ Carbon capture and storage and hydrogen production and transport ▫ New technology ▫ Energy performance, saving opportunity schemes ▫ Core fuel sector ▫ Offshore energy production, including environmental protection an, licensing and decommissioning
Understanding climate adaption and the third National Adaption Programme (NAP3)	NAP3 explains the government’s plans to adapt to climate change over the next 5 years from 2023 to 2028, including: <ul style="list-style-type: none"> ▫ Protecting the natural environment ▫ Supporting business in adapting to climate change ▫ Adapting infrastructure (for example, electricity network and railways) ▫ Protecting buildings and their surroundings (for example, from hotter temperatures) ▫ Protecting public health and communities ▫ Mitigating international impacts on the UK (for example, on food supplies imported from abroad).
The Water Environment (Water	These regulations make provision for the purpose of implementing in river basin districts within England and Wales Community legislation in the field of



Framework Directive) (England and Wales) Regulations 2017	<p>water management-related issues. They require the identification of river basin districts, and a number of other assessments to be carried out by the Environment Agency (EA) and Natural Resources Wales (NRW) including:</p> <ul style="list-style-type: none"> ▫ Characterise and classify water bodies in those districts ▫ Assess economic aspects of water use ▫ Require identification of bodies of water from which drinking water is abstracted ▫ Measures to protect the quality of water ▫ Protected areas by EU legislation and other specified areas to be included on registers of protected areas ▫ Provide for the establishment of environmental objectives for each water body ▫ Provide content and application of programme measures ▫ Deal with River Basin Management plans (RBMPs) which must be established for each river basin district.
Plan for Water: our integrated plan for delivering clean and plentiful water 2023	<p>DEFRA has created a plan for water to ensure the delivery of clean and plentiful water with a healthy water environment and a sustainable supply of water. The actions they outline to achieve this:</p> <ul style="list-style-type: none"> ▫ Reducing pollution from wastewater, urban areas and transport ▫ Reducing other pollutants ▫ Managing water demand ▫ Restoring water habitats ▫ New funding ▫ Increasing water supply ▫ Farming and our rural landscape
Guiding principles for drainage and wastewater management plans 2022	<p>In this document DEFRA describes the priorities and expectations for drainage and wastewater management plan (DWMPs) of the UK and Welsh Government's and the environmental and economic regulators. There is 6 key principles outlined:</p> <ol style="list-style-type: none"> 5. Comprehensive, evidence based and transparent 6. Resilient 7. Environment 8. Collaboration 9. Leadership 10. Customers
Regional	
North East Case for Culture	<p>The North East Culture Partnership has produced a 'North East Case for Culture' document. The vision for The Case for Culture is a positive statement of ambition for the next 15 years, building on the strengths of our diverse communities and pointing to the opportunities for further investment in arts and heritage right across the North East.</p>
North East Rapid Coastal Zone Assessment Survey.	<p>The North East Rapid Coastal Zone Assessment, or NERCZA, is one of a series of projects initiated by English Heritage around the coasts of England to inform and develop knowledge of the coastal historic environment.</p>



North East Zero Emissions Vehicle (ZEV) Strategy 2023	The North East Zero Emissions Vehicle (ZEV) Strategy aims to reduce the impact that private vehicles have on the environment by providing an extensive strategic network of electric vehicle chargers and aligns with the North East Transport Plan. This plan aims to deliver an associated scheme worth £80 Billion and has identified 221 locations for new charging points needed to expand the public charging network.
The North East Strategic Economic Plan (SEP) 2023	This is a refresh of the 2014 North East Local Enterprise Plan's (LEP) Strategy and aims to continue the original vision to drive forward a modern and diverse economy which is agile in the face of change and generate economic benefits to the regions residents. The plan focuses on 6 key targets: More jobs, Better jobs Closing the employment gap Reducing the economic activity rate gap Reducing the private sector employment density gap Reducing the productivity gap
Net Zero North East England	The North East is in the process of developing a robust and contextual vision for targeting net zero emissions in the North East and have established a website which outlines their ambitions. It is a collaborative effort and includes all 7 of the local authorities forming part of North East CA and outlines their commitment to work together to accelerate the region to transition to a greener economy.
Transport for the North's (TfN) Strategic Transport Plan: Transforming the North 2024	TfN aims to provide governing bodies on their strategic ambitions and priorities which are outlined in the plan: <ul style="list-style-type: none"> ▫ Transforming economic performance ▫ Rapid decarbonisation of our transport system ▫ Enhancing social inclusion and health ▫ The plan outlines how they aim to achieve these ambitions: ▫ Strong, interdependent and integrated labour markets working collectively to drive up productivity and growth through agglomeration ▫ Fast, frequent, and reliable connections between our economic centres for goods, people and business ▫ Strong outward facing connections to other parts of the UK and to our international gateways ▫ Acceleration of the decarbonisation of our transport system and reduced car dependency both within and between places ▫ Safe, reliable and accessible public transport networks, both at pan-regional and local level, which enable access to opportunities for all communities across the North.
TfN's Strategic Transport Plan: People and Place Framework 2023	The People and Place framework recognises that the policy priorities from individuals in rural areas will be different from individuals in an urban area, and how transport interventions may differ in impact for people in these different areas. The plan also recognises TfN and it's partners through Local Transport Plans, must represent a multitude of people with unique transport challenges. The plan aims to meet the requirements of each different place type.



TfN's Strategic Transport Plan: Vision, Strategic Ambitions and SMART Objectives (2024)	<p>The plan outlines the proposed vision, objectives and metrics for the Strategic Transport Plan. It also describes the full range of impacts on productivity, in relation to transport:</p> <ul style="list-style-type: none"> ▫ Reducing costs ▫ Agglomeration ▫ Removing physical barriers to innovation and clustering ▫ Connectivity to international gateways ▫ Expanding labour markets ▫ Making places more attractive to businesses and people. ▪ The guiding principles for the plan: <ul style="list-style-type: none"> ▫ The need to reflect the significant change in context since 2019, including the pandemic, the Levelling up agenda and funding and delivery challenges now facing the industry. ▫ The importance of a clear, flexible framework, able to reflect the current uncertainty around travel behaviours following the pandemic, but also able to reflect the long-term transformational ambition of the North. ▫ The need to create a triple bottom line: the economy; the environment; and inclusivity, thereby ensuring that the TfN STP remains relevant and outcome focused.
TfN's Strategic Transport Plan: Integrated Sustainability Appraisal Main Report and Appendices 2024	<p>The plan identifies the likely sustainability impacts of implementing the Strategic Transport Plan and reports on the process of developing the plan from a sustainability perspective. It fulfils the requirements for a:</p> <ul style="list-style-type: none"> ▫ Sustainability Appraisal ▫ Strategic Environmental Assessment ▫ Health Impact Assessment ▫ Equalities Impact Assessment ▫ Habitat Regulations Assessment
TfN's Strategic Transport Plan: Habitats Regulations Assessments and Appendices	<p>This report was carried out to provide information for the competent authority to carry out a HRA appropriate assessment. It has been prepared to inform the competent authority on the implications of the Strategic Transport Plan on European sites protected by the Habitats Regulations.</p>
The Northern Powerhouse Independent Economic Review 2023 Update	<p>The report was issued to summarise the findings and conclusions to update the Northern Powerhouse Independent Economic Review of 2016 (NPIER). The report covers the development of, and output from, new economic scenario modelling to articulate the economic ambition of the North by 2050. The updated NPIER has been used to communicate to partners across the region on how the research and evidence can be used and evolved to support the delivery of economic outcomes.</p>
TfN's Freight and Logistics Survey (2022)	<p>The aim of the strategy is to undertake an analysis of freight requirements across road, rail, port and inland waterways in the TfN region, identify constraints in existing networks, and provide a list of possible areas of work that will support economic growth and decarbonisation. Objectives of the strategy include:</p>



	<ul style="list-style-type: none"> ▫ Reduce the number of incidences of unplanned closures of the Major Road Network routes leading to severe journey delay; ▫ Prioritise measures that tackle journey reliability and congestion; ▫ Support less polluting and more energy efficient movement of good on the transport network; ▫ Reduce the impact of noise from freight movements on local communities; ▫ Improve multimodal north-south and east-west connectivity across the North ▫ Reduce the impact of air pollution from freight movements on the health of local communities; ▫ Increase electrification of the rail network; and ▫ Decarbonise road haulage through increased use of zero carbon and low emission fuels.
TfN International Connectivity and Aviation Policy Position Statement 2022	This policy position aims to reevaluate TfN's position for international aviation, both internationally and domestically. International connectivity is also considered to identify potential policy solutions and interventions that will support economic growth and decarbonisation around the North's international gateways
TfN's Connecting Communities: Socially Inclusive Transport Strategy for the North of England 2023	<p>This strategy is the response to the groups who are socially excluded by transport issues including people with disabilities and long-term health issues, people on low incomes and insecure work, and carers. The objectives of this strategy are:</p> <ul style="list-style-type: none"> ▫ Reduce the number of people living in areas with a high risk of transport-related social exclusion (TRSE) by 1,000,000 ▫ Reduce the number of people living in areas with a very high risk of transport-related social exclusion by 370,000
TfN: Transport and social exclusion in the North in 2023/24	<p>This report builds on previous outcomes of research and analysis through a survey undertaken with residents of five areas. The survey was undertaken with three main aims:</p> <ul style="list-style-type: none"> ▫ To explore how TRSE manifests in a range of areas where the overall level of risk is low, in contrast to focus on relatively high-risk areas of the North in the previous primary research ▫ To examine the impact of high levels of inflation and cost of living pressures on TRSE, which has been the defining economic challenge in 2023. ▫ To update the primary evidence base used in the TRSE data tool, so it reflects a period after the peak of the COVID-19 pandemic, and the impacts of large increases in the cost of living.
TfN's Community Severance Visualiser and accompanying report: 'Community Severance across England' 2024	<p>The report details a review of previous research carried out on community severance and explain the strategical need for a visualiser tool as well as how it was developed and findings from regional analysis.</p> <p>The report has 3 aims:</p> <ul style="list-style-type: none"> ▫ Further contextualise CS as a key impact from transport and related infrastructures ▫ Demonstrate the strategic value of an online visualiser tool



	<ul style="list-style-type: none"> Allow TfN to understand the extent of CS on a regional level through conducting analysis with underlying data from the visualiser tool
Clean Mobility Policies using TfN's Clean Mobility Tool	This strategy is part of Transport for the North's decarbonisation strategy. It is intended to support and inform local authorities and other transport stakeholders to manage levels of car use, and to achieve modal shift to public transport and active travel.
TfN Travel Choices Research (2024)	<p>The research outlines the importance understanding tackling affordability within the public transport system. The research examined two questions:</p> <ul style="list-style-type: none"> What is the direct cost of travelling by car, public transport, or active travel to the user? How does that match up to the cost for society, through things like extra air and noise pollution, contributing to traffic congestion, the carbon dioxide we create, and the impact it has on our health?
TfN Electric Vehicle Charging Infrastructure Framework 2022	The framework outlines the challenge of planning for delivering EV charging infrastructure. It was developed to support local authority and national government partners in the planning and deployment of local EV charging infrastructure to underpin any public sector funding, as well as inform and enhance delivery through partnership in the private sector.
Northumbrian Water: Drainage and Wastewater Management Plan (DWMP)	This plan looks 40 years ahead to outline the level of investment needed to ensure the drainage and wastewater systems can cope whilst keeping it affordable to residents and businesses and ensuring high environmental performance.
Local	
County Durham Plan 2020 - 2035	<p>The County Durham Plan was adopted in October 2020 sets out a vision for housing, jobs and the environment until 2035, as well as the transport, schools and healthcare to support it. The plan aims to:</p> <ul style="list-style-type: none"> Continue the economic growth and investment in the county Secure more and better jobs in County Durham Address the causes of climate change and adapt to its affects Create and enhance vibrant communities for all of our towns and villages Provide a wide choice of quality homes to meet everyone's needs and ensure they're built where people want to live, reducing the need to travel Secure the infrastructure to support new development and to relieve congestion and improve air quality Protect the natural and historic environment
Gateshead & Newcastle Upon Tyne Core Strategy and Urban Core Plan 2015 - 2030	<p>Gateshead are in the beginning of preparing a new local plan. The current adopted local plan is the 'core strategy and urban core plan for Gateshead and Newcastle Upon Tyne'. This plan was adopted in March 2015 and sets out the spatial planning framework to deliver economic prosperity up to 2030. The Plan includes 12 strategic objectives which aim to:</p> <ul style="list-style-type: none"> Encourage population growth in order to underpin sustainable economic growth.



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- To increase our economic performance, resilience, levels of entrepreneurship, skills and business formation by promoting Gateshead and Newcastle as the strong regional economic focus and by ensuring the supply of suitable, flexible and diverse business accommodation.
 - To increase our competitiveness by improving and expanding the role of the Urban Core as the regional destination for business, shopping, education, leisure, tourism and as a place to live.
 - To strengthen Newcastle's position as the regional retail centre. To ensure the provision of quality District and Local centres with a diverse range of shops and services that are accessible to meet the needs of all local communities
 - Expand leisure, culture and tourism providing for all age groups and diversifying the evening economy.
 - Ensure that our residential offer provides a choice of quality accommodation in sustainable locations to meet people's current and future needs and aspirations; improving opportunities to live in the Urban Core; and providing a broader range of accommodation including in new neighbourhoods
 - Manage and develop our transport system to support growth and provide sustainable access for all to housing, jobs, services and shops.
 - Improve sustainable access to, within and around the Urban Core by promoting fast and direct public transport links to the heart of the Urban Core, increasing walking and cycling and minimising through traffic
 - Ensure the development and use of land protects, sustains and enhances the quality of the natural, built and historic environment, making the Urban Core a high-quality exemplar for Gateshead and Newcastle, and ensuring our communities are attractive, safe and sustainable.
 - Provide the opportunity for a high quality of life for everyone and enhance the wellbeing of people to reduce all inequalities.
 - To reduce CO2 emission from development and future growth while adapting to the issues, mitigating adverse impacts and taking advantage of the opportunities presented by climate change.
 - Improve the function, usability and provision of our green infrastructure and public spaces by providing a network of green spaces and features which are connected and accessible for all.
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Our North Tyneside Plan 2021 - 2025

The North Tyneside plan was adopted in 2017 and sets out the Council's approach towards shaping future sustainable development in the Borough up to 2032. The plan sets out 11 objectives to deliver the vision of the plan:

- Ensure a sustainable future for North Tyneside with communities and infrastructure that are well placed to mitigate climate change
 - Diversify, strengthen and grow the local economy providing excellent job opportunities for everyone
 - Give all residents the opportunity to live free from crime and enjoy a healthy lifestyle, achieving their potential in work and education
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- Provide an appropriate range and choice of housing to meet current and future evidence based needs for market and affordable housing
 - Revitalise the town centres
 - Regenerate the Borough
 - Manage waste as a resource and minimise the amount produced and sent to landfill
 - Protect and enhance the natural environment
 - Protect and enhance the built and historic environment
 - Ensure sustainable access throughout the Borough, with the wider region and beyond
 - Enhance the image of the Borough
-

Northumberland
Local Plan 2016 –
2036

The Northumberland Local Plan 2016 to 2036 was formally adopted by Northumberland County Council on 31 March 2022. The Plan contains eight strategic objectives to help deliver the vision for Northumberland, which given the importance of Northumberland’s environment, the overarching aim is to deliver sustainable economic growth whilst conserving and enhancing Northumberland’s distinctive and valued natural, historic and built environment. The strategic objectives are:

- Economy and jobs
 - Homes
 - Environment
 - Connections
 - Community health and wellbeing
 - Climate change
 - Resources
 - Quality of place
-

South Tyneside
Local Development
Framework June
2007

South Tyneside are currently developing a new Local plan which will set out how they will meet the area's future social, economic and environmental needs. The adopted Local Development Framework is the current Plan that guides development and use of land in the borough and was adopted in June 2007. The vision which seeks to ‘concentrate development on key regeneration / development areas, but ensuring this is not at the expense of maintaining communities and providing full access to the major facilities and developments’ ensures:

- development meets the needs of our residents and businesses without compromising the ability of future generations to enjoy the same quality of life that we aspire to;
 - delivers the regeneration of the Borough. In doing so, focus development on: - the main centres of South Shields, Jarrow and Hebburn; - major riverside sites – bringing life back to the riverside and creating sustainable communities where people choose to live;
 - proposals are of sufficient scale can deliver a major change in the perception of the Borough and have the greatest impact on the economy, opportunity for new housing, quality of life and cultural facilities;
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- all residents have a choice of good quality and affordable housing in a variety of tenures and which meets their future needs;
 - natural and built environment that is valued, protected, enhanced and capitalised on for the benefit of all;
 - all those within the Borough can access the opportunities that are available, with reliable public transport, efficient road network and above all, focusing on delivering accessibility rather than relying on mobility; and
 - despite the focus on the big projects and key regeneration areas, the suburban areas and villages outside of the key regeneration hot-spots must not be ignored – ensuring appropriate levels of essential services are provided and that any local needs for development are met.
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Sunderland Core Strategy and Development Plan (2015 – 2033)

The Sunderland Core Strategy and Development Plan sets out the long-term plan for development across the city to 2033. The Plan was adopted in January 2020. The Plans strategic priorities are:

- To deliver sustainable economic growth and to meet objectively assessed needs for employment and housing, in particular through providing opportunities for young economically active age groups and graduates
 - To identify land we need for development in the right locations so we can protect our most vulnerable assets and while ensuring we meet our sustainable growth ambitions.
 - To promote healthy lifestyles and ensuring the development of safe and inclusive communities, with facilities to meet daily needs that encourage social interaction and improve health & wellbeing for all.
 - To provide a range and choice of accommodation, house types and tenures to meet the diverse needs of current and future residents.
 - To provide a wide portfolio of employment sites to support the development of key employment sectors and expand the opportunities for new office development.
 - To support and improve the vitality and economic performance of the Urban Core and designated centres.
 - To protect, sustain and enhance the quality of the built and historic environment and the delivery of distinctive and attractive places.
 - To protect and enhance the city’s biodiversity, geological resource, countryside and landscapes whilst ensuring that all homes have good access to a range of interlinked green infrastructure.
 - To adapt to and minimise the impact of climate change by reducing carbon emissions, maximising the use of low carbon energy solutions and seeking to reduce the risk/impact of flooding
 - To manage waste as a resource and minimise the amount produced and sent to landfill.
 - To promote sustainable and active travel and seek to improve transport infrastructure to ensure efficient, sustainable access.
 - To manage the city’s mineral resources ensuring the maintenance of appropriate reserves to meet needs.
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	<ul style="list-style-type: none"> ▫ To ensure that the city has the infrastructure in place to support its future growth and prosperity
Northumberland National Park Management Plan 2022	<p>The Northumberland National Park Management Plan sets out a shared, long-term vision for the Park as a place. The Plan has a number of strategic themes to secure the National Park’s future as a key asset to deliver on some of the biggest challenges that face society, including biodiversity loss, climate change and our health and wellbeing. These include:</p> <ul style="list-style-type: none"> ▫ Nature Recovery - To restore, conserve and enhance nature and its resilience at a landscape scale through a proactive nature-first led approach to sustainable land management and partnership working; ▫ Climate Action - Empower, enable and inspire climate action to work towards a net zero National Park by 2030. Beyond 2030 work towards the National Park being a carbon sink; ▫ Valuing place: Culture & Heritage - To conserve, enhance and celebrate the historic environment and rich cultural heritage by connecting people and place; ▫ A Welcoming park for All - To be a welcoming place, offering enjoyment and exploration of our finest landscapes and to support wellbeing; and ▫ Thriving Communities - To have engaged, resilient and balanced communities in a unique living, working landscape.
The North Pennines AONB Management Plan 2019-2024	<p>The North Pennines AONB management Plan sets out a vision for the future which recognizes the range of benefits and services gained from conserving the North Pennines and acknowledges the improvements that have happened in the area already due to climate change adaption, ecological protection and other actions and partnerships which have focused on improving the area. The plan has put forward a framework with a set of actions and outcomes falling under three main categories:</p> <ul style="list-style-type: none"> ▫ Nurturing a natural economy ▫ Looking after natural and cultural heritage ▫ Valuing and sharing what’s special.
The Northumberland Coast AONB Management Plan 2020 - 2024	<p>This plan is under the statutory duty of the Northumberland County Council and is formed of two parts. The first focuses on recording the qualities of the area which make it an AONB while the second outlines the councils aims and proposed actions for the area. The plan follows four main aims:</p> <ul style="list-style-type: none"> ▫ To ensure that the natural beauty and special qualities of the AONB are conserved and enhanced ▫ To ensure that the communities in and around the AONB are thriving places to live and work ▫ The designation of ‘Area of Outstanding Natural Beauty’ and the special qualities of the Area are understood ▫ and valued for their contribution to life in the wider region and are seen as being worthy of protection ▫ The AONB provides a high quality, clean environment that is welcoming and accessible to all
Clean Air Zones	<p>Based on their levels of NO₂ concentrates Gateshead Council, Newcastle City Council and North Tyneside Council were all required to investigate and</p>



	<p>consider introducing clean air zones/low emissions zones. After this direction several options were developed and consulted on in 2019. This resulted in the introduction of a charging Clean Air Zone covering parts of Newcastle and Gateshead affecting non-compliant buses, coaches, taxis (both Hackney Carriages and private hire vehicles), heavy goods vehicles and vans, to be enforced from 2021.</p>
Carbon Neutral	<p>After the national government declared a climate emergency in May 2019 all of the local authorities within North East CA followed suit declaring their goals around carbon neutrality as follows:</p> <ul style="list-style-type: none"> ▫ Newcastle City Council: Declared a climate emergency in April 2019, with the aim of making the city carbon neutral by 2030. ▫ North Tyneside Council: Declared a climate emergency in June 2019, with the aim of reducing the council's carbon footprint by 50% by 2027. ▫ Northumberland County Council: Declared a climate emergency in June 2019, with the aim of becoming carbon neutral by 2030 ▫ Durham County Council: Declared a climate emergency in February 2019 including aim to reduce emissions from Durham County Council's operations by 80% from 2008/09 levels by 2030 and is investigating what further actions are necessary to make County Durham carbon neutral by 2050. ▫ Gateshead Council: Declared a climate emergency in May 2019, with the aim of becoming carbon neutral by 2030. ▫ South Tyneside Council: Declared a climate emergency in July 2019, with the aim of becoming carbon neutral by 2030. ▫ Sunderland City Council: Declared a climate emergency in March 2019, with the aim of becoming carbon neutral by 2030
Northumbria River Basin Flood Risk Management Plan 2022	<p>This plan closely links with the National Flood and Coastal Erosion Risk Management Plan and it is a plan to manage any significant flood risks in the identified Flood Risk Area within the Northumbria River Basin District. This aims to address the main flood risk issues in the region including from rivers, coastal flooding, surface water flooding, groundwater, sewer flooding or reservoir flooding. This plan works in conjunction with various Local Flood Risk Areas (LLFA) plans including but not limited to:</p> <ul style="list-style-type: none"> ▫ Northumberland County Council Local Flood Risk Management Strategy, ▫ Newcastle City Council Local Flood Risk Management Strategy, ▫ North Tyneside Council Local Flood Risk Management Strategy, ▫ South Tyneside Council Local Flood Risk Management Strategy, ▫ Gateshead Council Local Flood Risk Management Strategy, ▫ Sunderland Council Local Flood Risk Management Strategy.
Northumbria River Basin Management Plan 2022	<p>The aim of this plan is to enhance the environment and water assets in the region and describes a framework used to protect and improve water quality in the Northumbria River Basin. The management plan is intended to be used to make water management decisions. It informs the planning and implementation of interventions that help protect and improve the quality of the water environment.</p>

Air Quality Strategy	Each of the local authorities as well as the Newcastle International Airport have their own Air Quality Strategy (AQS) aimed at tackling the (Air Quality Management Areas) AQMAs in their areas and improving general air quality in the region (Northumberland and Sunderland are the exception as they are not required to produce AQSs). These strategies focus on reducing the current levels of pollutants in the region by promoting modal shift to more sustainable modes such as active travel, public transport and electric vehicles.
Northumberland Joint Strategic Needs Assessment (JSNA): Public Community and Transport	Part of the Living Well chapter in Northumberland's JSNA, Public and Community Transport outlines the importance that good public and community transport networks are vital in good physical and mental health. A Health Needs Assessment (HNA) was carried out which aims to identify and advocate for the transport needs of Northumberland.
Newcastle Joint Strategic Assessment (JSNA)	The JSNA aids the council in identifying the current and future health and wellbeing of needs of people living in Newcastle. It influences planning and strategy decisions to support Newcastle residents.
Gateshead Joint Strategic Needs Assessment (JSNA): Transport	Outlines the importance of an effective transport system as Gateshead's economy changes, to ensure a more economically prosperous, socially inclusive and sustainable area. Also, the JSNA describes the relationship between physical activity and improved health.
North Tyneside Joint Strategic Needs Assessment (JSNA)	The JSNA is used to support health and wellbeing planning and commissioning in delivering highly targeted approaches. Also, the JSNA in North Tyneside assists in the tackling of health inequalities by highlighting the differences in outcomes across the borough.
South Tyneside Joint Strategic Needs Assessment (JSNA)	Identifies current and future health and wellbeing needs in South Tyneside. Provides partners of South Tyneside Council with the information they need to agree priorities and deliver services that meet the needs in South Tyneside
Sunderland Joint Strategic Needs Assessment (JSNA)	Sunderland council worked in collaboration with partners and the wider community to identify health and wellbeing needs of the local population, which provides insight into current and future health.
County Durham Joint Strategic Needs Assessment (JSNA)	The County Durham JSNAA aims to: <ul style="list-style-type: none"> ▫ highlight areas where there is a need to improve health and wellbeing outcomes for the local community ▫ aid decision makers in targeting resources to both areas and services ▫ act as a resource document to support health and wellbeing planning and commissioning ▫ act as a resource document to support health and wellbeing planning and commissioning

Appendix C. Baseline and Contextual Information

C.1 Biodiversity



Special Protection Area (SPA)

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are seven SPAs within the North East CA area, predominantly located in the south west corner of Northumberland and the west side of County Durham. There are also two SPAs located on the north east coast of Northumberland.						
There are three SPAs within County Durham Local Authority area: <ul style="list-style-type: none"> ▪ Pennine Moors ▪ Northumbria Coast 	No SPAs have been identified within Gateshead Local Authority area.	No SPAs have been identified within Newcastle upon Tyne Local Authority area.	There is one SPA within the North Tyneside Local Authority area: <ul style="list-style-type: none"> ▪ Northumbria Coast 	There are seven SPAs within the Northumberland LA area: <ul style="list-style-type: none"> ▪ Northumberland Marine ▪ Holburn Lake & Moss ▪ Lindisfarne ▪ Northumbria Coast ▪ Coquet Island ▪ Farne Islands ▪ North Pennine Moors 	There is one SPA within the South Tyneside Local Authority area: <ul style="list-style-type: none"> ▪ Northumbria Coast 	<ul style="list-style-type: none"> ▪ There is one SPA within the Sunderland Local Authority area: ▪ Northumbria Coast

Explanatory Text and anticipated future trends:

Special Protection Areas (SPAs) are protected areas for birds in the UK. SPAs are classified in accordance with European Council Directive 2009/147/EC on the conservation of wild birds, known as the Birds Directive. SPAs protect rare and vulnerable birds (as listed on Annex I of the Birds Directive), and regularly occurring migratory species. JNCC¹ is responsible for advising the UK Government and Devolved Administrations on aspects of the classification and management of SPAs from a UK perspective, including reporting on the implementation of the UK SPA programme and the status and trends of protected bird species. New potential Special Protection Areas (pSPAs) for classification or updates to existing SPAs are submitted in tranches.

¹ Joint Nature Conservation Committee JNCC (2020) *Special Protection Areas – Overview*. Available: <https://jncc.gov.uk/our-work/special-protection-areas-overview/>



The UK's Statutory Nature Conservation Bodies (SNCBs) are responsible for assessing the condition of SPAs. Approximately 35.72% of all SPA's in England are classified as being in favourable condition, with 47.21% classed as unfavourable but recovering in 2024. Approximately 9.87% of SPAs are in a declining condition with 0% being partially destroyed².

The locations of SPAs within the North East CA Region are shown in **Figure D-2**.

Anticipated Future Trends³:

- The composition of flora and fauna on each Protected Area (PA) will change – high confidence (medium evidence, high agreement)
- Cold adapted species of high latitudes and altitudes will tend to decrease on PAs, whilst warm adapted species will tend to increase – medium confidence (medium evidence, medium agreement)
- PAs in the North of the UK will gain plant species overall, whilst PAs in the south may lose some native plant species. This pattern is reversed for UK breeding birds – low confidence (medium evidence, low agreement)
- Species with lower dispersal capacities and those for which urban and intensive agricultural areas are a barrier to dispersal will be unable to colonize PAs that become climatically suitable – low confidence (limited evidence, medium agreement)
- Increasing range mismatching of interacting species, such as butterflies and their host plants, might mean that more management is necessary on PAs to preserve species that interact with each other – low confidence (limited evidence, medium agreement).

Integrating consideration of climate change into management plans for the PA network is likely to result in more effective (and cost-effective) conservation solutions. In order to facilitate this integration, monitoring of climate change impacts and management actions should be carried out to enable adaptive decision making.

Special Areas of Conservation (SAC)	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are 18 SACs within the North East CA area, predominantly located on the western boundaries of Northumberland and County Durham within the Pennines and Cheviot Hills. There are also a number located on the North Sea coastlines of County Durham and Northumberland.						

² Natural England (2024) *SSSI Condition Summary*. Available: [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk/designated-sites-view)

³ Bournemouth University (2015) *Biodiversity Report Card*. Available: <https://nerc.ukri.org/research/partnerships/ride/lwec/report-cards/biodiversity-source04/>



<p>There are six SACs within County Durham Local Authority area:</p> <ul style="list-style-type: none"> ▪ North Pennine Moors ▪ Moor House-Upper Teesdale ▪ Durham Coast ▪ North Pennine Dales Meadows ▪ Thislington ▪ Castle Eden Dene 	<p>No SACs have been identified within Gateshead Local Authority area.</p>	<p>No SACs have been identified within Newcastle upon Tyne Local Authority area.</p>	<p>No SACs have been identified within North Tyneside Local Authority area.</p>	<p>There are 14 SACs within Northumberland Local Authority area:</p> <ul style="list-style-type: none"> ▪ North Pennine Moors ▪ North Pennine Dales Meadows ▪ River Eden ▪ River Tweed ▪ Border Mires, Kielder-Butterburn ▪ North Northumberland Dunes ▪ Ford Moss ▪ Newham Fen ▪ Harbottle Moors ▪ Simonside Hills ▪ Tweed Estuary ▪ Roman Wall Loughs ▪ Berwickshire & North Northumberland Coast 	<p>There is one SAC within South Tyneside Local Authority area:</p> <ul style="list-style-type: none"> ▪ Durham Coast 	<p>There is one SAC within Sunderland Local Authority area:</p> <ul style="list-style-type: none"> ▪ Durham Coast
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- Tyne & Allen River Gravels

Explanatory Text and anticipated future trends:

SACs are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). Sites of Community Importance (SCIs) are sites that have been adopted by the European Commission but not yet formally designated by the government of each country. Candidate SACs (cSACs) are sites that have been submitted to the European Commission, but not yet formally adopted. JNCC is responsible for advising the UK Government and devolved administrations on aspects of the designation and management of SACs from a UK perspective.

SACs are of national and international conservation importance.

Approximately 32.12% of all SACs in England are classified as being in favourable condition, with 52.74% classed as unfavourable but recovering in 2024. Approximately 7.45% of SACs are in a declining condition with 0.00% being partially destroyed⁴.

The locations of SACs within the North East CA Region are shown in **Figure D-2**.

Anticipated Future Trends⁵:

See above details that are applicable to all forms of PA.

Sites of Special Scientific	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are 233 SSSIs within the North East CA area, predominantly located along the eastern and western boundary regions as well as the northern region.						

⁴ Natural England (2024) *SSSI Condition Summary*. Available: [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk)

⁵ UKRI (2024) Natural Environment Research Council. Available: <https://www.ukri.org/councils/nerc/>



Interest (SSSI)	There are 90 SSSIs within the County Durham Local Authority area.	There are eight SSSIs within the Gateshead Local Authority area.	There are five SSSIs within the Newcastle upon Tyne Local Authority area.	There are three SSSIs within the North Tyneside Local Authority area.	There are 118 SSSIs within the Northumberland Local Authority area.	There are five SSSIs within the South Tyneside Local Authority area.	There are 18 SSSIs within the Sunderland Local Authority area.
<p>Explanatory Text and anticipated future trends:</p> <p>A Site of Special Scientific Interest (SSSI) is a formal conservation designation of international importance. Usually, it describes an area that's of particular interest to science due to the rare species of fauna or flora it contains - or even important geological or physiological features that may lie in its boundaries. SSSIs often contain important habitats such as grasslands, parkland and woodland. Some even contain ancient woodland and ancient trees. In other words, these areas have high conservation value, and need to be protected. Official authorities in each country determine which sites should have SSSI status, for England this is Natural England.</p> <p>Approximately 34.67% of all SSSIs in England are classified as being in favourable condition, with 47.76% classed as unfavourable but recovering in 2024. Approximately 9.90% of SSSIs are in a declining condition with 0.02% being partially destroyed⁶.</p> <p>The locations of SSSIs within the North East CA Region are shown in Figure D-2.</p> <p><u>Anticipated Future Trends⁷:</u></p> <p>See above details that are applicable to all forms of PA.</p>							
National Nature	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are 15 NNRs within the North East CA area, mainly concentrated in County Durham and Northumberland.							

⁶ Natural England (2024) *SSSI Condition Summary*. Available: [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk/designated-sites-view)

⁷ UKRI (2024) *Natural Environment Research Council*. Available: <https://www.ukri.org/councils/nerc/>



Reserves (NNR)

<p>There are six NNRs within the County Durham Local Authority area:</p> <ul style="list-style-type: none"> ▪ Cassop ▪ Castle Eden Dene ▪ Derwent Gorge and Muggleswick Woods ▪ Durham Coast ▪ Moor House-Upper Teesdale ▪ Thrislington 	<p>No NNRs have been identified within Gateshead Local Authority area.</p>	<p>No NNRs have been identified within Newcastle upon Tyne Local Authority area.</p>	<p>No NNRs have been identified within North Tyneside Local Authority area.</p>	<p>There are 10 NNRs within the Northumberland Local Authority area:</p> <ul style="list-style-type: none"> ▪ Derwent Gorge and Muggleswick Woods ▪ Farne Islands ▪ Gowk Bank ▪ Greenlee Lough ▪ Kielder Mires ▪ Kielderhead ▪ Lindisfarne ▪ Muckle Moss ▪ Newham Bog ▪ Whitelee Moor 	<p>No NNRs have been identified within South Tyneside Local Authority area.</p>	<p>No NNRs have been identified within Sunderland Local Authority area.</p>
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Explanatory Text and anticipated future trends:

National Nature Reserves (NNRs) were established to protect some of our most important habitats, species and geology, and to provide ‘outdoor laboratories’ for research. Natural England manages approximately two thirds of England’s NNRs. The remaining reserves are managed by organisations approved by Natural England, such as the National Trust, Forestry Commission, RSPB, Wildlife Trusts and local authorities.



Approximately 47.43% of all NNRs in England are classified as being in favourable condition, with 33.92% classed as unfavourable but recovering in 2024. Approximately 14.81% of NNRs are in a declining condition with 0% being partially destroyed⁸.

The locations of NNRs within the North East CA Region are shown in **Figure D-2**.

Local Nature Reserves (LNR)	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are 97 LNRs within the North East CA area, predominantly concentrated around the south western boundary.						
	There are 37 LNRs within the County Durham Local Authority area.	There are nine LNRs within the Gateshead Local Authority area.	There are seven LNRs within the Newcastle upon Tyne Local Authority area.	There are seven LNRs within the North Tyneside Local Authority area.	There are 28 LNRs within the Northumberland Local Authority area.	There are eight LNRs within the South Tyneside Local Authority area.	There are five LNRs within the Sunderland Local Authority area.

Explanatory Text and anticipated future trends:

Local Nature Reserves (LNRs) are a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities. Parish and Town Councils can also declare LNRs but they must have the powers to do so delegated to them by a principal local authority. LNRs are places with wildlife or geological features that are of special interest locally. They offer people opportunities to study or learn about nature or simply to enjoy it. They range from windswept coastal headlands, ancient woodlands and flower-rich meadows to former inner-city railways, long abandoned landfill sites and industrial areas now re-colonised by wildlife. They are an impressive natural resource which makes an important contribution to England's biodiversity.

The locations of LNRs within the North East CA Region are shown in **Figure D-1**.

Anticipated Future Trends:

⁸ Natural England (2024) *SSSI Condition Summary*. Available: [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk/designated-sites-view)



See above details that are applicable to all forms of PA.

Ramsar Sites	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are four Ramsar sites within the North East CA area, located along the eastern coast, north eastern region and western boundary.							
<p>There are two Ramsar sites within the County Durham Local Authority area:</p> <ul style="list-style-type: none"> Northumbria Coast 	<p>No Ramsar sites have been identified within Gateshead Local Authority area.</p>	<p>No Ramsar sites have been identified within Newcastle upon Tyne Local Authority area.</p>	<p>There is one Ramsar site located within the North Tyneside Local Authority area:</p> <ul style="list-style-type: none"> Northumbria Coast 	<p>There are four Ramsar sites within the Northumberland Local Authority area:</p> <ul style="list-style-type: none"> Holburn Lake & Moss Irthinghead Mires Lindisfarne Northumbria Coast 	<p>There is one Ramsar site within the South Tyneside Local Authority area:</p> <ul style="list-style-type: none"> Northumbria Coast 	<p>There is one Ramsar site within the Sunderland Local Authority area:</p> <ul style="list-style-type: none"> Northumbria Coast 	

Explanatory Text and anticipated future trends:

Ramsar sites are wetlands of international importance designated under the Ramsar Convention. The initial emphasis was on selecting sites of importance to water birds within the UK, and consequently many Ramsar sites are also Special Protection Areas (SPAs) classified under the Birds Directive. Sites proposed for selection are advised by the UK statutory nature conservation agencies, or the relevant administration in the case of Overseas Territories and Crown Dependencies, co-ordinated through JNCC.

Approximately 53.62% of all Ramsar Site in England are classified as being in favourable condition, with 32.00% classed as unfavourable but recovering. Approximately 10.70% of Ramsar Sites are in a declining condition with 0% being partially destroyed⁹.

⁹ Natural England (2024) *SSSI Condition Summary*. Available: [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk/designated-sites-view)



The locations of Ramsar Sites within the North East CA Region are shown in **Figure D-2**.

Anticipated Future Trends¹⁰:

See above details that are applicable to all forms of PA.

Priority Habitat	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are 56 different priority habitats identified within the North East CA region. The largest majority of this is deciduous woodland making up approximately 30%, upland heathland approximately 18% and 'blanket bog, deciduous woodland' making up 11% of priority habitats identified.						
	There are 30 priority habitats within the County Durham Local Authority area, predominantly deciduous woodland which makes up approximately 40%, upland heathland 14% and blanket bog 14%.	There are 12 priority habitats within the Gateshead Local Authority area, predominantly deciduous woodland which makes up approximately 81%, 'no main habitat but additional habitats present' 8%	There are 17 priority habitats within the Newcastle upon Tyne Local Authority area, predominantly deciduous woodland which makes up approximately 79%, 'no main habitat but additional habitats present' 4%	There are eight priority habitats within the North Tyneside Local Authority area, predominantly deciduous woodland which makes up approximately 84%, maritime cliff and slope 6% and good quality semi improved grassland 4%.	There are 53 priority habitats within the Northumberland Local Authority area, predominantly deciduous woodland which makes up approximately 23%, upland heathland 21% and blanket bog 11%.	There are 11 priority habitats within the South Tyneside Local Authority area, predominantly deciduous woodland making up approximately 75%, 5% lowland calcareous grassland and 5% mudflats.	There are 15 priority habitats within the Sunderland Local Authority area, predominantly deciduous woodland making up approximately 79%, 'no main habitat but additional habitats present' 8%, lowland calcareous grassland 3%

¹⁰ UKRI (2024) Natural Environment Research Council. Available: <https://www.ukri.org/councils/nerc/>



	and mudflats 4%.	and lowland meadows 3%.				and mudflats 3%.
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Explanatory Text and anticipated future trends:

Priority habitats can be designated as protected areas called Sites of Special Scientific Interest (SSSIs). They can also be outside of these SSSI protected areas but be under Higher Level Stewardship (HLS) or Countryside Stewardship (CS) agreements or fall within Forestry Commission (FC) 'Managed woodland'. Some priority habitats, however, fall outside of the protection of all these schemes.

The locations of Priority Habitat within the North East CA Region are shown in **Figure D-3**.

Anticipated Future Trends:

See above details that are applicable to all forms of PA.

Ancient Woodland	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are approximately 1222 areas of ancient woodland within the North East CA region, covering approximately 9,975 ha.						
	There are approximately 406 areas of ancient woodland within the County Durham Local Authority area, covering approximately 3,934 ha.	There are approximately 100 areas of ancient woodland within the Gateshead Local Authority area, covering approximately 1089 ha.	There are approximately six areas of ancient woodland within the Newcastle upon Tyne Local Authority area, covering approximately 48 ha.	There is one area of ancient woodland within the North Tyneside Local Authority area, covering approximately 13 ha.	There are approximately 723 areas of ancient woodland within the Northumberland Local Authority area, covering approximately 5255 ha.	No areas of ancient woodland were identified within the South Tyneside Local Authority area.	There are 12 areas of ancient woodland within the Sunderland Local Authority area, covering approximately 72 ha.
	Explanatory Text and anticipated future trends:						



Ancient woods are areas of woodland that have persisted since 1600 in England and Wales, and 1750 in Scotland. They are relatively undisturbed by human development. As a result, they are unique and complex communities of plants, fungi, insects and other microorganisms. Ancient woodlands can be classified into different categories, including Ancient semi-natural woods (woods that have developed naturally) and plantations on ancient woodland sites (ancient woodlands that have been felled and replanted with non-native species). Ancient woodland is identified using presence or absence of woods from old maps, information about the wood's name, shape, internal boundaries, location relative to other features, ground survey, and aerial photography. The Forestry Commission is responsible for protecting, expanding and promoting the sustainable management of woodlands.

Approximately 1,225 ancient woodlands are under threat in the UK due to conifer plantations, overgrazing, infrastructure development and the spread of invasive species¹¹.

The locations of Ancient Woodland within the North East CA Region are shown in **Figure D-2**.

Anticipated Future Events:

See above details that are applicable to all forms of PA. In addition to the threat of climate change, ancient woodlands are at particular threat from major infrastructure projects, including road and rail schemes. Whilst many schemes take part in some form of habitat regeneration (such as replanting), the replacement habitat is not comparable to the ecological value of ancient woodlands that have been preserved since 1600. Once these habitats are removed, they cannot be replaced or regrown.

Marine Conservation Zones (MCZs)	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are three MCZs within the North East CA area, predominantly located along the eastern coast of England.						
	No MCZs have been identified within the County Durham Local Authority area.	No MCZs have been identified within the Gateshead Local Authority area.	No MCZs have been identified within the Newcastle upon Tyne	There are two MCZs within the North Tyneside Local Authority area:	There are three MCZs within the Northumberland Local Authority area: <ul style="list-style-type: none">▪ Aln Estuary	No MCZs have been identified within the South Tyneside Local Authority area.	No MCZs have been identified within the Sunderland Local Authority area.

¹¹ Woodland Trust: Ancient Woodlands. Available: [Ancient Woodland - British Habitats - Woodland Trust](#)



		Local Authority area.	<ul style="list-style-type: none"> ▪ Berwick to St Mary's ▪ Coquet to St Marys 	<ul style="list-style-type: none"> ▪ Berwick to St Mary's ▪ Coquet to St Mary's 		
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Explanatory Text and anticipated future trends:

The government aims to have 'clean, healthy, safe, productive and biologically diverse oceans and seas'. The government has made a commitment to completing a network of Marine Conservation Zones (a type of Marine Protected Area), to create a Blue Belt of protected sites around our coasts.

The locations of MCZs within the North East CA Region are shown in **Figure D-2**.

Anticipated Future Trends¹²:

Increasing marine development, pollution, fishing practices and climate change place pressure on MCZs and wider marine habitat and wildlife. Management measures may be required in order to restore or maintain the conservation status of the protected features of MCZs. See above details that are applicable to all forms of PA.

Biosphere Reserves	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
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There are three biosphere reserves in the south of England, none of which fall within the North East CA area.

Explanatory Text and anticipated future trends:

Biosphere Reserves are all about improving the relationship between people and their local environment, globally. They are sites created by UNESCO that find creative ways for people and nature to thrive together. They act as extraordinary testing grounds to put into practice a revolutionary approach to managing our ecosystems sustainably for future generations.

Biosphere reserves are recognised under UNESCO's Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community. Once designated, they lie under the United Kingdom's

¹² UKRI (2024) Natural Environment Research Council. Available: <https://www.ukri.org/councils/nerc/>



authority, but when grouped together in the global community together they make up a network of sites within the World Network of Biosphere Reserves (WNBR).

Anticipated Future Trends¹³:

See above details that are applicable to all forms of PA.

RSPB Reserves	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are two RSPB Reserves within the North East CA area, located along the western boundary and eastern boundary.							
No RSPB Reserves have been identified within the County Durham Local Authority area.	No RSPB Reserves have been identified within the Gateshead Local Authority area.	No RSPB Reserves have been identified within the Newcastle upon Tyne Local Authority area.	No RSPB Reserves have been identified within the North Tyneside Local Authority area.	There are two RSPB Reserves within the Northumberland Local Authority area: <ul style="list-style-type: none"> ▪ Geltsdale ▪ Coquet Island 	No RSPB Reserves have been identified within the South Tyneside Local Authority area.	No RSPB Reserves have been identified within the Sunderland Local Authority area.	

Explanatory Text and anticipated future trends:

RSPB reserves are nature reserves run by the Royal Society for the Protection of Birds (RSPB); a non-statutory body incorporated by Royal Charter. RSPB reserves cover a broad range of habitat and landscapes, including heathland, estuaries, cliffs.

The locations of RSPB Reserves within the North East CA Region are shown in **Figure D-2**.

Anticipated Future Trends:

¹³ UKRI (2024) Natural Environment Research Council. Available: <https://www.ukri.org/councils/nerc/>



See above details that are applicable to all forms of PA.



C.2 Air Quality



Air Quality Management Areas (AQMA)

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are four AQMAs within the North East CA area as of 2018, located in the urban areas of four of the seven local authorities ¹⁴ .						
<p>There are two AQMAs within the County Durham Local Authority area:</p> <ul style="list-style-type: none"> ▪ ‘Durham County Council Air Quality Management Area ▪ Durham City No 2 Order 2014’ 	<p>There is one AQMA within the Gateshead Local Authority area:</p> <ul style="list-style-type: none"> ▪ Gateshead AQMA No. 1 (Town Centre) 	<p>There are two AQMAs within the Newcastle Local Authority area:</p> <ul style="list-style-type: none"> ▪ AQMA No. 1b (City Centre) ▪ AQMA No. 5 (Gosforth) 	<p>There is one AQMA within the North Tyneside Local Authority area:</p> <ul style="list-style-type: none"> ▪ AQMA No. 5 (Gosforth) 	<p>No AQMAs have been identified within the Northumberland Local Authority area.</p>	<p>No AQMAs have been identified within the South Tyneside Local Authority area.</p>	<p>No AQMAs have been identified within the Sunderland Local Authority area.</p>

Explanatory Text and anticipated future trends:

Since December 1997 each local authority in the UK must review and assess air quality in their area to determine performance against national air quality objectives. Where air quality objectives are not likely to be achieved an AQMA must be declared. AQMAs are typically associated with vehicle emissions, principally oxides of nitrogen (NOx), oxides of sulphur (SO2) and particulates (PM10). As such, AQMAs are predominantly associated with urban areas and the road network¹⁵.

The quality of our air in the UK has improved considerably over the last decade. Road transport is a key source of many air pollutants, particularly in urban areas. There are two main trends in the transport sector working in opposite directions: new vehicles are becoming individually cleaner in response to European emission standards legislation, but total vehicle kilometres are increasing. Overall

¹⁴ Department for Environment and Rural Affairs (2023) *UK Air Information Resource: List of Local Authorities with AQMAs*. Available: [List of Local Authorities with AQMAs - Defra, UK](#)

¹⁵ Department for Environment and Rural Affairs (2016) *Current AQMAs by Source*. Available: <https://uk-air.defra.gov.uk/aqma/summary>



emissions of key air pollutants from road transport have fallen by about 50% over the last decade, despite increases in traffic, and are expected to reduce by a further 25% over the next decade. This is mainly a result of progressively tighter vehicle emission and fuel standards agreed at European level and set in UK regulations¹⁶.

The locations of AQMAs within the North East CA Region are shown in **Figure D-4**.

Note that there is also increasing recognition of the role solid fuel use in domestic properties plays in poor air quality, with wood burning making a significant contribution toward wintertime PM10 concentrations in many towns and cities. PM10 attributable to wood burning tends to peak during wintertime evenings and weekends. This suggests that wood is used principally as a secondary or 'lifestyle' fuel, rather than a primary source of heating. It also suggests that the majority of current air quality impacts are linked to simpler appliances such as open fires and stoves, rather than more complex appliances such as biomass boilers and Combined Heat and Power systems. Local authorities have experienced a number of gross pollution and nuisance cases linked to solid fuel appliances, and the frequency of these cases may be increasing. In many cases these problems occur when appliances are poorly installed, misused and/or inappropriate fuels are used¹⁷.

Noise Action Important Areas

There are 341 Noise Action Important Areas within the North East CA area, located on the local rail and road networks. Noise Action plans have been identified at specific locations along the A69, A1, A167, A191, A1058, A194, A184, A1018, A19, A690, A690 and the A1(M).

There are 97 Noise Action Important Areas within the County Durham Local Authority area.	There are 47 Noise Action Important Areas within the Gateshead Local Authority area.	There are 52 Noise Action Important Areas within the Newcastle upon	There are 46 Noise Action Important Areas within the North Tyneside Local Authority area.	There are 36 Noise Action Important Areas within the Northumberland	There are 28 Noise Action Important Areas within the South Tyneside Local Authority area.	There are 45 Noise Action Important Areas within the Sunderland
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¹⁶ Department for Environment and Rural Affairs (2011) *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland - Volume 1*. Available: <https://www.gov.uk/government/publications/the-air-quality-strategy-for-england-scotland-wales-and-northern-ireland-volume-1>

¹⁷ IES (2023) *New community: IES & EPUK focus on implementation*. Available: <https://www.environmental-protection.org.uk/wp-content/uploads/2013/07/Solid-Fuel-and-Air-Quality-Update-for-LAs-final-060413.pdf>



	Tyne Local Authority area.	Local Authority area.	Local Authority area.
<p>Explanatory Text and anticipated future trends:</p> <p>Noise Action Plans are required by the Environmental Noise Directive. Noise Important Areas identify 'hotspot' locations where the highest 1% of noise levels at residential locations can be found and therefore highlight where further investigation should be directed.</p> <p>*DEFRA defines an agglomeration as an area having a population in excess of 100,000 persons and a population density equal to or greater than 500 people per km² and which is considered to be urbanised.</p> <p>The locations of Noise Action Important Areas within the North East CA Region are shown in Figure D-4.</p>			



C.3 Climate Change



Distribution of Greenhouse Gases (GHGs)	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	All of the local authority area's within the North East CA area have a combined territorial CO ₂ emissions estimate of 7,455.6 kt CO ₂ e in 2022.						
	Note the North East region territorial CO ₂ emissions estimate total for 2022 is 14,017.2 kt CO ₂ however, this covers a larger area and includes more local authorities ¹⁸ .						
	The territorial CO ₂ emissions estimate for County Durham Local Authority area 2022 totalled at 2,089.4 kt CO ₂ e ¹⁹ .	The territorial CO ₂ emissions estimate for Gateshead Local Authority area 2022 totalled at 890.3 kt CO ₂ e.	The territorial CO ₂ emissions estimate for Newcastle upon Tyne Local Authority area 2022 totalled at 1,147.2 kt CO ₂ e.	The territorial CO ₂ emissions estimate for North Tyneside Local Authority area 2022 totalled at 753.3 kt CO ₂ e.	The territorial CO ₂ emissions estimate for Northumberland Local Authority area 2022 totalled at 1,076.6 kt CO ₂ e.	The territorial CO ₂ emissions estimate for South Tyneside local Authority area 2022 totalled at 441.0 kt CO ₂ e.	The territorial CO ₂ emissions estimate for Sunderland local Authority area 2022 totalled at 1,057.8 kt CO ₂ e.
Explanatory Text and anticipated future trends:							
<p>The UK's yearly publication²⁰ on GHG emissions provides the latest estimates of 1990-2022 UK territorial greenhouse gas emissions, which are presented in carbon dioxide equivalent units (CO₂e). They show greenhouse gas emissions occurring within the UK's borders and cover the Kyoto "basket" of seven greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).</p> <p>The UK has domestic targets for reducing greenhouse gas emissions under the Climate Change Act 2008 (CCA). The CCA established a long-term legally binding framework to reduce emissions, initially committing the UK to reducing emissions by at least 80% below 1990/95</p>							

¹⁸Department for Energy Security and Net Zero (2024) *2005-2022 UK local and regional greenhouse gas emissions – data tables*. Available: [UK local authority and regional greenhouse gas emissions statistics, 2005 to 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/2005-2022-uk-local-and-regional-greenhouse-gas-emissions-data-tables)

¹⁹Department for Energy Security and Net Zero (2024) *2005-2022 UK local and regional greenhouse gas emissions – data tables*. Available: [UK local authority and regional greenhouse gas emissions statistics, 2005 to 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/2005-2022-uk-local-and-regional-greenhouse-gas-emissions-data-tables)

²⁰ Department for Energy Security & Net Zero (2023) *2022 UK greenhouse gas emissions, provisional figures*. Available: [2022 UK greenhouse gas emissions: provisional figures - statistical release \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/statistics/2022-uk-greenhouse-gas-emissions-provisional-figures)



baselines by 2050. In June 2019, following the IPCC’s Special Report on Global Warming of 1.5°C and advice from the independent Committee on Climate Change, the CCA was amended to commit the UK to achieving a 100% reduction in emissions (to net zero) by 2050.

The CCA also introduced carbon budgets, which set legally binding limits on the total amount of greenhouse gas emissions the UK can emit for a given five-year period. The first carbon budget ran from 2008-12. In 2014, the UK confirmed that it had met the budget, with emissions 36 MtCO_{2e} below the cap of 3,018 MtCO_{2e}. The second carbon budget ran from 2013-17. In 2019, the UK confirmed that it had met the budget, with emissions 384 MtCO_{2e} below the cap of 2,782 MtCO_{2e}. The third carbon budget ran from 2018 to 2022, with an emissions cap of 2,544 MtCO_{2e}.

Anticipated Future Trends:

Recent trends illustrate that GHG emissions are primarily being reduced in the energy sector due to the change in fuel mix for electricity generation, in particular a reduction in the use of coal and gas. It is expected that this will continue over the next few years and decades in favour of more renewable and low-carbon sources. It can also be expected that GHG emissions in the transportation sector are likely to decrease with the increasing availability and feasibility of electric vehicles and business fleets.

Contribution of sectors to GHG emissions	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>All of the local authority areas within the North East CA area have combined territorial CO₂ emissions estimates per sector in 2022 of:</p> <ul style="list-style-type: none"> ▪ Industry: 1,102.4 kt CO_{2e}, ▪ Commercial: 753.5 kt CO_{2e}, ▪ Public Sector: 368.6 kt CO_{2e}, ▪ Domestic: 2,625.5 kt CO_{2e}, ▪ Transport: 2,955.2 kt CO_{2e}, ▪ LULUCF: -591.5 kt CO_{2e}, ▪ Agriculture: 166.5 kt CO_{2e}, ▪ Waste: 2.1 kt CO_{2e}. <p>Note the North East region territorial CO₂ emissions estimate per sector for 2022 is as follows:</p> <ul style="list-style-type: none"> ▪ Industry: 3,325.8 kt CO_{2e} 							



- Commercial: 1,160.7 kt CO₂e
- Public Sector: 499.3 kt CO₂e
- Domestic: 3,617.3 kt CO₂e
- Transport: 4,059.1 kt CO₂e
- LULUCF: -506.1 kt CO₂e
- Agriculture: 1,244.6 kt CO₂e
- Waste: 616.5 kt CO₂e

However, this covers a larger area and includes more local authorities²¹.

<p>The territorial CO₂ emissions estimate for County Durham Local Authority area 2022 total is broken down into the following sectors²²:</p> <ul style="list-style-type: none"> ▪ Industry: 318.3 kt CO₂e ▪ Commercial: 148.9 kt CO₂e 	<p>The territorial CO₂ emissions estimate for Gateshead Local Authority area 2022 total is broken down into the following sectors:</p> <ul style="list-style-type: none"> ▪ Industry: 160.5 kt CO₂e ▪ Commercial: 80.3 kt CO₂e 	<p>The territorial CO₂ emissions estimate for Newcastle upon Tyne Local Authority area 2022 total is broken down into the following sectors:</p> <ul style="list-style-type: none"> ▪ Industry: 73.6 kt CO₂e ▪ Commercial: 186.1 kt CO₂e 	<p>The territorial CO₂ emissions estimate for North Tyneside Local Authority area 2022 total is broken down into the following sectors:</p> <ul style="list-style-type: none"> ▪ Industry: 97.1 kt CO₂e ▪ Commercial: 101.9 kt CO₂e 	<p>The territorial CO₂ emissions estimate for Northumberland Local Authority area 2022 total is broken down into the following sectors:</p> <ul style="list-style-type: none"> ▪ Industry: 268.6 kt CO₂e ▪ Commercial: 108.0 kt CO₂e 	<p>The territorial CO₂ emissions estimate for South Tyneside Local Authority area 2022 total is broken down into the following sectors:</p> <ul style="list-style-type: none"> ▪ Industry: 33.0 kt CO₂e ▪ Commercial: 39.4 kt CO₂e 	<p>The territorial CO₂ emissions estimate for Sunderland Local Authority area 2022 total is broken down into the following sectors:</p> <ul style="list-style-type: none"> ▪ Industry: 224.8 kt CO₂e ▪ Commercial: 88.9 kt CO₂e
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²¹Department for Energy Security and Net Zero (2024) *2005-2022 UK local and regional greenhouse gas emissions – data tables*. Available: [UK local authority and regional greenhouse gas emissions statistics, 2005 to 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/2005-2022-uk-local-and-regional-greenhouse-gas-emissions-data-tables)

²² Department for Energy Security and Net Zero (2024) *2005-2022 UK local and regional greenhouse gas emissions – data tables*. Available: [UK local authority and regional greenhouse gas emissions statistics, 2005 to 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/2005-2022-uk-local-and-regional-greenhouse-gas-emissions-data-tables)



<ul style="list-style-type: none"> ▪ Public Sector: 81.7 kt CO₂e ▪ Domestic: 753.9 kt CO₂e ▪ Transport: 843.8 kt CO₂e ▪ LULUCF: - 112.0 kt CO₂e ▪ Agriculture: 54.3 kt CO₂e ▪ Waste: 0.6 kt CO₂e 	<ul style="list-style-type: none"> ▪ Public Sector: 28.0 kt CO₂e ▪ Domestic: 249.7 kt CO₂e ▪ Transport: 385.5 kt CO₂e ▪ LULUCF: - 15.7 kt CO₂e ▪ Agriculture: 1.7 kt CO₂e ▪ Waste: 0.2 kt CO₂e 	<ul style="list-style-type: none"> ▪ Public Sector: 127.9 kt CO₂e ▪ Domestic: 346.2 kt CO₂e ▪ Transport: 370.1 kt CO₂e ▪ LULUCF: 41.8 kt CO₂e ▪ Agriculture: 1.3 kt CO₂e ▪ Waste: 0.2 kt CO₂e 	<ul style="list-style-type: none"> ▪ Public Sector: 24.2 kt CO₂e ▪ Domestic: 263.8 kt CO₂e ▪ Transport: 262.5 kt CO₂e ▪ LULUCF: 3.1 kt CO₂e ▪ Agriculture: 0.6 kt CO₂e ▪ Waste: 0.2 kt CO₂e 	<ul style="list-style-type: none"> ▪ Public Sector: 42.8 kt CO₂e ▪ Domestic: 482.8 kt CO₂e ▪ Transport: 579.1 kt CO₂e ▪ LULUCF: - 510.8 kt CO₂e ▪ Agriculture: 105.6 kt CO₂e ▪ Waste: 0.5 kt CO₂e 	<ul style="list-style-type: none"> ▪ Public Sector: 24.5 kt CO₂e ▪ Domestic: 181.5 kt CO₂e ▪ Transport: 159.2 kt CO₂e ▪ LULUCF: 2.0 kt CO₂e ▪ Agriculture: 1.3 kt CO₂e ▪ Waste: 0.1 kt CO₂e 	<ul style="list-style-type: none"> ▪ Public Sector: 39.5 kt CO₂e ▪ Domestic: 347.6 kt CO₂e ▪ Transport: 355.0 kt CO₂e ▪ LULUCF: 0.1 kt CO₂e ▪ Agriculture: 1.7 kt CO₂e ▪ Waste: 0.3 kt CO₂e
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Explanatory Text and anticipated future trends:

The UK’s yearly publication²³ on GHG emissions provides the latest estimates of 1990-2018 UK territorial greenhouse gas emissions, which are presented in carbon dioxide equivalent units (CO₂e). They show greenhouse gas emissions occurring within the UK’s borders and cover the Kyoto “basket” of seven greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

The UK has domestic targets for reducing greenhouse gas emissions under the Climate Change Act 2008 (CCA). The CCA established a long-term legally binding framework to reduce emissions, initially committing the UK to reducing emissions by at least 80% below 1990/95 baselines by 2050. In June 2019, following the IPCC’s Special Report on Global Warming of 1.5°C and advice from the independent

²³ Department for Energy Security & Net Zero (2023) *2022 UK greenhouse gas emissions, provisional figures*. Available: [2022 UK greenhouse gas emissions: provisional figures - statistical release \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/123456/2022-UK-greenhouse-gas-emissions-provisional-figures-statistical-release.pdf)



Committee on Climate Change, the CCA was amended to commit the UK to achieving a 100% reduction in emissions (to net zero) by 2050.

The CCA also introduced carbon budgets, which set legally binding limits on the total amount of greenhouse gas emissions the UK can emit for a given five-year period. The first carbon budget ran from 2008-12. In 2014, the UK confirmed that it had met the budget, with emissions 36 MtCO_{2e} below the cap of 3,018 MtCO_{2e}. The second carbon budget ran from 2013-17. In 2019, the UK confirmed that it had met the budget, with emissions 384 MtCO_{2e} below the cap of 2,782 MtCO_{2e}. The third carbon budget ran from 2018 to 2022, with an emissions cap of 2,544 MtCO_{2e}.

Anticipated Future Trends:

Recent trends illustrate that GHG emissions are primarily being reduced in the energy sector due to the change in fuel mix for electricity generation, in particular a reduction in the use of coal and gas. It is expected that this will continue over the next few years and decades in favour of more renewable and low-carbon sources. It can also be expected that GHG emissions in the transportation sector are likely to decrease with the increasing availability and feasibility of electric vehicles and business fleets.

Predicted changes to temperature and weather patterns	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	<p>The projected changes in temperature and precipitation for the north east of England by the 2050s (2040-2069), under the UKCIP02 low and high emissions scenarios) are as follows²⁴:</p> <ul style="list-style-type: none"> ▪ Annal temperatures will be warmer: Temperature is projected to increase between 1.0°C to 5°C. ▪ High summer temperatures will become more frequent: The number of very hot days will increase, especially in Summer and Autumn ▪ Winter will become wetter: There will be greater seasonal precipitation contrasts, with drier summers becoming more common and winter precipitation becoming more variable, with less snowfall likely. <p>Note projected changes in temperature and precipitation by the 2050s at local authority level are anticipated to be in line with that reported at regional level.</p> <p>Explanatory Text and anticipated future trends:</p>						

²⁴ UKCIP (2004) *And the weather today is... Climate Change in the North East (North East)*. Available: [NE_summary.pdf \(ukcip.org.uk\)](https://www.ukcip.org.uk/summary.pdf)



In December 2015, climate change issues were highlighted during the UN Conference of the Parties (COP) 21. At COP21, 189 parties ratified The Paris Agreement. The Paris Agreement's long-term temperature goal is to keep the increase in global average temperature to well below 2 °C above pre-industrial levels; and to pursue efforts to limit the increase to 1.5 °C, recognising that this would substantially reduce the risks and impacts of climate change globally. It also aims to increase the ability of parties to adapt to the adverse impacts of climate change and make "finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."

Under the Paris Agreement, each country must determine, plan, and regularly report on the contribution that it undertakes to mitigate global warming. No mechanism forces a country to set a specific emissions target by a specific date, but each target should go beyond previously set targets.



C.4 Flood Risk



Location of Flood Zones	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
The relevant local authorities fall within the Northumbria, Humber and Solway Tweed River Basin Districts (RBD).							
The Northumbria River Basin District covers an area of 9,029 km ² from the Scottish Border to just south of Guisborough, and from the Pennines east to the North Sea. Approximately 2.5 million people live in the region as of 2022, primarily in two locations: Tyne and Wear, and the Tees Valley ²⁵ . Within this area, there is one Flood Risk Area (FRA) for significant risk of flooding from surface water. As of 2022, there were 2.9 million people within the Northumbria RBD, of which 3,105 (0.11%) were in areas at high risk of flooding from rivers and the sea, and 13,016 (0.45%) from surface water ²⁶ .							
The Humber River Basin District covers an area of 26,109 km ² from the Scottish Border to just south of Guisborough, and from the upland areas of the Peak District, South Pennines and the North York Moors, across the Derbyshire and Yorkshire Dales and the fertile river valleys of the Trent and Ouse, to the free-draining chalk of the Yorkshire and Lincolnshire Wolds. More than 10.8 million people live in the region as of 2022 ²⁷ . Within this area, there are 38 FRA for significant risk of flooding from main rivers and the sea, and 12 from surface water. As of 2022, there were 12.3 million people within the Humber RBD, of which 59,933 (0.49%) were in areas at high risk of flooding from rivers and the sea, and 78,329 (0.64%) from surface water ²⁸ .							
The Solway Tweed river basin is a cross border river basin that includes Scottish and English waterbodies that flow into the Solway and Tweed estuaries. It has an area of approximately 17,500 km ² and incorporates the Scottish Borders, Dumfries and Galloway and parts of							

²⁵ Environment Agency (2022) *River Basin Management Plan for the Northumbria River Basin District HRA*. Available: [River basin management plan for the Northumbria River Basin District HRA \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/114222/river-basin-management-plan-for-the-northumbria-river-basin-district-hra.pdf)

²⁶ Environment Agency (2022) *Northumbria River Basin District Flood Risk Management Plan 2021 to 2027*. Available: [Northumbria River Basin District Flood Risk Management Plan 2021 to 2027 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/114222/northumbria-river-basin-district-flood-risk-management-plan-2021-to-2027.pdf)

²⁷ Environment Agency (2022) *River Basin Management Plan for the Humber River Basin District HRA*. Available: [River basin management plan for the Humber River Basin District HRA \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/114222/river-basin-management-plan-for-the-humber-river-basin-district-hra.pdf)

²⁸ Environment Agency (2022) *Humber River Basin District Flood Risk Management Plan 2021 to 2027*. Available: assets.publishing.service.gov.uk/media/638099ed8fa8f56eb302c6f8/Humber-FRMP-2021-2027.pdf



Cumbria and Northumberland. Approximately 450,000 people live within this area as of 2022. Within the English part of this area, there are no FRAs within the English portion of the Solway Tweed RBD²⁹.

Note the river basin management plan used for Solway and Tweed is for the English part of the Solway Tweed RBD.

Explanatory Text and anticipated future trends:

In England, the flood risk (river and tidal) is categorised into three zones³⁰ for planning purposes (noting that the NPPF further subdivides flood zone 3 into 3a and Functional Floodplain 3b (land where water has to flow or be stored in times of flood):

- Flood Zone 1 – Land unlikely to be affected by flooding, with a less than 0.1% (less than 1 in 1000) chance of flooding each year.
- Flood Zone 2 – Land likely to be affected by a major flood, with up to a 0.1% (1 in 1000) chance of occurring each year.
- Flood Zone 3 – Land likely to be affected by flooding from the sea by a flood that has a 0.5% (1 in 200) or greater chance of happening each year, or from a river by a flood that has a 1 per cent (1 in 100) or greater chance of happening each year.

The risk of surface water flooding also needs to be considered:

Very low risk area (less than 0.1% (1:1000)) chance of flooding.

- Low risk area (0.1% to 1% (1:1000 – 1:100)) chance of flooding.
- Medium risk area (1% to 3.3% (1:100 – 1:30)) chance of flooding.
- High risk area (3.3% (1:30)) or greater chance of flooding.

Estimates of flood risk from different sources across the UK vary, but it is known that the level of risk is substantial – England has approximately 5.2million properties at risk³¹.

While new development is expected to occur in the plan area making use of a sequential approach, without a strategic approach, there is increased potential for the inappropriate siting of new development which may aggravate existing flood risk.

The locations of Flood Zones within the North East CA Region are shown in **Figure D-5**.

²⁹ Environment Agency (2022) *Humber River Basin District Flood Risk Management Plan HRA*. Available: [Solway Tweed FRMP: habitats regulations assessment \(publishing.service.gov.uk\)](#)

³⁰ Environment Agency (2014) *Flood risk assessments: applying for planning permission*. Available: [Flood risk assessments: applying for planning permission - GOV.UK \(www.gov.uk\)](#)

³¹ Environment Agency (2009) *Flooding in England: A National Assessment of Flood Risk*. Available: [Flooding in England: national assessment of flood risk - GOV.UK \(www.gov.uk\)](#)

Bathing Water Quality	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
All of the local authority areas within the North East CA area have a combined total of 26 bathing water areas.							
<p>As of 2023, County Durham Local Authority area has three bathing water areas. The quality of these areas assessed under the Bathing Waters Directive were³²:</p> <ul style="list-style-type: none"> ▪ Seaham Hall Beach – Sufficient ▪ Seaham Beach – Good ▪ Crimdon - Good 	<p>As of 2023, no bathing waters have been identified within the Gateshead Local Authority area.</p>	<p>As of 2023, no bathing waters have been identified within the Newcastle upon Tyne Local Authority area.</p>	<p>As of 2023, North Tyneside Local Authority area has five bathing water areas. The quality of these areas assessed under the Bathing Waters Directive were:</p> <ul style="list-style-type: none"> ▪ Whitley Bay – Excellent ▪ Tynemouth Cullercoats – Poor (bathing not advised) ▪ Tynemouth Long Sands North – Excellent ▪ Tynemouth Long Sands 	<p>As of 2023, Northumberland Local Authority area has 13 bathing water areas. The quality of these areas assessed under the Bathing Waters Directive were:</p> <ul style="list-style-type: none"> ▪ Low Newton – Excellent ▪ Warkworth – Excellent ▪ Amble Links – Good ▪ Spittal – Excellent ▪ Bamburgh Castle – Excellent 	<p>As of 2023, South Tyneside Local Authority area has three bathing water areas. The quality of these areas assessed under the Bathing Waters Directive were:</p> <ul style="list-style-type: none"> ▪ South Shields – Excellent ▪ Marsden – Good ▪ Littlehaven Beach – Results unavailable 	<p>As of 2023, Sunderland Local Authority area has two bathing water areas. The quality of these areas assessed under the Bathing Waters Directive were:</p> <ul style="list-style-type: none"> • Seaburn – Excellent • Roker – Excellent 	

³² environment Agency (2024) *Bathing Water Data*. Available: <https://environment.data.gov.uk/bwq/profiles/data.html?bw=ukc1101-06200,ukc1101-06000,ukc1404-05900&county=Durham,Northumberland&district=County%20Durham&country=England>



- | | | | | | |
|--|--|--|---|---|--|
| | | | <ul style="list-style-type: none"> South – Excellent ▪ Tynemouth King Edwards Bay - Excellent | <ul style="list-style-type: none"> ▪ Seahouses North – Excellent ▪ Beadnell – Excellent ▪ Blyth South Beach – Excellent ▪ Seaton Sluice – Excellent ▪ Druridge Bay North – Excellent ▪ Druridge Bay South – Excellent ▪ Newbiggin North – Good ▪ Newbiggin South – Good | |
|--|--|--|---|---|--|

Explanatory Text and anticipated future trends:



Water quality at designated bathing water sites in England is assessed by the Environment Agency. From May to September, weekly assessments measure current water quality, and at a number of sites daily pollution risk forecasts are issued. Annual ratings classify each site as excellent, good, sufficient or poor based on measurements taken over a period of up to four years³³.

The locations of Bathing Water Quality Sites within the North East CA Region are shown in **Figure D-5**.

Coastal Processes Shoreline Management Plans	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>There are three Shoreline Management Plans (SMP) within the north east region, two of which fall along the eastern border of the North East CA region³⁴:</p> <ul style="list-style-type: none"> ▪ Scottish Border to the River Tyne SMP1 ▪ The Tyne to Flamborough Head SMP2 <p>These plans present approaches to managing the risk of coastal flooding and erosion at the shoreline and in estuaries over the short, medium, and long term, considering the implications of climate change. They include action plans and split into more specific locations.</p>							
	County Durham Local Authority area is covered by SMP2.	Gateshead Local Authority Area is inland and does not reach the coast.	Newcastle upon Tyne Local Authority Area is inland and does not reach the coast.	North Tyneside Local Authority area is covered by SMP1.	Northumberland Local Authority area is covered by SMP1.	South Tyneside Local Authority area is covered by SMP2.	Sunderland Local Authority area is covered by SMP2.
<p>Explanatory Text and anticipated future trends:</p> <p>SMPs were developed by coastal groups between 2006 and 2012, including the Environment Agency, local authorities and others with an interest in coastal management. They guide coastal management investment decisions on the coast such as building and maintaining sea defences and implementing adaptation plans³⁵.</p>							

³³ Environment Agency (2024) *Bathing Water Data*. Available: <http://environment.data.gov.uk/bwq/profiles/data.html?country=England>

³⁴ Environment Agency (2024) *North East Coastal Group*. Available: [North East CG1 | Shoreline Management Plans \(data.gov.uk\)](http://data.gov.uk/north-east-coastal-group)

³⁵ Environment Agency (2024) *Shoreline Management Plans*. Available: [Shoreline management plans - GOV.UK \(www.gov.uk\)](http://www.gov.uk/shoreline-management-plans)



Flood risk management plans (FRMPs) describe the risk of flooding from rivers, the sea, surface water, groundwater and reservoirs. Each FRMP covers a specific river basin district and sets out how risk management authorities will work together and with communities to manage flood and coastal risk over the next few years. Risk management authorities include the Environment Agency, lead local flood authorities (LLFAs), local councils, and water and sewerage companies³⁶.

³⁶ County Durham Council (2017) *Local Flood Risk Management Strategy 2016-2020*. Available: [LocalFloodRiskManagementStrategy.pdf \(durham.gov.uk\)](https://www.durham.gov.uk/media/1000000/LocalFloodRiskManagementStrategy.pdf)



C.5 Historic Environment



World Heritage Sites

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are two World Heritage Sites within the North East CA area, Hadrian’s Wall running across East to West, and Durham Cathedral located in the Southeast region.						
One World Heritage Site has been identified in the County Durham Local Authority Area. ▪ Durham Cathedral	No World Heritage Sites have been identified in the Gateshead Local Authority Area.	One World Heritage Site has been identified in the Newcastle-upon-Tyne Local Authority Area. ▪ Hadrian’s Wall	One World Heritage Site has been identified in the North Tyneside Local Authority Area. • Hadrian’s Wall	One World Heritage Site has been identified in the Northumberland Local Authority Area. • Hadrian’s Wall	One World Heritage Site has been identified in the South Tyneside Local Authority Area. • Hadrian’s Wall	No World Heritage Sites have been identified in the Sunderland Local Authority Area.

Explanatory Text and anticipated future trends:

World Heritage Sites are inscribed to meet the UK’s commitments under the World Heritage Convention and the sites are designated for their globally important cultural or natural interest and require appropriate management and protection measures.

The first World Heritage Sites within the UK were designated in 1986. Sites can continue to be nominated, with the last site on the UK mainland being the Forth Rail Bridge, designated in 2015. Sites are inscribed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). In England the Department for (DCMS) acts as the UK 'State Party' which is responsible for nominating new sites. The DCMS receives advice from Historic England in this regard³⁷. The Outstanding Universal Value of a World Heritage Site indicates its importance as a heritage asset of the highest significance. This is to be taken into account by the relevant authorities in plan-making and determining planning applications³⁸.

³⁷ Historic England (2020) *World Heritage*. Available: <https://historicengland.org.uk/advice/planning/international/world-heritage>

³⁸ MHCLG (2019) *Planning practice guidance. Further guidance on World Heritage Sites. Paragraph: 028 Reference ID: 18a-028-20190723*. Available: <https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment#World-Heritage-Sites>



Of the sites in England, none have been placed on the List of World Heritage in Danger. The list presently comprises 56 sites in total worldwide. These are sites at which conditions are present to threaten the characteristics for which a site was placed on the World Heritage List³⁹.

Development in the Plan Area may be **inappropriately located or designated to pose a risk to the World Heritage Site in the North East CA area as well as its setting**. Without a co-ordinated strategic approach to development and infrastructure there is an increased potential for this risk to result.

The locations of World Heritage Sites within the North East CA Region are shown in **Figure D-6**.

Conservation Areas	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There is a combined total of 217 Conservation Areas across each of the local authority areas within the North East CA area, spread throughout the region, but are more concentrated in the East, Southeast and South regions of the plan area.							
There are 96 Conservation Areas in the County Durham Local Authority Area.	No data available for the Gateshead Local Authority Area.	No data available for the Newcastle-upon-Tyne Local Authority Area.	There are 19 Conservation Areas in the North Tyneside Local Authority Area.	There are 74 Conservation Areas in the Northumberland Local Authority Area.	There are 13 Conservation Areas in the South Tyneside Local Authority Area.	There are 15 Conservation Areas in the Sunderland Local Authority Area.	
Explanatory Text and anticipated future trends:							
Local authorities have a positive legal duty to designate conservation areas where parts of their own area are of special architectural or historic interest. In exceptional circumstances, where the local authority has not done so, the Secretary of State (for Digital, Culture, Media and Sport) may designate a conservation area anywhere in England. The Planning (Listed Buildings and Conservation Areas) Act 1990 also sets out the requirement for local authority's proposals for the preservation and enhancement of conservation areas.							

³⁹ UNESCO (2020) *List of World Heritage in Danger*. Available at: <https://whc.unesco.org/en/danger>



Additional development in the Plan Area may be inappropriately located or designed to pose a risk to listed building and conservation areas and their settings. Without a co-ordinated strategic approach to development and infrastructure there is an increased potential for this risk to result.

The locations of Conservation Areas within the North East CA Region are shown in **Figure D.6**.

Listed Buildings	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are 10,536 Listed Buildings in the North East CA area. 349 are Grade I listed, the remaining are Grade II and Grade II* listed.							
There are 3,102 listed buildings in the County Durham Local Authority Area:	There are 249 listed buildings in the Gateshead Local Authority Area:	There are 774 listed buildings in the Newcastle-upon-Tyne Local Authority Area:	There are 224 listed buildings in the North Tyneside Local Authority Area:	There are 5,619 listed buildings in the Northumberland Local Authority Area:	There are 195 listed buildings in the South Tyneside Local Authority Area:	There are 373 listed buildings in the Sunderland Local Authority Area:	
Grade I – 103	Grade I – 8	Grade I – 52	Grade I – 2	Grade I – 170	Grade I – 4	Grade I – 10	
Grade II – 2825	Grade II – 217	Grade II – 563	Grade II – 211	Grade II – 5167	Grade II – 180	Grade II – 344	
Grade II* – 166	Grade II* – 18	Grade II* – 155	Grade II* – 10	Grade II* – 267	Grade II* – 7	Grade II* – 15	

Explanatory Text and anticipated future trends:

Listing of buildings is concerned with recognising the buildings special architectural and historic interest, with a view to protecting the building, under the planning system for future generations to enjoy. All buildings built before 1700 which survive in anything like their original condition are listed, as are most of those built between 1700 and 1840. Particularly careful selection is required for buildings from the period after 1945. Usually, a building has to be over 30 years old to be eligible for listing⁴⁰.

⁴⁰ Historic England (2020) *Listed Buildings*. Available: <https://historicengland.org.uk/listing/what-is-designation/listed-buildings/>



Buildings are considered by the Secretary of State (for Digital, Culture, Media and Sport) and where they are deemed to be of special architectural or historic interest they can be included on the list. The Planning (Listed Buildings and Conservation Areas) Act 1990 sets out the designation regime⁴¹.

There are three categories of listed building:

- Grade I buildings are of exceptional interest, only 2.5% of listed buildings are Grade I
- Grade II* buildings are particularly important buildings of more than special interest; 5.8% of listed buildings are Grade II*
- Grade II buildings are of special interest; 91.7% of all listed buildings are in this class and it is the most likely grade of listing for a homeowner.

Additional housing development in the Plan Area may be **inappropriately located or designed to pose a risk to listed building and conservation areas and their settings**. Without a co-ordinated strategic approach to development and infrastructure there is an increased potential for this risk to result.

The locations of Listed Buildings within the North East CA Region are shown in **Figure D-6**.

Scheduled Monuments	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are 1,288 Scheduled Monuments in the North East CA area.							
There are 238 Scheduled Monuments in the County Durham Local Authority Area.	There are 16 Scheduled Monuments in the Gateshead Local Authority Area.	There are 42 Scheduled Monuments in the Newcastle Local Authority Area.	There are 8 Scheduled Monuments in the North Tyneside Local Authority Area.	There are 969 Scheduled Monuments in the Northumberland Local Authority Area.	There are 5 Scheduled Monuments in the South Tyneside Local Authority Area.	There are 10 Scheduled Monuments in the Sunderland Local Authority Area.	

Explanatory Text and anticipated future trends:

⁴¹ Historic England (2020) *Listed Buildings Identification and Extent*. Available: <https://historicengland.org.uk/advice/hpg/has/listed-buildings/>



Scheduling is the selection of nationally important archaeological sites which are legally protected. The monitoring and identification of sites is undertaken by Historic England. Scheduled Monuments cover the whole range of archaeological sites and are not always visible or above ground sites.

The condition of Scheduled Monuments is monitored as part of Historic England’s ‘Heritage at Risk’ programme. Local government archaeological services, plus independent national and local heritage organisations and community groups can also play important roles in their curation, plus that of non-scheduled but nationally important monuments⁴².

Additional housing development in the Plan Area may be **inappropriately located or designated to pose a risk to scheduled monuments and their settings**. Without a co-ordinated strategic approach to development and infrastructure there is an increased potential for this risk to result.

The locations of Scheduled Monuments within the North East CA Region are shown in **Figure D-6**.

Registered Parks and Gardens	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are 46 Registered Parks and Gardens located throughout the North East CA area with the largest number of them being in County Durham and Northumberland.						
	<p>There are 17 Registered Parks and Gardens in the County Durham Local Authority Area:</p> <ul style="list-style-type: none"> Auckland Castle Park Bowes Musuem 	<p>There are 3 Registered Parks and Gardens in the Gateshead Local Authority Area:</p> <ul style="list-style-type: none"> Gibside Bradley Park Saltwell Park 	<p>There are 6 Registered Parks and Gardens in the Newcastle-upon-Tyne Local Authority Area:</p> <ul style="list-style-type: none"> Leazes Park St John’s Cemetery Jesmond Dene, Armstrong 	<p>There are no Registered Parks and Gardens in the North Tyneside Local Authority Area.</p>	<p>There are 17 Registered Parks and Gardens in the Northumberland Local Authority Area:</p> <ul style="list-style-type: none"> Alnwick Castle Belsay Hall Blagdon 	<p>There is 1 Registered Park and Garden in the South Tyneside Local Authority Area:</p> <ul style="list-style-type: none"> North and South Marine Parks and Bents Park 	<p>There are 2Registered Parks and Gardens in the Sunderland Local Authority Area:</p> <ul style="list-style-type: none"> Mowbray Park Roker Park

⁴² Department for Culture, Media and Sport (2013) *Scheduled Monuments*. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/249695/SM_policy_statement_10-2013_2_.pdf



<ul style="list-style-type: none"> ▪ Brancepath Castle ▪ Hardwick Path ▪ Lartington Hall ▪ Raby Castle ▪ Rokeby Park ▪ Croxdale Hall ▪ Burn Hall ▪ The Castle, Castle Eden ▪ Lumley Castle ▪ Old Durham Gardens ▪ Windlestone Hall ▪ Lambton Castle ▪ Pasmore Pavilion ▪ Ceddesfeld Hall Gardens ▪ Ramshaw Hall Gardens 		<p>and Heaton Parks</p> <ul style="list-style-type: none"> ▪ Newcastle General Cemetery ▪ Wooslington Park ▪ Westgate Hill Cemetery 		<ul style="list-style-type: none"> ▪ Capheaton ▪ Chillingham ▪ Cragside ▪ Hesleyside ▪ Howick Hall ▪ Kirkharle Hall ▪ Lindisfarne Castle ▪ Nunwick ▪ Seaton Delaval ▪ Tillmouth Park ▪ Wallington ▪ St Mary's Hospital Stannington ▪ Belford Hall ▪ The Hexham Parks ▪ St Andrew's Cemetery 		
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Explanatory Text and anticipated future trends:



The purpose of Registers of Historic Parks and Gardens in England is to encourage the protection of gardens, grounds and other open spaces which are of historic importance. The majority of sites registered are, or started life as, the grounds of private houses, but public parks and cemeteries form important categories too.

The emphasis of the Register is on 'designed' landscapes, rather than on planting or botanical importance. The various types of designed landscape included on the Register are designated in the following four themes:

- Rural Landscapes
- Urban Landscapes
- Landscapes of Remembrance
- Institutional Landscapes

The locations of Registered Parks and Gardens within the North East CA Region are shown in **Figure D-6**.

Registered Battlefields	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are 6 Registered Battlefields in the North East CA area, mostly located to the North of the boundary.							
There is 1 Registered Battlefield in the County Durham Local Authority Area:	There is 1 Registered Battlefield in the Gateshead Local Authority Area:	There is 1 Registered Battlefield in the Newcastle-upon-Tyne Local Authority Area:	There is no Registered Battlefields in the North Tyneside Local Authority Area.	There are 4 Registered Battlefields in the Northumberland Local Authority Area:	There is no Registered Battlefields in the South Tyneside Local Authority Area.	There is no Registered Battlefields in the Sunderland Local Authority Area.	
<ul style="list-style-type: none"> ▪ Battle of Neville's Cross 1346 	<ul style="list-style-type: none"> ▪ Battle of Newburn Ford 1640 	<ul style="list-style-type: none"> ▪ Battle of Newburn Ford 1640 		<ul style="list-style-type: none"> ▪ Battle of Flodden 1513. ▪ The Site of The Battle of Halidon Hill 1333. 			



				<ul style="list-style-type: none"> ▪ Battle of Homildon Hill 1402 ▪ Battle of Otterburn 1388. 	
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Explanatory Text and anticipated future trends:

Historic battlefields are designated by Historic England as conferred under the Historic Buildings and Ancient Monuments Act, 1983 (as amended). While only one Historic Battlefield lies within the Plan Area Region, without a co-ordinated strategic approach to additional development in the Plan Area there is likely to be increased potential for this to be inappropriately located or designed to pose a risk to the site and its settings.

The locations of Registered Battlefields within the North East CA Region are shown in **Figure D-6**.

Heritage at Risk	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are currently 236 buildings in the North East CA area listed on the Heritage at Risk Register, located throughout the North East CA Area.						
	There are 51 buildings currently listed on the Heritage at Risk Register in the County Durham Local Authority Area.	There are 11 buildings currently listed on the Heritage at Risk Register in the Gateshead Local Authority Area.	There are currently 17 buildings listed on the Heritage at Risk Register in the Newcastle-upon-Tyne Local Authority Area.	There are currently 3 buildings listed on the Heritage at Risk Register in the North Tyneside Local Authority Area.	There are currently 138 buildings listed on the Heritage at Risk Register in the Northumberland Local Authority Area.	There is currently 6 buildings listed on the Heritage at Risk Register in the South Tyneside Local Authority Area.	There is currently 10 buildings listed on the Heritage at Risk Register in the Sunderland Local Authority Area.

Explanatory Text and anticipated future trends:

Historic England has a programme known as the Heritage at Risk Programme, this Programme collecting information on the condition of built heritage in the United Kingdom to determine of the sites most at risk and most in need of safeguarding for the



future.

Since 2008, as part of this Programme, Historic England has released an annual Heritage at Risk Register. The Heritage at Risk Register highlights the Grade I and Grade II* listed buildings, and scheduled monuments, conservation areas, wreck sites and registered parks and gardens in England deemed to be 'at risk'. It is worth noting that Grade II buildings are not included on the list.

The locations of Heritage at Risk Sites within the North East CA Region are shown in **Figure D-6**.

Protected Wrecks	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are 57 Protected Wrecks around England's coast, 4 of which are on the Register. There is no Protected Wrecks in the North East CA Plan Area.						

Explanatory Text and anticipated future trends:

The Protection of Wrecks Act (1973) allows the Government to designate a wreck to prevent uncontrolled interference. Designated sites are identified as being likely to contain the remains of a vessel, or its contents, which are of historical, artistic, or archaeological importance⁴³.

⁴³ Water Resources South East (2020) *Strategic Environmental Assessment Scoping Report*. Available: [wrse-regional-plan-strategic-environmental-assessment-scoping-report.pdf](#)



C.6 Landscape



National Parks

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There is one National Park in the North East CA area, located in the North and Northwestern regions.						
No National Parks have been identified in the County Durham Local Authority Area.	No National Parks have been identified in the Gateshead Local Authority Area.	No National Parks have been identified in the Newcastle-upon-Tyne Local Authority Area.	No National Parks have been identified in the North Tyneside Local Authority Area.	There is one National Park in the Northumberland Local Authority Area: <ul style="list-style-type: none"> • Northumberland National Park 	No National Parks have been identified in the South Tyneside Local Authority Area.	No National Parks have been identified in the Sunderland Local Authority Area.

Explanatory Text and anticipated future trends:

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them.

The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales. In addition, the Environment Act 1995 requires relevant authorities to have regard for nature conservation.

The designation of National Parks is an ongoing process with two being added in England since 2008 (South Downs and Broads).

The locations of National Parks within the North East CA Region are shown in **Figure D-7**.

National Landscape (formerly AONB)

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are two National Landscape (formerly AONB) sites within the North East CA area, located in the Northeastern coast and the Southwest.						
One AONB has been identified in the County	No AONB sites have been	No AONB sites have been identified in the	No AONB sites have been identified in the	Two AONB sites have been identified in the	No AONB sites have been identified in the	No AONB sites have been identified in the



Durham Local Authority Area: ▪ North Pennines AONB	identified in the Gateshead Local Authority Area	Newcastle-upon-Tyne Local Authority Area.	North Tyneside Local Authority Area.	Northumberland Local Authority Area: ▪ North Pennines AONB ▪ Northumberland Coast AONB	South Tyneside Local Authority Area.	Sunderland Local Authority Area.
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Explanatory Text and anticipated future trends:

In England, the primary purpose of the AONB designation (now known as National Landscape) is to conserve natural beauty – which by statute includes wildlife, physiographic features and cultural heritage as well as the more conventional concepts of landscape and scenery. Account is taken of the need to safeguard agriculture, forestry and other rural industries and the economic and social needs of local communities. Particular regard should be paid to promoting sustainable forms of social and economic development, that in themselves conserve and enhance the environment. Through the designation of AONBs land has been recognised as being of national importance⁴⁴.

AONBs are designated under the National Parks and Access to the Countryside Act 1949, amended in the Environment Act 1995. The Countryside and Rights of Way Act 2000 clarifies the procedure and purpose of designating AONBs.

There is a need to protect landscape character (including that of the AONBs) from potential threats. This includes issues such as inappropriate development, lack of appropriate management and climate change. Without a co-ordinated strategic approach to development and infrastructure degradation of the special qualities of the AONBs within the region is more likely to result.

The locations of National Landscapes within the North East CA Region are shown in **Figure D-7**.

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
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⁴⁴ The National Landscapes Association (2024) *National Landscapes*. Available: [National Landscapes - National Landscapes \(national-landscapes.org.uk\)](https://national-landscapes.org.uk)



Heritage Coast

There are two Heritage Coast sites within the North East CA area, located in the Northeastern and Southeastern regions of the plan area.

One Heritage Coast site has been identified in the Country Durham Local Authority Area: • Durham Heritage Coast	No Heritage Coast sites have been identified in the Gateshead Local Authority Area.	No Heritage Coast sites have been identified in the Newcastle-upon-Tyne Local Authority Area.	No Heritage Coast sites have been identified in the North Tyneside Local Authority Area.	One Heritage Coast site has been identified in the Northumberland Local Authority Area: • Northumberland Heritage Coast	No Heritage Coast sites have been identified in the South Tyneside Local Authority Area.	One Heritage Coast site has been identified in the Sunderland Local Authority Area: • Durham Heritage Coast.
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Explanatory Text and anticipated future trends:

Heritage Coasts were established to conserve the best stretches of undeveloped coast in England. The national policy framework and objectives for heritage coasts were developed by the Countryside Commission, a predecessor of Natural England, and ratified by government. Heritage coasts are ‘defined’ rather than designated, so there is not a statutory designation process like that associated with national parks and AONBs.

The Durham Heritage Coast is located within the North East CA area, covering the part of the coast from Sunderland to Hartlepool. The Heritage Coast is a coastal landscape of magnesian limestone grasslands, cliffs, pebble and sandy beaches stretching between the two main conurbations of Tyne and Wear and Teesside.

The locations of Heritage Coasts within the North East CA Region are shown in **Figure D-7**.

National Trails

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are two National Trails within the North East CA area, with the Pennine Way National Trail running between the North and South of the North East CA area and the Kirk Yetholm and Hadrian’s Wall Path running between the East and West of the North East CA Area						
One National Trail has been	No National Trails have	One National Trail has been	One National Trail has been	Two National Trails have been	No National Trails have been	No National Trails have been



identified in the County Durham Local Authority Area:	been identified in the Gateshead Local Authority Area.	identified in the Newcastle-upon-Tyne Local Authority Area:	identified in the North Tyneside Local Authority Area:	identified in the Northumberland Local Authority Area:	identified in the South Tyneside Local Authority Area.	identified in the Sunderland Local Authority Area.
<ul style="list-style-type: none"> Pennine Way 		<ul style="list-style-type: none"> Kirk Yetholm and Hadrian's Wall Path 	<ul style="list-style-type: none"> Kirk Yetholm and Hadrian's Wall Path 	<ul style="list-style-type: none"> Kirk Yetholm and Hadrian's Wall Path. Pennine Way 		

Explanatory Text and anticipated future trends:

There are 15 National Trails in England, with a new National Trail, the King Charles III England Coast Path currently being established with some sections already open⁴⁵. National Trails are managed by local trail partnerships, with guidance and support from Natural England. Lead partners are in place for the majority of the trails and they're responsible for⁴⁶:

- receiving funding from Natural England on behalf of the local partnership
- reporting to Natural England on progress towards achieving the national quality standards

Areas of Tranquillity	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	Reported at National Level Only.						

Explanatory Text and anticipated future trends:

Northumbria University, on behalf of CPRE⁴⁷, developed methodology for mapping areas of tranquillity. While urban centres within the NETP area have low levels of tranquillity, many of the rural areas - particularly those with landscape areas which are protected nationally such as National Parks and AONBs - have high levels of tranquillity. It should be noted that such protected areas will continue to be offered protection through other designations. However, the maps show that major trunk roads can have significant

⁴⁵ National Trails (2024) *Home: The Trails*. Available: [Find your perfect trail, and discover the land of myths and legend - National Trails](#)

⁴⁶ Natural England (2015) *National Trails: Management Standards*. Available: [National Trails: management standards - GOV.UK \(www.gov.uk\)](#)

⁴⁷ CPRE (2007) *Intrusion Map: England, 2007*. Available: https://www.cpre.org.uk/wp-content/uploads/2019/11/intrusion_map_england_2007_1.pdf



effects for tranquillity in rural areas and therefore the affect which this transport plan has on tranquillity of rural areas should be considered further as part of the SEA process.

In the North East CA area, parts of the North, West and Southwest are the most tranquil, especially the Northumberland National Park and surrounding area. The East and Southeast are the least tranquil, in a more dense urban area.

National Character Areas	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There is 14 National Character Areas in North East CA area, located throughout the plan area.							
<p>6 National Character Areas have been identified in the County Durham Local Authority Area:</p> <ul style="list-style-type: none"> • North Pennines • Pennine Dales Fringe • Durham Coalfield Pennine Fringe • Tees Lowlands • Durham Magnesian Limestone Plateau 	<p>2 National Character Areas have been identified in Gateshead Local Authority Area:</p> <ul style="list-style-type: none"> • Tyne and Wear Lowlands • Durham Coalfield Pennine Fringe 	<p>2 National Character emails have been identified in the Newcastle-upon-Tyne Local Authority Area:</p> <ul style="list-style-type: none"> • Tyne and Wear Lowlands • South East Northumberland Coastal Plain 	<p>2 National Character Areas have been identified in the North Tyneside Local Authority Area:</p> <ul style="list-style-type: none"> • Tyne and Wear Lowlands • South East Northumberland Coastal Plain 	<p>11 National Character Areas have been identified in the Northumberland Local Authority Area:</p> <ul style="list-style-type: none"> • North Northumberland Coastal Plain • Cheviot Fringe • Northumberland Sandstone Hills • Cheviots • Border Moors and Forests • Mid Northumberland 	<p>2 National Character Areas have been identified in the South Tyneside Local Authority Area:</p> <ul style="list-style-type: none"> • Tyne and Wear Lowlands • Durham Magnesian Limestone Plateau 	<p>2 National Character Areas have been identified in the Sunderland Local Authority Area:</p> <ul style="list-style-type: none"> • Tyne and Wear Lowlands • Durham Magnesian Limestone Plateau 	



<ul style="list-style-type: none"> • Tyne and Wear Lowlands 				<ul style="list-style-type: none"> • South East Northumberland Coastal Plain • Tyne Gap and Hadrian's Wall • North Pennines • Durham Coalfield Pennine Fringe • Tyne and Wear Lowlands 	
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Explanatory Text and anticipated future trends:

National Character Areas (NCAs) are landscape areas which share similar characteristics, following natural lines in the landscape rather than administrative boundaries. Developed by Natural England⁴⁸, NCA profiles describe the natural and cultural features that shape each of these landscapes, providing a broad context to their character. There is a total of 159 NCAs in England, 14 of which are in the North East CA area.

The locations of National Character Areas within the North East CA Region are shown in **Figure D-7**.

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
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⁴⁸ Natural England (2020) National Character Areas [online]. Available at: <http://publications.naturalengland.org.uk/category/587130>.



Designated Dark Skies

Out of 19 International Dark Sky Reserves (IDSR)⁴⁹ in the UK, 8 of them are in England, and one of them is in the North East CA plan area.

No IDSR sites have been identified in the County Durham Local Authority Area.	No IDSR sites have been identified in the Gateshead Local Authority Area.	No IDSR sites have been identified in the Newcastle-upon-Tyne Local Authority Area.	No IDSR sites have been identified in the North Tyneside Local Authority Area.	One IDSR site has been identified in the Northumberland Local Authority Area: <ul style="list-style-type: none"> Northumberland National Park and Kielder Water and Forest Park 	No IDSR site has been identified in the South Tyneside Local Authority Area.	No IDSR site has been located in the Sunderland Local Authority Area.
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Explanatory Text and anticipated future trends:

An International Dark Sky Reserve (IDSR)⁵⁰ is a public or private land of substantial size (at least 700 km², or about 173,000 acres) possessing an exceptional or distinguished quality of starry nights and nocturnal environment, and that is specifically protected for its scientific, natural, educational, cultural heritage, and/or public enjoyment.

The IDSR consists of two regions:

- 1) A “core” area meeting the minimum criteria for sky quality and natural darkness; and
- 2) A “peripheral” or “buffer” area that supports dark sky values in the core and receives similar benefits.

⁴⁹ International Dark Sky Association (2020) *International Dark Sky Reserves*. Available: <https://www.darksky.org/our-work/conservation/idsp/finder/>

⁵⁰ International Dark Sky Association (2018) *International Dark Sky Reserve Program Guidelines – June 2018*. Available: <https://www.darksky.org/wp-content/uploads/2018/12/IDSR-Guidelines-2018.pdf>



The IDSR is formed through a partnership of landowners and/or administrators that recognize the value of the natural night-time environment through regulations, formal agreements, and long term planning.



C.7 Soils, Geology and Land Use



Agricultural Land Classification	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>Land within the North East CA region is predominantly Grade 3, Grade 4 and Grade 5⁵¹.</p> <p>The best and most versatile agricultural land is defined as Grades 1, 2 and 3a of the Agricultural Land Classification (ALC) system. Within the North East CA area, there is a high proportion of land (Grade 2 and 3) considered the best and most versatile.</p> <p>Note subgroup data for Grade 3 land is unavailable from this dataset.</p>	<p>Within County Durham Local Authority area, the most predominant land is Grade 3 and Grade 5.</p> <p>There is a high proportion of land (Grade 2 and 3) considered the best and most versatile.</p>	<p>Within Gateshead Local Authority area, the most predominant land is Grade 3 and Urban.</p> <p>There is a smaller proportion of land (Grade 3) considered the best and most versatile.</p>	<p>Within Newcastle upon Tyne Local Authority area, the most predominant land is Grade 3 and Urban.</p> <p>There is a smaller proportion of land (Grade 3) considered the best and most versatile.</p>	<p>Within North Tyneside Local Authority area, the most predominant land is Grade 3 and Urban.</p> <p>There is a smaller proportion of land (Grade 3) considered the best and most versatile.</p>	<p>Within Northumberland Local Authority area, the most predominant land is Grade 3 and Grade 5.</p> <p>There is a high proportion of land (Grade 2 and 3) considered the best and most versatile.</p>	<p>Within South Tyneside Local Authority area, the most predominant land is Grade 3 and Urban.</p> <p>There is a smaller proportion of land (Grade 3) considered the best and most versatile.</p>	<p>Within Sunderland Local Authority area, the most predominant land is Grade 3 and Urban.</p> <p>There is a smaller proportion of land (Grade 3) considered the best and most versatile.</p>
	<p>Explanatory Text and anticipated future trends:</p> <p>ALC uses a grading system to assess and compare the quality of agricultural land at national, regional and local levels. It assesses the potential for land to support different agricultural uses, such as growing crops for food. It does not consider the land's current use and intensity of use. Natural England has a statutory role in advising local planning authorities about land quality issues.</p>						

⁵¹ Natural England (2024) *Provisional Agricultural Land Classification (ALC)*. Available: [Guide to assessing development proposals on agricultural land - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/guide-to-assessing-development-proposals-on-agricultural-land)



A combination of climate, site and soil characteristics and their unique interaction determines the limitation and grade of the land. These affect the:

- range of crops that can be grown;
- yield of crop;
- consistency of yield; and
- cost of producing the crop.

When considering development proposals that affect agricultural land, developers and LPAs should aim to protect the best and most versatile (BMV) agricultural land and soils in England from significant, inappropriate or unsustainable development proposals. BMV agricultural land is graded 1 to 3a. The highest grade goes to land that⁵²:

- gives the highest yield or output;
- has the widest range and versatility of use;
- produces the most consistent yield from a narrower range of crops; and
- requires less input.

There is increased potential for development to occur in areas which would affect higher value agricultural land without a co-ordinated strategic approach to development and infrastructure in the region.

The locations of Agricultural Land Classifications within the North East CA Region are shown in **Figure D-8**.

Geological SSSIs and RIGS	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>There are 233 SSSIs within the North East CA area, predominantly located along the eastern and western boundary regions as well as the northern region. These are designated for both biological and geological reasons.</p> <p>Note no Regionally Important Geodiversity Site spatial data is available for the North East CA region.</p>							

⁵² Natural England (2018) *Guide to assessing development proposals on agricultural land*. Available: [Guide to assessing development proposals on agricultural land - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/guide-to-assessing-development-proposals-on-agricultural-land)



There are 129 SSSIs within the County Durham Local Authority area. Note this figure includes sites designated for both biological and geological reasons.	There are eight SSSIs within the Gateshead Local Authority area. None of these sites have been designated for geological reasons.	There are five SSSIs within the Newcastle upon Tyne Local Authority area. None of these sites have been designated for geological reasons.	There are three SSSIs within the North Tyneside Local Authority area. Tynemouth to Seaton Sluice SSSI is designated for both geological and biological reasons.	There are 118 SSSIs within the Northumberland Local Authority area. Note this figure includes sites designated for both biological and geological reasons.	There are five SSSIs within the South Tyneside Local Authority area. Durham Coast SSSI is designated for both biological and geological reasons.	There are 18 SSSIs within the Sunderland Local Authority area. Note this figure includes sites designated for both biological and geological reasons.
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Explanatory Text and anticipated future trends:

SSSIs represent the principal national designation for places of importance for biodiversity and geodiversity in the UK. The designation of areas as SSSIs attaches certain legal requirements to the management of these sites. In addition to designating areas as SSSIs when the land's wildlife is of special interest, Natural England will select and notify an area as a new SSSI when it believes the geology or landform is of special interest⁵³. At a national level the majority of SSSIs are in favourable or unfavourable recovering condition.

Geology in the North East Region is likely to face threats from development; human activities such as pollution, roads, disturbance, farming practices; loss of habitat; loss of food sources and a changing climate. **Without a co-ordinated strategic approach to development and infrastructure is likely to increase the potential for inappropriate greenfield development to occur which could increase pressures on SSSIs designated for their geological importance.**

Contaminated Land	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	As of 2024, there are 54 special sites of contaminated land in England. Two of these sites are within the Northumberland, Durham and Tees region. These are sites that due to specific land uses, past activities or water pollution are passed from the local council to the Environment Agency to regulate.						

⁵³ Natural England (2020) *Sites of special scientific interest*. Available: <https://www.gov.uk/guidance/protected-areas-sites-of-special-scientific-interest>



The National Planning Policy Framework places the onus with the developer and/or landowner for securing a safe land/development.

Note reporting / spatial data is not freely available at regional or local authority level although two have been identified within the North East region. There are also anticipated to be a large number of brownfield sites. Such sites are likely to present a potential risk in respect of contaminated land.

Explanatory Text and anticipated future trends:

Land is legally defined as ‘contaminated land’ where substances are causing or could cause:

- Significant harm to people, property or protected species;
- Significant pollution of surface waters (for example lakes and rivers) or groundwater; and
- Harm to people as a result of radioactivity.

Land may be contaminated by various substances including:

- Heavy metals such as arsenic, cadmium and lead;
- Oils and tars;
- Chemical substances and preparations, like solvents;
- Gases;
- Asbestos; and
- Radioactive substances.

Some types of contaminated land are classed as ‘special sites’, which are then regulated by the Environment Agency in England once a local council has decided that an area is a special site⁵⁴. The National Planning Policy Framework requires a risk assessment of land potentially affected by contamination and expects all investigations to be undertaken in accordance with established practices such as BS10175 (2002) ‘Code of Practice for the Investigation of Potentially Contaminated Sites’.

Green Belt	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
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⁵⁴ Environment Agency (2020) *Contaminated land*. Available at: <https://www.gov.uk/contaminated-land>



Within the North East CA area, each of the seven local authorities has land designated as Green Belt, covering a total area of 98,550.6 ha as of 2023⁵⁵.

In the North East region, 98,550 ha of land is designated as greenbelt, covering 11.5% of total land area in the region. This is the 7th largest percentage of all 9 region in England⁵⁶. Note the North East region covers a larger area than the North East CA area.

Within County Durham Local Authority area, 8577.0 ha of land is designated as Green Belt.	Within Gateshead Local Authority area, 8514.7 ha of land is designated as Green Belt.	Within Newcastle upon Tyne Local Authority area, 3967.4 ha of land is designated as Green Belt.	Within North Tyneside Local Authority area, 1656.4 ha of land is designated as Green Belt.	Within Northumberland Local Authority area, 70301.8 ha of land is designated as Green Belt.	Within South Tyneside Local Authority area, 2350.8 ha of land is designated as Green Belt.	Within Sunderland Local Authority area, 3182.5 ha of land is designated as Green Belt.
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Explanatory Text and anticipated future trends:

The National Planning Policy Framework attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence⁵⁷.

Green Belt serves five purposes:

- to check the unrestricted sprawl of large built-up areas;
- to prevent neighbouring towns merging into one another;
- to assist in safeguarding the countryside from encroachment;

⁵⁵ MHCLG (2023) *English local authority Green Belt dataset*. Available: [English local authority Green Belt dataset - data.gov.uk](https://data.gov.uk/dataset/english-local-authority-green-belt-dataset)

⁵⁶ Department for Levelling Up, Housing & Communities (2023) *Local authority green belt: England 2022-23 – statistical release*. Available: [Local authority green belt: England 2022-23 - statistical release - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistical-releases/local-authority-green-belt-england-2022-23)

⁵⁷ Department for Levelling Up, Housing & Communities (2023) *Local authority green belt: England 2022-23 – statistical release*. Available: [Local authority green belt: England 2022-23 - statistical release - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistical-releases/local-authority-green-belt-england-2022-23)



- to preserve the setting and special character of historic towns; and
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

Once Green Belts have been defined, local planning authorities should plan positively to enhance their beneficial use, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

In 2022-23, 10 local authorities adopted new boundaries for designated land as Green Belt, with the result being a net increase of 890 hectares in the overall area of land designated as Green Belt compared to 31 March 2022⁵⁸.

In spite of its strong protection through national planning policy Green Belt may come under pressure as areas are targeted for potential release and development in inappropriate locations as housing needs increase. There is **increased potential for Green Belt land that has not been identified as suitable for strategic growth to be subject to development without a co-ordinated strategic planning approach.**

The locations of Greenbelts within the North East CA Region are shown in **Figure D-9**.

Open Green Space	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are approximately 5,069 Open Green spaces within the North East CA area, with the main typologies as follows:							
<ul style="list-style-type: none"> ▪ Religious Grounds ▪ Public Park Or Garden ▪ Play Space ▪ Playing Field ▪ Cemetery ▪ Golf Course ▪ Other Sports Facility ▪ Allotments Or Community Growing Spaces 							

⁵⁸ Department for Levelling Up, Housing & Communities (2023) *Local authority green belt: England 2022-23 – statistical release*. Available: [Local authority green belt: England 2022-23 - statistical release - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/local-authority-green-belt-england-2022-23-statistical-release)



- Bowling Green
- Tennis Court

There are approximately 1736 areas of Open Green space within the County Durham Local authority area.	There are approximately 569 areas of Open Green space within the Gateshead Local authority area.	There are approximately 508 areas of Open Green space within the Newcastle upon Tyne Local authority area.	There are approximately 349 areas of Open Green space within the North Tyneside Local authority area.	There are approximately 1191 areas of Open Green space within the Northumberland Local authority area.	There are approximately 252 areas of Open Green space within the South Tyneside Local authority area.	There are approximately 492 areas of Open Green space within the Sunderland Local authority area.
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Explanatory Text and anticipated future trends:

Open space, which includes all open space of public value, can take many forms, from formal sports pitches to open areas within a development, linear corridors and country parks. It can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to green infrastructure, as well as being an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development⁵⁹.

Local authorities play a vital role in⁶⁰:

- providing new, good quality greenspace that is inclusive and equitable
- improving, maintaining and protecting existing greenspace
- increasing green infrastructure within public spaces and promoting healthy streets
- improving transport links, pathways and other means of access to greenspace, and providing imaginative routes linking areas of greenspace for active travel

⁵⁹ MHCLG (2014) *Open space, sports and recreation facilities, public rights of way and local green space*. Available: <https://www.gov.uk/guidance/open-space-sports-and-recreation-facilities-public-rights-of-way-and-local-green-space>

⁶⁰ Public Health England (2020) *Improving access to greenspace – A new review for 2020*. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904439/Improving_access_to_greenspace_2020_review.pdf



Without a co-ordinated strategic approach to development and infrastructure, there is increased potential for planning decisions to result in inappropriate development, which could fragment existing networks of open space thereby reducing connectivity.

The locations of Open Greenspace within the North East CA Region are shown in **Figure D-9**.

Geoparks	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
There are currently three geoparks in England, one of which is located within the North East CA area; the Noth Pennines between Cumbria and Northumberland ⁶¹ .							
The North Pennines Geopark intersects the County Durham Local Authority area.	No Geoparks were identified within the Gateshead Local Authority area.	No Geoparks were identified within the Newcastle upon Tyne Local Authority area.	No Geoparks were identified within the North Tyneside Local Authority area.	The North Pennines Geopark intersects the Northumberland Local Authority area.	No Geoparks were identified within the South Tyneside Local Authority area.	No Geoparks were identified within the Sunderland Local Authority area.	
Explanatory Text and anticipated future trends:							
Geoparks are endorsed by UNESCO and are not designated under legislation. They are locally-led partnerships within areas of internationally significant geology that work to support sustainable economic development of the area, primarily through geological and eco-tourism ⁶² .							
Existing and Consented Urban Areas	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
Local level data only.							
Of the population of County	Of the population of Gateshead,	Of the population of Newcastle	Of the population of North	Of the population of	Of the population of South	Of the population of Sunderland,	

⁶¹ United Kingdom National Commission for UNESCO (2017) *Global Geoparks*. Available: <http://www.unesco.org.uk/designation/geoparks/>

⁶² United Kingdom National Commission for UNESCO (2017) *Global Geoparks*. Available: <http://www.unesco.org.uk/designation/geoparks/>



Durham, 41% are living in rural areas and 59% in urban areas (2022).	6% are living in rural areas and 94% in urban areas (2022).	upon Tyne, 2% are living in rural areas and 98% in urban areas (2022).	Tyneside, 4% are living in rural areas and 96% in urban areas (2022).	Northumberland, 44% are living in rural areas and 56% in urban areas (2022).	Tyneside, 0% are living in rural areas and 100% in urban areas (2022).	1% are living in rural areas and 99% in urban areas (2022).
Durham City is the largest settlement in the Local Authority area with 44,886 people as of 2011 ⁶³ .	Gateshead is a large settlement within the area with 113,193 people as of 2011 ⁶⁴ . Other smaller settlements include Whickham with 16,200 and Ryton with 15,617.	Newcastle upon Tyne is a city made up of different areas including Jesmond and Cowgate.	The largest population centres across this Local Authority area include North Shields, Wallsend (42,726), Whitley Bay (36,602) and Killingworth.	This area is occupied by a number of small and medium sized towns, including Berwick-upon-Tweed (12,962), Ashington (27,386), Blyth (35,865) and Cramlington (28,628).	South Shields is a large area in this local authority area, with 78,070 people, as well as Jarrow which is more medium sized with 44,633 people. Hebburn is a smaller area with 19,415 people.	The City of Sunderland is a large settlement with 180,019 people. Washington is a medium sized area with 68,180 people and Hetton-le-Hole smaller with 12,839.

Explanatory Text and anticipated future trends:

As with the rest of the UK, the North East CA area is anticipated to accommodate substantial amounts of development in the coming years as planned for in each of the local authority areas' adopted and emerging plans. The delivery of this development will allow for benefits to be achieved in terms of meeting local housing requirements and limiting residents' journey times to service and facilities and jobs, though may have implications in terms of cumulative effects on the environment.

⁶³ Durham County Council (2020) *County Durham Plan*. Available: [County Durham Plan ADOPTED 2020](#)

⁶⁴ ONS (2016) *Understanding Towns in England and Wales: population and demography*. Available: [Understanding towns in England and Wales: population and demography - Office for National Statistics \(ons.gov.uk\)](#)



C.8 Water Quality and Resources



River Basin Districts

County Durham

Gateshead

Newcastle

North Tyneside

Northumberland

South Tyneside

Sunderland

The North East CA Area falls within three River basin Districts:

- 1) **Northumbria River Basin District (RBD).** The Northumbria RBD covers an area of 9,029km², extending from the Scottish border in the north through Northumbria to Stockton-upon-Tees in the south. It includes parts of Cumbria to the west and extends to North Sea to the east. A total of 2.5 million people live in the region. The Northumbria River basin district has a particularly rich diversity of wildlife and habitats, supporting many species of global and national importance. The management catchments that make up the river basin district include many interconnected rivers, lakes, groundwater, estuaries and coastal waters. Around 67% of the river basin district is farmed or used for forestry, with a mixture of arable and livestock production including sheep, and on higher ground moorland, management for grouse and forestry. The main industries are chemical, petrochemicals, food, drink, transport equipment and metal sectors.

There are seven management catchment areas in the RBD that are throughout the plan area:⁶⁵

- Northumberland Rivers (North and Northeast regions of LTP Area)
- Northumbria AWB (Southwest region of LTP Area)
- Northumbria GW
- Northumbria TraC (East Coast Region of LTP)
- Tees (Southern Region of LTP)
- Tyne (West, Southwest and East Regions of LTP)
- Wear (Southern Region of the LTP)

- 2) **Humber River RBD.** The Humber river basin district covers an area of 26,100km² and extends from the West Midlands in the south, northwards to North Yorkshire and from Staffordshire in the west to part of Lincolnshire and the Humber Estuary in the east. A total of 10.8 million people live within the district. The Humber river basin district has a rich diversity of wildlife and habitats, supporting many species of global and national importance. The management catchments that make up the river basin district include many interconnected rivers, lakes, groundwater and coastal waters. The catchments range from the uplands of the Peak District to fertile river valleys of the Trent to chalk aquifers of the Yorkshire and Lincolnshire Wolds and vary from rural catchments to others heavily influenced by urban and industrial land use.

⁶⁵ Defra (2024) *Catchment Data Explorer*. Available: [England | Catchment Data Explorer](#)



There are 18 management catchment areas in the RBD that are throughout the plan area⁶⁶

- Aire and Calder
- Derwent Derbyshire
- Derwent Humber
- Don and Rother
- Dove
- Esk and Coast
- Hull and East Riding
- Humber AWB
- Humber GW
- Humber TraC
- Idle and Torne
- Louth Grimsby and Ancholme
- Soar
- Swale Ure Nidd and Ouse Upper
- Tame Anker and Mease
- Trent Lower and Erewash
- Trent Valley Staffordshire
- Wharfe and Ouse Lower

- 3) **Solway Tweed RBD.** The Solway Tweed River Basin is a cross-border river basin which includes Scottish and English waterbodies that flow into the Solway and Tweed estuaries. The river basin is jointly managed by the Environment Agency and the Scottish Environment Protection Agency. The river basin has an area of around 17,500km², and incorporates the Scottish Borders, Dumfries and Galloway and parts of Cumbria and Northumberland. The river basin includes the important salmon rivers of the Tweed, the Eden and those within Dumfries and Galloway. The natural characteristics of these waters vary considerably from upland streams

⁶⁶ [Humber River Basin District | Catchment Data Explorer](#)

running over granite rocks to the wide-open mud flats of the Solway estuary. The area is home to approximately 450,000 people and important economic activities include agriculture, tourism, forestry and manufacturing. The water environment is a major part of the Solway Tweed's best known and loved landscapes, including parts of the Southern Uplands and the Lake District and Northumberland National Parks. The river basin is largely rural and supports a wide range of internationally important habitats and wildlife with many of the waterbodies designated as Special Areas of Conservation and Special Protection Areas.

There are six management catchments in this river basin district:

- Eden and Esk
- Solway Tweed GW
- Solway Tweed TraC
- Till
- Tweed
- Waver and Wampool

Explanatory Text and anticipated future trends:

A river basin is the area of land from which all surface water run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth or estuary. A river basin district includes the area of land and sea made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters (covering one nautical mile from the coast)⁶⁷.

Each river basin district has a river basin management plan (RBMP). Each plan consists of a collection of documents which describe how waters are managed, together with information about the river basin district in data tables and maps.

RBMPs are prepared in line with the Water Framework Directive to protect and improve the quality of our water environment. The RBMPs support the governments framework for the 25-year environment plan and will allow local communities to find more cost-effective ways to take action and further improve our environment.

The locations of River Basin Districts within the North East CA Region are shown in **Figure D-10**.

⁶⁷ [River basin management plans, updated 2022: introduction - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/river-basin-management-plans)

Water Framework Directive (WFD)

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
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The Northumbria River Basin Management Plan (RBMP) is relevant for the North East Region and the status of waterbodies. Local government is involved in regulating, operating, influencing and undertaking projects in the river basin district (RBD) of the associated RBMP. The status of surface and groundwater bodies in the Northumbria RBD are as follows⁶⁸

Number of water bodies

- Rivers, canals and surface water transfers – 315
- Lake – 45
- Coastal – 7
- Estuarine – 7
- Groundwater – 384

Ecological Status for Surface Waters

- Bad – 11
- Poor – 62
- Moderate – 202
- Good – 97
- High – 2

Chemical Status for Surface Waters

- Fail – 374
- Good – 0

Quantitative Status for Groundwater

- Poor – 1
- Good – 9

Chemical Status for Groundwater

⁶⁸ [Classifications data for Northumbria River Basin District | Catchment Data Explorer](#)



- Poor – 7
- Good – 3

Explanatory Text and anticipated future trends:

The EU WFD is transposed into UK law through the following regulations: The Water Environment (WFD) (England and Wales) Regulations 2017 for England and Wales; the Water Environment and Water Services (Scotland) Act 2003 (WEWS Act) and The Water Environment (WFD) Regulations (Northern Ireland) 2003 for Northern Ireland.

The purpose of the Directive is to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. Groundwater is an important natural resource that supports river flows as well as ecological diversity in rivers, lakes and wetlands. It is also available for use, across the United Kingdom, for water supply by abstraction from boreholes, wells and springs.

The number of waterbodies assessed each year varies and has decreased from 10,835 in 2009 to 9,291 in 2022. There have been variations in the overall number of water bodies awarded high or good surface water status between 2009 and 2022. Despite this 36% of surface water bodies assessed under the WFD in the UK were in high or good status in 2022, which reflects no change from 36% of surface water bodies assessed in 2009⁶⁹.

By 2027, 94% of surface water bodies were set objectives to reach a good ecological status, however, 63% of these objectives are low confidence. The chemical status for surface water were set the objectives of 100% of surface waters reaching a good status and quantitative status objectives for groundwater were also set an objective of 100% of groundwater reaching a good status. By 2040, 50% of groundwater was planned to reach a good status.

The locations of WFD Rivers, Canals, Surface water transfers and Lakes within the North East CA Region are shown in **Figure D-10**.

Drinking Water	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
Drink Water Safeguard Zones (DWSZs) are designated in England for any raw water sources that are ‘at risk’ of deterioration which would result in the need for additional treatment. These zones are areas where the land use is causing pollution of the raw water.							

⁶⁹ Joint Nature Conservation Committee (2019) *Surface Water Status – Datasheet*. Available: http://jncc.defra.gov.uk/docs/UKBI2015_DS_B7_Final2.xlsx



Safeguard Zones

Similarly, parts of the country at which there is increased risk of contamination to groundwater supplied from activities which might cause pollution are covered by Source Protection Zones (SPZs).

In the North East CA area there are four Drinking Water Safeguard Zones for Surface Water and one Drinking Water Safeguard Zone for Groundwater.

<p>There are two DWSZs for surface water in the County Durham Local Authority area:</p> <ul style="list-style-type: none"> ▪ Cumwhinton and Castle Carrock ▪ Acomb Landing and Moor Monkton <p>There are no DWSZs for Groundwater within the Local Authority area.</p>	<p>There are no DWSZs for surface water or groundwater within the Gateshead Local Authority area.</p>	<p>There are no DWSZs for surface water or groundwater within the Newcastle upon Tyne Local Authority area.</p>	<p>There are no DWSZs for surface water or groundwater within the North Tyneside Local Authority area.</p>	<p>There are three DWSZs for surface water in the Northumberland Local Authority area:</p> <ul style="list-style-type: none"> ▪ Cumwhinton and Castle Carrock ▪ Whittle Dene ▪ Warkworth <p>There is one DWSZ for groundwater within the Local Authority area.</p>	<p>There are no DWSZs for surface water or groundwater within the South Tyneside Local Authority area.</p>	<p>There are no DWSZs for surface water or groundwater within the Sunderland Local Authority area.</p>
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Explanatory Text and anticipated future trends:

DWSZs are designated by the Environment Agency for areas in which action is needed to address pollution so that extra treatment of raw water can be avoided. Furthermore, groundwater provides around a third of drinking water in England and maintains the flow in many of the waterbodies in the country. SPZs are also designated by the Environment Agency. These designations cover groundwater sources such as wells, boreholes and springs which are used for public drinking water supply.



The locations of DWSZ within the North East CA Region are shown in **Figure D-10**.

Source Protection Areas	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>Groundwater supplies a third of the drinking water. The Environment Agency protect groundwater sources used to supply drinking water from pollution. Sources include wells, boreholes and springs. Source Protection Areas or Zones (SPZs) – are zones which show the level of risk to the source from contamination. This could be from any activity that might cause pollution in the area. For example, storing pollutants like petrol underground, soakaways from septic tanks to the ground⁷⁰.</p> <p>There are 65 SPZs throughout the North East CA area:</p> <ul style="list-style-type: none"> ▪ SPZ 1 – 32 ▪ SPZ 1c – 1 ▪ SPZ 2 – 21 ▪ SPZ 2c – 0 ▪ SPZ 3 – 10 ▪ SPZ 3c – 1 	<p>Groundwater supplies a third of the drinking water. The Environment Agency protect groundwater sources used to supply drinking water from pollution. Sources include wells, boreholes and springs. Source Protection Areas or Zones (SPZs) – are zones which show the level of risk to the source from contamination. This could be from any activity that might cause pollution in the area. For example, storing pollutants like petrol underground, soakaways from septic tanks to the ground⁷⁰.</p>						
	<p>There are 33 SPZs within the County Durham Local Authority area:</p> <ul style="list-style-type: none"> ▪ SPZ 1 – 16 ▪ SPZ 1c – 1 ▪ SPZ 2 – 15 ▪ SPZ 3 – 2 	<p>There are no SPZs within the Gateshead Local Authority area.</p>	<p>There are no SPZs within the Newcastle upon Tyne Local Authority area.</p>	<p>There are no SPZs within the North Tyneside Local Authority area.</p>	<p>There are 24 SPZs within the Northumberland Local Authority area:</p> <ul style="list-style-type: none"> ▪ SPZ 1 – 13 ▪ SPZ 2 – 4 ▪ SPZ 3 – 6 ▪ SPZ 3c – 1 	<p>There are 3 SPZs within the South Tyneside Local Authority area:</p> <ul style="list-style-type: none"> ▪ SPZ 1 – 13 ▪ SPZ 2 – 4 ▪ SPZ 3 – 6 ▪ SPZ 3c – 1 	<p>There are 9 SPZs within the Sunderland Local Authority area:</p> <ul style="list-style-type: none"> ▪ SPZ 1 – 3 ▪ SPZ 2 – 3 ▪ SPZ 3 – 3
<p>Explanatory Text and anticipated future trends:</p>							

⁷⁰ [Groundwater source protection zones \(SPZs\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/groundwater-source-protection-zones)



SPZs are also designated by the Environment Agency. These designations cover groundwater sources such as wells, boreholes and springs which are used for public drinking water supply.

The locations of SPZ within the North East CA Region are shown in **Figure D-10**.



C.9 Resources and Waste



Authorised and Historic Landfill Sites	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	<p>In the UK, landfill tax is one of the key drivers to divert waste from landfill to ensure that the 2020 target of no more than 10.161 million tonnes of biodegradable municipal waste (BMW) to landfill and the 2035 target of no more than 10% of municipal waste to landfill⁷¹. UK BMW sent to landfill has increased from approximately 6.1 million tonnes in 2020 to around 6.8 million tonnes in 2021⁷².</p>						
	<p>In the North East CA area 100,000 tonnes of waste (7.6% of total waste collected) went to landfill in 2021/2022. This figure is lower than the English average of 8.1%.</p>						
	<p>There are 934 historic landfill sites and 70 permitted waste sites in the North East CA area.</p>						
<p>Explanatory Text and anticipated future trends:</p>							
<p>It is unlikely that providing new development in North East CA will greatly influence the proportion of waste sent to landfill. This will more likely be influenced by the decisions of residents in the plan area (for example by recycling and composting) as well decisions made by the local authority.</p>							
<p>The locations of Historic Landfill Sites and Permitted Waste Sites within the North East CA Region are shown in Figure D-11.</p>							
Energy / Fuel Use	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	<p>For the North East Region the installed capacity for renewable electricity generation was 1,175 MW in 2022 (1.2% higher than 2021) and it generated 3,954 gigawatt hours of electricity from renewable sources, mostly generated by onshore wind⁷³.</p>						
	<p>Note North East Region covers all Local Authorities within the North East CA area but also some not included.</p>						
	<p>Explanatory Text and anticipated future trends:</p>						

⁷¹ Defra (2020) *Waste Management Plan for England*. Available: https://consult.defra.gov.uk/waste-and-recycling/waste-management-plan-for-england/supporting_documents/Waste%20Management%20Plan%20for%20England.pdf

⁷² Defra (2023) *UK Statistics on waste*. Available: [UK statistics on waste - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

⁷³ [Report: Renewable electricity generation - North East Evidence Hub \(northeast-ca.gov.uk\)](http://northeast-ca.gov.uk)



Electricity supply is driven by demand, as it is generated or imported as needed. In recent years, demand for electricity has decreased as energy efficiency measures have improved and increased in number. The total electricity demand comprises energy industry use, losses in transmission or distribution and final consumption by end users⁷⁴.

The main driver for the decrease shift in generation of coal and gas was an increase in the carbon price floor in April 2015, from £9 per tonne of CO₂ to £18 per tonne of CO₂. Since coal generation produces more than double the amount of carbon dioxide per GWh of electricity supplied than gas, this made generation from coal more expensive than gas.

The decline in fossil fuel generation was made possible by the substantial growth in renewable generation and this trend continued in 2019, although falling slightly to 2021. Low carbon generation consists of renewable and nuclear generation and the rise in renewables share of generation also drove an increase in the share of generation from low carbon sources.

The delivery of new development and infrastructure **may provide opportunities for the incorporation of new renewable schemes where this is deemed appropriate. If development is not provided in a strategic manner, it is less likely that these types of opportunities will be achieved.**

Waste Facilities	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are 39 Household Recycling and Waste Centres (HRC) in the North East CA area.						
	<p>There are 13 HRCs in the County Durham Local Authority Area.</p> <ul style="list-style-type: none"> Anfield Plain Hett Hills 	<p>There are two HRCs in Gateshead Local Authority Area.</p> <ul style="list-style-type: none"> Cowen Road, Blaydon Campground, Wrekenton 	<p>There are three HRCs in Newcastle-upon-Tyne Local Authority Area.</p> <ul style="list-style-type: none"> Byker Brunswick 	<p>There is one HRC in the North Tyneside Local Authority Area.</p> <ul style="list-style-type: none"> Wallsend Road, North Shields 	<p>There are 12 HRCs in the Northumberland Local Authority Area.</p> <ul style="list-style-type: none"> Allendale Alnwick Bebside 	<p>There are 6 HRCs in South Tyneside Local Authority Area.</p> <ul style="list-style-type: none"> Asda Boldon Asda South Shields 	<p>There is one HRC in Sunderland Local Authority Area.</p> <ul style="list-style-type: none"> Pallion

⁷⁴ DBEIS (2020) *DUKES 2020 Chapter 5: Electricity*. Available:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904805/DUKES_2020_Chapter_5.pdf



<ul style="list-style-type: none"> ▪ Potterhouse Lane ▪ Tudhoe ▪ Coxhoe ▪ Thornley Station ▪ Horden ▪ Seaham ▪ Romanway ▪ Heighington ▪ Stainton Grove ▪ Middletown in Teesdale • Fosterley 		<ul style="list-style-type: none"> ▪ Walbottle 		<ul style="list-style-type: none"> ▪ Berwick ▪ Haltwhistle ▪ Hexham ▪ Kirkley West Thorn ▪ Morpeth ▪ North Seaton ▪ North Sunderland ▪ West Wylam • Wooler 	<ul style="list-style-type: none"> ▪ Monkton Stadium ▪ Morrisons Jarrow ▪ Morrisons South Shields ▪ Tesco South Shields
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Explanatory Text and anticipated future trends:

The provision of waste facilities in the Plan Area is outside of the scope of the Local Transport Plan.

Aggregates / Construction Materials	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	<p>Construction output is forecast to fall by 2.1% this year due to falls in private housing new build and repair, maintenance and improvement. The CPA forecasts that construction output will rise by 2.0% in 2025 in line with falling interest rates and a general economic recovery⁷⁵.</p> <p>In the North East of England, 2,154 thousand tonnes of sand and gravel were sold in 2022⁷⁶.</p>						

⁷⁵ CPA (2024) *Construction Hit by House Building Recession*. Available: [Construction Hit By House Building Recession \(constructionproducts.org.uk\)](https://www.constructionproducts.org.uk).

⁷⁶ Department for Business and Trade (2023) *Building materials and components statistics: December 2023*. Available: [Building materials and components statistics: December 2023 - GOV.UK \(www.gov.uk\)](https://www.gov.uk)



Note the North East region covers a larger area and includes more local authorities than the North East CA area.

Explanatory Text and anticipated future trends:

Aggregates are the most commonly used minerals in the UK and are essential to a modern economy. They provide the critical raw material for built development and other construction, manufacturing and the maintenance of infrastructure, through their use as concrete, mortar, finishes, roadstone, constructional fill and railway ballast.

There are three sources of supply of aggregates – primary, secondary and recycled. The majority of aggregate demand is met from primary sources. This involves extracting material directly from the ground and dredging from the sea floor. There are significant geographical imbalances in the occurrence of suitable natural aggregate resources and the areas where they are most needed.

Although the demand for construction materials is expected to fall in 2020 due to the impact of Covid-19, the long-term trend is an expected increase at a national level.

Sector Waste Statistics	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	<p>In 2022/23, the North East CA area as a whole collected 924,177 tonnes of total waste with 820,443 tonnes being household waste. The management of the waste collected throughout the area is listed as follows:</p> <ul style="list-style-type: none"> • Landfilled – 105,264 tonnes • Incinerated – 506,472 tonnes • Recycled – 301,558 tonnes • Other – 44,633 tonnes 						
	<p>In County Durham in 2022/23 the total waste collected was 252,114 tonnes and 227,232 tonnes</p>	<p>In Gateshead in 2022/23 the total waste collected was 92,261 tonnes and 85,594 was household waste.</p>	<p>In Newcastle-upon-Tyne in 2022/23 the total waste collected was 132,169 tonnes and 106,007 tonnes was household waste.</p>	<p>In North Tyneside in 2022/23 the total waste collected was 89,308 tonnes and 82,975 tonnes</p>	<p>In Northumberland in 2022/23 the total waste collected was 164,749 tonnes and 145,368</p>	<p>In South Tyneside in 2022/23 the total waste collected was 72,487 tonnes and 62,336 tonnes</p>	<p>In Sunderland in 2022/23 the total waste collected was 121,089 tonnes and 110,931 tonnes was</p>



<p>was household waste.</p> <p>In County Durham in 2022/2023 the management of all local authority collected waste is as follows:</p> <ul style="list-style-type: none"> • Landfilled – 24,144 tonnes • Incineration – 125,982 tonnes • Recycled – 98,594 tonnes • Other – 3,300 	<p>In Gateshead in 2022/203 the management of all local authority collected waste is as follows:</p> <ul style="list-style-type: none"> ▪ Landfilled – 1,135 tonnes ▪ Incinerated – 60,323 tonnes ▪ Recycled – 28,929 tonnes ▪ Other – 1,874 	<p>In Newcastle-upon-Tyne in 2022/2023 the management of all local authority collected waste is as follows:</p> <ul style="list-style-type: none"> ▪ Landfilled – 55,666 tonnes ▪ Incinerated – 40,945 tonnes ▪ Recycled – 32,863 tonnes ▪ Other – 2,695 	<p>was household waste</p> <p>In North Tyneside in 2022/23 the management of all local authority collected waste is as follows:</p> <ul style="list-style-type: none"> ▪ Landfilled – 7,307 tonnes ▪ Incinerated – 54,047 ▪ Recycled – 27,955 tonnes ▪ Other – 0 tonnes 	<p>tonnes was household waste.</p> <p>In Northumberland in 2022/23 the management of all local authority collected waste is as follows:</p> <ul style="list-style-type: none"> ▪ Landfilled – 16,118 tonnes ▪ Incinerated – 94,084 tonnes ▪ Recycled – 54,485 tonnes ▪ Other – N/A 	<p>was household waste.</p> <p>In South Tyneside in 2022/23 the management of all local authority collected waste is as follows:</p> <ul style="list-style-type: none"> ▪ Landfilled – 640 tonnes ▪ Incinerated – 47,949 tonnes ▪ Recycled – 22,933 tonnes ▪ Other - 965 	<p>household waste.</p> <p>In Sunderland in 2022/23 the management of all local authority waste collected is as follows:</p> <ul style="list-style-type: none"> ▪ Landfilled – 254 tonnes ▪ Incinerated – 83,142 tonnes ▪ Recycled – 35,799 tonnes
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Explanatory Text and anticipated future trends:

In February 2019 the Government published a consultation on measures to increase recycling from households and businesses to support the achievement of a much higher 65% recycling rate for municipal waste by 2035. The Government is introducing measures for England to increase household recycling by requiring all local authorities to collect a consistent set of dry materials from households in England, to collect food waste separately from all households on a weekly basis; and to arrange for garden waste collection where necessary. Together, these will support the ability to meet commitments on recycling outlines in the Resources and Waste Strategy.



C.10 Communities – Population, Employment and Viability



Population and Locations of Major Settlements	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>The total population for the North East CA area is per Mid-2022 predictions is 1,994,284 people⁷⁷.</p> <p>The population is expected to increase by 5.1% between 2018 and 2043, with the proportion of those aged 65 and over to increase by 35.6% by 2043⁷⁸.</p> <p>The number of households is projected to increase by 24,429 (4.8%) over the next 10 years from 2018 (505,133) to 2028 (529,562)⁷⁹.</p>							
<p>The Mid-2022 population estimates for County Durham was 528,127, with a density of 237 people per km².</p> <p>The largest settlements in County Durham are Durham City in the West, the town of Consett in the North and the town of Newtown Aycliffe in the Southeast. There are also many other towns and</p>	<p>The Mid-2022 population estimates for Gateshead was 197,722 with a density of 1,389 people per km².</p> <p>Gateshead has a large urban area with the largest urban areas such with Gateshead in the Northeast and Birtley in the east but have more rural settlements in the west such</p>	<p>The Mid-2022 population estimates for Newcastle-upon-Tyne was 307,565 with a density of 2,711 people per km².</p> <p>Newcastle-upon-Tyne is predominantly a large urban area with a number of different districts such</p>	<p>The Mid-2022 population estimates for North Tyneside was 210,287 with a density of 2,558 people per km².</p> <p>North Tyneside is a predominantly urban area with a number of towns such as North Shields and Tynemouth to the southeast, Whitley Bay to the east and</p>	<p>The Mid-2022 population estimates for Northumberland was 324,362 with a density of 65 people per km².</p> <p>Some of the largest settlements in Northumberland are the coastal town of Blyth and town of Ashington in the East, Cramlington Town in the Southeast and Berwick-</p>	<p>The Mid-2022 population estimates for South Tyneside was 148,667 with a density of 2,308 people per km².</p> <p>The largest town in South Tyneside is South Shields, with other riverside towns like Jarrow and Hebburn</p>	<p>The Mid-2022 population estimates for Sunderland was 277,354 with a density of 2,018 people per km².</p> <p>Sunderland is the main town centre of the county, with other towns like Monkwearmouth in the east, with other nearby towns like Hetton-le-Hole and Houghton-le-Spring, as</p>	

⁷⁷ONS (2024) *Estimates of the population for the UK, England, Wales Scotland, and Northern Ireland*. Available: [Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/population-demography/population/population-estimates)

⁷⁸ ONS (2020) *Population projections for local authorities: Table 2*. Available: [Population projections for local authorities: Table 2 - Office for National Statistics](https://www.ons.gov.uk/population-demography/population/projections-for-local-authorities)

⁷⁹ ONS (2020) *Household projections for England: 2018-based*. Available: [Household projections for England: detailed data for modelling and analysis - Office for National Statistics](https://www.ons.gov.uk/population-demography/population/projections-for-england)



rural settlements throughout the county	as the village of Ryton and the village of Whickham in the North.	as Seaton Burn and Fordley.	Killingworth to the northeast. There	upon-Tweed in the North.		well as a number of surrounding villages and hamlets.
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Explanatory Text and anticipated future trends:

Latest ONS figures for household projections in England show an indication of the future number of households in England and its regions and local authorities⁸⁰. These are used for planning in areas such as housing and social care. The latest household projections show a continued rise in the number of households in England, at a level closely in line with what was previously projected. There continues to be much variation across age groups, regions and household types. ONS project the majority of household growth over the next 10 years will be because of an increase in older households without dependent children, particularly those where the household reference person is aged 75 years and over. This shows the potential impact of an ageing population on future household formation.

The number of households in the North East is projected to increase by 4.5% between 2018 and 2028, with the highest being London and the South East, where growth is projected to be 8.9%. This is an estimated increase of 672,655 in mid-2018 to 702,737 in mid-2028 in the North East.

The North East Region is expected to see population growth in the coming years, with the proportion of residents of an older age increasing in line with the trend across much of England. Development across the plan area needs to be particularly considerate of this group in relation to the design of development and neighbourhoods as well as the accessibility of services and facilities. There will be a need to promote development which ensures the issue of isolation does not become more prevalent given the expected increase in the proportion of single person households among older people. Without a strategic approach to development, it is less likely that these challenges will be comprehensively met.

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
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⁸⁰ ONS (2020) *Household projections for England: 2018-based*. Available:

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/householdprojectionsforengland/2018based#household-type-projections>



Working Age Population

As of the 2021 Census, the proportion of residents in the North East CA area of working age (16-64) was 62%⁸¹.

As of the 2021 Census, the proportion of residents in County Durham Local Authority Area of working age was 62%.	As of the 2021 Census, the proportion of residents in Gateshead Local Authority Area of working age was 62%.	As of the 2021 Census, the proportion of residents in Newcastle-upon-Tyne Local Authority Area of working age was 68%.	As of the 2021 Census, the proportion of residents in North Tyneside Local Authority Area of working age was 62%.	As of the 2021 Census the proportion of residents in Northumberland Local Authority Area of working age was 58%.	As of the 2021 Census, the proportion of residents of the South Tyneside Local Authority Area of working age was 61%.	As of the 2021 Census, the proportion of residents in the Sunderland Local Authority Area of working age was 62%.
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Explanatory Text and anticipated future trends:

See above relating to population change.

Unemployment

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
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In the North East, 4.4% of economically active people were unemployed, from April 2023 to March 2024⁸².

Note the North East region covers a larger area and includes more local authorities than the North East CA area.

From April 2023 to March 2024, 4.1% of economically active people were unemployed in the County	From April 2023 to March 2024, 4.4% of economically active people were unemployed in the Gateshead	From April 2023 to March 2024, 6.6% of economically active people were unemployed in the Newcastle-	From April 2023 to March 2024, 4.0% of economically active people were unemployed in the North	From April 2023 to March 2024, 4.4% of economically active people were unemployed in the Northumberland	From April 2023 to March 2024, 5.5% of economically active people were unemployed in the South	From April 2023 to March 2024, 4.4% of economically active people were unemployed in the Sunderland
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⁸¹ ONS (2021) *Census Maps: Age*. Available: [Age - Census Maps, ONS](#)

⁸² Nomis (2024) *Labour Market Profile: North East*. Available: [Labour Market Profile - Nomis - Official Census and Labour Market Statistics \(nomisweb.co.uk\)](#).



Durham Local Authority Area.	Local Authority Area.	upon-Tyne Local Authority Area.	Tyneside Local Authority Area .	Local Authority Area.	Tyneside Local Authority Area.	Local Authority Area.
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Explanatory Text and anticipated future trends:

Data from the ONS Labour Force Survey in February 2023 shows the redundancy rate increased on the quarter but is below pre-pandemic rates. The UK employment rate was estimated at 75.6% in October to December 2022, 0.2% higher than the previous three-month period. The increase in employment over the latest three-month period was driven by part-time workers. Total actual weekly hours worked decreased on the quarter, and are still below pre-pandemic levels.⁸³

Without the strategic approach to development in the plan area the required development and infrastructure is less likely to be provided to encourage investment in areas where highest numbers of residents can benefit from new employment opportunities

Education	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
Within the North East CA area, the local authorities have a combined total of their populations with the following qualifications as of 2021:							
<ul style="list-style-type: none"> ▪ No Qualifications – 326,667 ▪ Level 1 – 156,039 ▪ Level 2 – 224,014 ▪ Apprenticeship – 107,048 ▪ Level 3 – 304,221 ▪ Level 4 - 473,595 ▪ Other Qualifications – 40,291 							
In County Durham:	In Gateshead:	In Newcastle upon Tyne:	In North Tyneside:	In Northumberland:	In South Tyneside:	In Sunderland:	

⁸³ ONS (2023) *Labour market overview, UK: February 2023*. Available: [Labour market overview, UK - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk/labour-market-overview)



No Qualifications – 90,804	No Qualifications – 34,975	No Qualifications – 46,232	No Qualifications – 29,968	No Qualifications – 48,173	No Qualifications – 24,849	No Qualifications – 51,666
Level 1- 41,359	Level 1 – 16,022	Level 1 – 19,729	Level 1 – 16,025	Level 1 – 26,051	Level 1 – 12,323	Level 1 – 24,530
Level 2 – 61,724	Level 2 – 22,280	Level 2 – 25,891	Level 2 – 24,300	Level 2 – 28,873	Level 2 – 17,393	Level 2 – 33,553
Apprenticeship – 27,061	Apprenticeship – 11,629	Apprenticeship – 11,943	Apprenticeship – 11,773	Apprenticeship – 18,624	Apprenticeship – 9,706	Apprenticeship – 16,312
Level 3 – 86,414	Level 3 – 27,436	Level 3 – 52,768	Level 3 – 28,969	Level 3 – 47,690	Level 3 – 22,265	Level 3 – 38,679
Level 4 – 116,019	Level 4 – 45,246	Level 4 – 86,063	Level 4 – 56,375	Level 4 – 82,653	Level 4 – 31,707	Level 4 – 55,532
Other – 10,577	Other – 4,158	Other – 5,824	Other – 4,102	Other – 6,782	Other – 3,049	Other – 5,799

Explanatory Text and anticipated future trends:

The following category descriptions are provided for the different levels of education⁸⁴:

- Level 1 and entry level qualifications: 1 to 4 GCSEs grade A* to C, Any GCSEs at other grades, O levels or CSEs (any grades), 1 AS level, NVQ level 1, Foundation GNVQ, Basic or Essential Skills
- Level 2 qualifications: 5 or more GCSEs (A* to C or 9 to 4), O levels (passes), CSEs (grade 1), School Certification, 1 A level, 2 to 3 AS levels, VCEs, Intermediate or Higher Diploma, Welsh Bacculaureate Intermediate Diploma, NVQ level 2, Intermediate GNVQ, City and Guilds Craft, BTEC First or General Diploma, RSA Diploma
- Level 3 qualifications: 2 or more A levels or VCEs, 4 or more AS levels, Higher School Certificate, Progression or Advanced Diploma, Welsh Bacculaureate Advance Diploma, NVQ level 3; Advanced GNVQ, City and Guilds Advanced Craft, ONC, OND, BTEC National, RSA Advanced Diploma

⁸⁴ <https://www.ons.gov.uk/datasets/TS067/editions/2021/versions/3#variables>



- Level 4 Qualifications or above is classified as; degree (BA, BSc), higher degree (MA, PhD, PGCE), NVQ level 4 to 5, HNC, HND, RSA Higher Diploma, BTEC Higher level, professional qualifications (for example, teaching, nursing, accountancy)
- Other: vocational or work-related qualifications, other qualifications achieved in England or Wales, qualifications achieved outside England or Wales (equivalent not stated or unknown)

Economic Activity Rates	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>From April 2023 to March 2024, 74.6% of those in the North East region of England were economically active while 71.3% of the population was in employment. Of those who are were economically inactive 20.8% were students, 18% were looking after family/home and 34.1% were long-term sick⁸⁵.</p> <p>Note the North East region covers a larger area and includes more local authorities than the North East CA area.</p>							
From April 2023 to March 2024, 77% of those in the County Durham Local Authority Area were economically active while 74.2% of the population was in employment. Of those who are were economically inactive 13.2% were students, 21% were looking	From April 2023 to March 2024, 76.9% of those in the Gateshead Local Authority Area were economically active while 73.6% of the population was in employment. Of those who are were economically inactive 22 % were students	From April 2023 to March 2024, 71.9% of those in the Newcastle-upon-Tyne Local Authority Area were economically active while 69.2% of the population was in employment. Of those who are were economically inactive 37.8% were students,	From April 2023 to March 2024, 75.6% of those in the North Tyneside Local Authority Area were economically active while 71.8% of the population was in employment. Of those who are were economically inactive 14.7% were students, 18.3% were	From April 2023 to March 2024, 73.9% of those in the Northumberland Local Authority Area were economically active while 70.8% of the population was in employment. Of those who are were economically inactive 16.0% were students, 18.2% were	From April 2023 to March 2024, 69.0% of those in the South Tyneside Local Authority Area were economically active while 65.1% of the population was in employment. Of those who are were economically inactive 27.5% were students, 19.5% were	From April 2023 to March 2024, 75.8% of those in the Sunderland Local Authority Area were economically active while 72.9% of the population was in employment. Of those who are were economically inactive 9.3% were students, 24.2% were	

⁸⁵ Nomis (2024) *Labour Market Profile: North East*. Available: [Labour Market Profile - Nomis - Official Census and Labour Market Statistics \(nomisweb.co.uk\)](https://www.nomisweb.co.uk/labour-market-profile)



after family/home and 37.4% were long-term sick.	and 32% were long-term sick. Note Gateshead does not have data freely available regarding looking after family/home.	12.7% were looking after family/home and 31.4% were long-term sick.	looking after family/home and 36.8% were long-term sick.	looking after family/home and 28.4% were long-term sick.	looking after family/home and 35.3% were long-term sick.	looking after family/home and 41% were long-term sick.
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Explanatory Text and anticipated future trends:

The Noth East and North East CA area have demonstrated lower levels of economic activity than the national average in recent years. Of those who were reported to be economically inactive, this included a mostly lower percentage of students than the national average for both the North East and North East CA area. Development in the region should aim to build on the relatively high rates of economic activity among the local population. Without a strategic approach to development and infrastructure in the plan area, it may prove more difficult to encourage further economic investment and to build on level of economic activity presently demonstrated in the region.

Deprivation	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
With Rank 1 being most deprived, out of the 317 local authorities in England, County Durham ranks 65 th most	With Rank 1 being most deprived, out of the 317 local authorities in England, Gateshead ranks 54 th most deprived. Of the seven deprivation domains that make up	With Rank 1 being most deprived, out of the 317 local authorities in England, Newcastle upon Tyne ranks 74 th most deprived. Of the seven deprivation domains that	With Rank 1 being most deprived, out of the 317 local authorities in England, North Tyneside ranks 128 th most deprived. Of the seven deprivation domains that make up	With Rank 1 being most deprived, out of the 317 local authorities in England, Northumberland ranks 131 st most deprived. Of the seven deprivation domains that make up IMD2019,	With Rank 1 being most deprived, out of the 317 local authorities in England, South Tyneside ranks 26 th most deprived. Of the seven deprivation domains that make up IMD2019, South	With Rank 1 being most deprived, out of the 317 local authorities in England, Sunderland ranks 33 rd most deprived. Of the seven deprivation domains that make up	



deprived ⁸⁶ . Of the seven deprivation domains that make up IMD2019, County Durham ranks as follows for 'Income' and 'Employment': Income – 35 th Employment – 105 th	IMD2019, Gateshead ranks as follows for 'Income' and 'Employment': Income – 30 th Employment – 86 th	make up IMD2019, Newcastle upon Tyne ranks as follows for 'Income' and 'Employment': Income – 104 th Employment – 109 th	IMD2019, North Tyneside ranks as follows for 'Income' and 'Employment': Income – 68 th Employment – 159 th	Northumberland ranks as follows for 'Income' and 'Employment': Income – 88 th Employment – 144 th	Tyneside ranks as follows for 'Income' and 'Employment': Income – 3 rd Employment – 75 th	IMD2019, Sunderland ranks as follows for 'Income' and 'Employment': Income – 6 th Employment – 56 th
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Explanatory Text and anticipated future trends:

The Indices of Deprivation 2019⁸⁷ provide a set of relative measures of deprivation for small geographical areas (Lower-layer Super Output Areas) across England, based on seven different domains of deprivation:

- Income Deprivation
- Employment Deprivation
- Education, Skills and Training Deprivation

⁸⁶ MHCLG (2019) *IoD2019 Interactive Dashboard – Local Authority Focus*. Available: <https://app.powerbi.com/view?r=eyJrIjojOTdjYzlyNTMtMTcxNi00YmQ2LW11YzgtMTUyYzYxMzQ2ODEwLTljN2QtNDNkZS1hODcyLTl0YTJjZjM5OTVhOCJ9>

⁸⁷ MHCLG (2019) *The English Indices of Deprivation 2019*. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833951/IoD2019_Technical_Report.pdf



- Health Deprivation and Disability
- Crime
- Barriers to Housing and Services
- Living Environment Deprivation

Each of these domains is based on a basket of indicators. As far as is possible, each indicator is based on data from the most recent time point available. A range of summary measures are available for higher-level geographies including Local Authority Districts and upper tier Local Authorities, Local Enterprise Partnerships, and Clinical Commissioning Groups. These summary measures are produced for the overall Index of Multiple Deprivation, each of the seven domains and the supplementary indices.

Overall, 88 per cent of neighbourhoods that are in the most deprived decile according to the Index of Multiple Deprivation 2019 (IMD2019) were also the most deprived according to the IMD2015. Deprivation is dispersed across England. 61 per cent of local authority districts contain at least one of the most deprived neighbourhoods in England.

While the North East CA contains both more and less deprived areas in England, specifically South Tyneside which is 26th most deprived. Without the strategic approach to development in the plan area, opportunities to deliver development and infrastructure which can improve access to employment and the income of local people are less likely to be achieved.

The spatial distribution of Deprivation within the North East CA region are shown in **Figure D-12**.

Gross Value Added	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
The GVA per hour worked indices of the North East region is 89 (£32.02) for 2021 ⁸⁸ .							
Note the North East region covers a larger area and includes more local authorities than the North East CA area.							
In County Durham, the current price output per hour	In Gateshead, the current price output per hour	In Newcastle upon Tyne, the current price output per hour	In North Tyneside, the current price output per hour	In Northumberland, the current price output per hour	In South Tyneside, the current price output per hour	In Sunderland, the current price output per hour	

⁸⁸ North East Evidence Hub (2022) *Productivity (GVA per hour worked)*. Available: [Report: Productivity \(GVA per hour worked\) - North East Evidence Hub \(northeast-ca.gov.uk\)](https://northeast-ca.gov.uk/report-productivity-gva-per-hour-worked-north-east-evidence-hub)



indices is 79.94 for in 2011 ⁸⁹ .	indices is 80.94 in 2011.	indices is 86.69 in 2011.	indices is 95.22 in 2011.	indices is 79.38 in 2011.	indices is 73.64 in 2011.	indices is 93.37 in 2011.
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Explanatory Text and anticipated future trends:

GVA per hour worked is a useful measure of labour productivity compared to e.g. GVA per job as it takes into account different employment structures (The UK average index is 100). In the North East, £32.02 is 11% below the England equivalent. Having increased in 2020 due to fewer hours being worked in less productive sectors, GVA per hour decreased in 2021 compared to 2020 as Covid-19 restrictions were lifted. There were also specific issues in 2021 in the North East automotive sector, which is one of the most productive sectors in the North East but has been impacted by semiconductor shortages globally⁹⁰.

Local authority districts with highest levels of productivity are generally located in the Greater South East of England, with the Rushmoor, City of London and Runnymede local authority districts having the highest levels of labour productivity⁹¹.

Development and infrastructure should be planned so that increases in value of the economy can be of benefit to all. Without a strategic approach to development and infrastructure to support future economic growth it is likely that some opportunities to secure this aim may not be realised.

⁸⁹ ONS (2023) *Subregional productivity in the UK: June 2023*. Available: [Subregional productivity in the UK - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)

⁹⁰ North East Evidence Hub (2022) *Productivity (GVA per hour worked)*. Available: [Report: Productivity \(GVA per hour worked\) - North East Evidence Hub \(northeast-ca.gov.uk\)](https://northeast-ca.gov.uk)

⁹¹ ONS (2023) *Subregional productivity in the UK: June 2023*. Available: [Subregional productivity in the UK - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)



C.11 Communities – Supporting Infrastructure



Location of Strategic Rail Links	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	There are a number of rail links within the North East CA area, connecting places such as Berwick-upon-Tweed to Newcastle-upon-Tyne and Durham.						
	Explanatory Text and anticipated future trends:						
	Before the Covid-19 pandemic, the use of public transport via rail in Great Britain has increased in recent years while reliance on bus services has decreased. In 2020-21, public transport was heavily impacted by the COVID-19 pandemic. At the lowest point in April and May 2020, passenger rail journeys were 96% less than an equivalent day in the previous year ⁹² .						
	The provision of development and infrastructure in the plan area provides an opportunity to strengthen the rail offer in the region and its viability, while encouraging use by residents. Providing development and infrastructure without a taking strategic approach is less likely to achieve these aims considering the need to ensure a highly connected railway system for it to be successful.						

Location of Strategic Road Network (SRN)	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	Within County Durham Local Authority area, is the A1 (M) motorway as well as various single and dual carriageways. Some A roads include the A688, A691 and A19.	Within Gateshead Local Authority area, is the A1 (M) motorway slightly intersects its eastern border, as well as various single and dual carriageways. Some A roads	Within Newcastle upon Tyne Local Authority area, is the A167 (M) motorway and various single and dual carriageways. Some A roads include A1, A1058 and A656.	Within North Tyneside Local Authority area are various single and dual carriageways. Some A roads include the A19, A1058 and A191.	Within Northumberland Local Authority area are various single and dual carriageways. Some A roads include the A69, A696, A1, A1068 and A697.	Within South Tyneside Local Authority area are various single and dual carriageways. Some A roads include the A1018 and A194.	Within South Tyneside Local Authority area are various single and dual carriageways. Some A roads include the A19, A1018 and A690.

⁹² Department for Transport (2022) *Rail Factsheet*. Available:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1049929/rail-factsheet-2021.pdf



include A1, A694 and A692.

Explanatory Text and anticipated future trends:

The SRN is a crucial part of the national transport system, with Department for Transport predicting traffic levels on the SRN to rise by 46% by 2040. The SRN in England consists of motorways and the most significant A-roads. It is managed by the Highways Agency, which is an executive agency of the Department for Transport. This network is a crucial part of England’s infrastructure, and is especially important for businesses⁹³.

The provision of development and infrastructure in the plan area **provides an opportunity to not only to strengthen the SRN in the plan area to help limit congestion and support economic growth, but also to support the viability of public transport networks support. Providing development and infrastructure without a taking strategic approach is less likely to achieve these aims considering the need to ensure a highly connected SRN and public transport network for it to be successful.**

Location of Airports	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	Newcastle Airport is the only major airport within the North East CA area of the 50 within the UK ⁹⁴ . The infrastructure falls within both Northumberland and Newcastle upon Tyne Local Authority area.						
	Explanatory Text and anticipated future trends:						
	The aviation industry plays an important role in the UK economy contributing at least £22 billion, along with over 230,000 jobs. Growth in this sector has been reflected by year on year increases in UK passenger numbers for the seven consecutive years up to 2018 ⁹⁵						
	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland

⁹³ House of Commons (2014) *Better Roads: Improving England’s Strategic Road Network*. Available: <https://publications.parliament.uk/pa/cm201314/cmselect/cmtran/850/850.pdf#:~:text=The%20Strategic%20Road%20Network%20%28SRN%29%20is%20a%20crucial,in%20Government%20policy%20over%20the%20past%20two%20decades>

⁹⁴ [Airports in the United Kingdom \(map\) \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/769696/aviation-2050-print.pdf)

⁹⁵ HM Government (2018) *The future of UK aviation*. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/769696/aviation-2050-print.pdf



As of September 2023, full fibre broadband is available to 17.8 million premises (56%), a growth of 42.4% and 5.3 million additional premises since 2022⁹⁶

**Digital
Connectivity**

In County Durham Local Authority area, the fixed broadband coverage of premises in September 2023 is as follows:	In Gateshead Local Authority area, the fixed broadband coverage of premises in September 2023 is as follows:	In Newcastle upon Tyne Local Authority area, the fixed broadband coverage of premises in September 2023 is as follows:	In North Tyneside Local Authority area, the fixed broadband coverage of premises in September 2023 is as follows:	In Northumberland Local Authority area, the fixed broadband coverage of premises in September 2023 is as follows:	In South Tyneside Local Authority area, the fixed broadband coverage of premises in September 2023 is as follows:	In Sunderland Local Authority area, the fixed broadband coverage of premises in September 2023 is as follows:
Full fibre – 54% (143,002)	Full fibre – 27% (27,156)	Full fibre – 69% (98,721)	Full fibre – 59% (61,487)	Full fibre – 51% (83,635)	Full fibre – 15% (11,305)	Full fibre – 42% (58,348)
Superfast – 96% (253,222)	Superfast – 97% (98,980)	Superfast – 98% (139,048)	Superfast – 99% (102,637)	Superfast – 95% (154,696)	Superfast – 98% (74,922)	Superfast – 98% (136,821)
Ultrafast – 57% (150,261)	Ultrafast – 79% (80,756)	Ultrafast – 87% (123,848)	Ultrafast – 89% (92,087)	Ultrafast – 52% (85,301)	Ultrafast – 86% (65,684)	Ultrafast – 85% (119,246)
Not able to receive decent broadband of at least 10Mbit/s download and 1Mbit/s upload – 1% (3,301)	Not able to receive decent broadband of at least 10Mbit/s download and 1Mbit/s upload – 1% (1,280)	Not able to receive decent broadband of at least 10Mbit/s download and 1Mbit/s upload – 0% (693)	Not able to receive decent broadband of at least 10Mbit/s download and 1Mbit/s upload – 0% (474)	Not able to receive decent broadband of at least 10Mbit/s download and 1Mbit/s upload – 2% (3,687)	Not able to receive decent broadband of at least 10Mbit/s download and 1Mbit/s upload – 1% (509)	Not able to receive decent broadband of at least 10Mbit/s download and 1Mbit/s upload – 1% (1,309)

⁹⁶ Ofcome (2023) *Connected Nations 2023: Interactive Report*. Available: [Interactive report 2023 - Ofcom](#)



Explanatory Text and anticipated future trends:

Standard, superfast and ultrafast denote different broadband speed categories⁹⁷:

- Standard broadband has download speeds of less than 30Mbps;
- Superfast broadband has download speeds between 30Mbps and 300Mbps;
- Ultrafast broadband has download speeds of greater than 300Mbps;

Ultrafast broadband is available across much of the North East CA Area. However, some areas do not benefit from access to the infrastructure necessary to allow for connections. **Without a strategic approach to development and infrastructure in the region, it is likely to prove more difficult to ensure that new residents have the choice of being able to access to ultrafast broadband and also to build on existing provisions.**

Electricity Network	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	Northern PowerGrid and Electricity North West are the main providers responsible for the north of England. The North East CA area's electricity network is completely covered by Northern PowerGrid ⁹⁸ .						
Water Treatment Works and Sewage	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	<p>Explanatory Text and anticipated future trends:</p> <p>The electricity distribution networks, in the UK including those in the North East Region, carry electricity from the high voltage transmission grid to industrial, commercial and domestic users. This network is increasingly supplied by renewable sources, with for example, the North East of England increasing output of Solar PV of 34.1 MW in 2022⁹⁹.</p>						
The North East CA area's sewage network is covered by three main providers, predominately Northumbrian Water, and partially by United Utilities and Yorkshire Water ¹⁰⁰ .							

⁹⁷ Ofcom (2023) *Connected Nations 2023 UK report*. Available: [Connected Nations 2023 - UK report \(ofcom.org.uk\)](https://www.ofcom.gov.uk/consult/condocs/cn2023/cn2023.pdf)

⁹⁸ Energy Network Association (2024) *Electricity Transmission Map*. Available: [Who's my network operator? – Energy Networks Association \(ENA\)](https://www.enanetworks.org.uk/who-s-my-network-operator/)

⁹⁹ DESNZ (2023) *Regional renewable electricity in 2022*. Available: [Regional renewable electricity in 2022 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/123456/Regional_renewable_electricity_in_2022.pdf)

¹⁰⁰ UK Parliament (2024) *Constituency information: Water companies*. Available: [Constituency information: Water companies \(parliament.uk\)](https://www.parliament.uk/constituencies/water-companies/)



Treatment Works

Northumbrian Water are specifically responsible for the wastewater system for over 2.7 million people, which includes things like drains, manholes, pumping stations, and storm overflows, as well as treatment works and SuDs (sustainable drainage systems). Being a combined system, the Drainage and Waste Water Management Plan (DWMP) for the area details mitigation measures including storm overflows, water treatment and the managing network flooding. Being a combined sewage system. This DWMP is split up into seven area each with their own plan¹⁰¹.

United Utilities is the main provider of water for the North West of England with a population of 6.8 million in 2020, which is expected to increase by 14% between 2023 and 2050. The plan DWMP aims to strengthen the network regarding resilience to climate change, enhancing nature and ecosystems, and providing benefits to the community. The plan includes storm overflow discharge reduction [lam, assessing future risk and managing those risks though working with customers, slowly draining rainwater and monitoring the network¹⁰².

Yorkshire Water providers services to over 5 million customers annually, collecting and treating around 2.2 billion litres of wastewater every day¹⁰³. They are yet to produce their DWMP24 but provide a guidance document highlighting customers and communities, environment and drainage and wastewater services as important outcomes to achieve in the planned DWMP¹⁰⁴.

Explanatory Text and anticipated future trends:

As with most areas of the UK, the existing Water Treatment Works and Sewage Treatment Works infrastructure in the North East CA area will be subject to capacity issues at the local level due to population growth and associated new development.

Development in the plan area will need to **respond to capacity issues in terms of these types of infrastructure. In some instances, development may need to support the delivery of new infrastructure where capacity issues emerge. Without a strategic approach to development, capacity issues in the region may prove more difficult to address in manner which benefits the highest number of residents in the plan area.**

¹⁰¹ Northumbrian Water (2023) *Our Drainage and Waster Water Management Plan*. Available: <https://www.nwl.co.uk/services/sewerage/dwmp/>

¹⁰² United Utilities (2023) *Summary of our Drainage and Wastewater Management Plan 2023*. Available: [DWMP Publication May 2023 \(unitedutilities.com\)](#)

¹⁰³ Yorkshire Water (2023) *Yorkshire Water Services Limited Annual Performance Report 2023/2024*. Available: [Yorkshire Water, Annual Performance Report 2023/2024, published July 2024](#).

¹⁰⁴ Yorkshire Water (2019) *Working together to improve drainage and environmental water quality: an overview of Drainage Wastewater Management Plans*. Available: [DWMP Final Report 16mb \(water.org.uk\)](#)



Major Utilities
(major gas
mains,
overhead lines
etc.)

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
Northern Gas Networks is responsible for the gas distribution network across the North East CA area ¹⁰⁵ .						
Explanatory Text and anticipated future trends:						
There are currently no gas terminals in the Plan Area. There are areas of the North East CA Area within which gas pipelines and overhead power lines are present to facilitate supply. Without a strategic approach to development it is less likely that development and new infrastructure is provided to complement the existing distribution of this infrastructure.						

¹⁰⁵ Energy Network Association (2024) *Electricity Transmission Map*. Available: [Who's my network operator? – Energy Networks Association \(ENA\)](#)



C.12 Communities – Health and Wellbeing



Population	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
All the local authority areas combined within the North East CA area have a combined total population of 1,969,797 people as of the 2021 census. Of this population 1,007,277 are female and 962,548 are male ¹⁰⁶ .							
	The census 2021 population count for County Durham Local Authority is 522,062 people, 266,764 of which are female and 255,304 are male. This area has a projected population change of 3.7% (19,516 people) between mid-2018 and mid-2028 ¹⁰⁷ .	The census 2021 population estimate for Gateshead Local Authority is 196,144 people, 99,952 of which are female and 96,199 are male. This area has a projected population change of 0% (45 people) between mid-2018 and mid-2028.	The census 2021 population estimate for Newcastle upon Tyne Local Authority is 300,131 people, 151,802 of which are female and 148,323 are male. This area has a projected population change of 2.9% (8,749 people) between mid-2018 and mid-2028.	The census 2021 population estimate for North Tyneside Local Authority is 208,952 people, 107,630 of which are female and 101,337 are male. This area has a projected population change of 5.2% (10,762 people) between mid-2018 and mid-2028.	The census 2021 population estimate for Northumberland Local Authority is 320,565 people, 163,989 of which are female and 156,578 are male. This area has a projected population change of 3.4% (10,831 people) between mid-2018 and mid-2028.	The census 2021 population estimate for South Tyneside Local Authority is 147,777 people, 76,062 of which are female and 71,714 are male. This area has a projected population change of 3.1% (4,718 people) between mid-2018 and mid-2028.	The census 2021 population estimate for South Tyneside Local Authority is 274,166 people, 141,078 of which are female and 133,093 are male. This area has a projected population change of -0.1% (-256 people) between mid-2018 and mid-2028.

¹⁰⁶ ONS (2024) *Census*. Available: [Census - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk)

¹⁰⁷ ONS (2024) *Subnational population projections for England: 2018-based*. Available: [Subnational population projections for England - Office for National Statistics](https://www.ons.gov.uk)



Explanatory Text and anticipated future trends:

The population in the UK is measured through the Census. This provides an estimate of the overall population the UK and its distribution within countries and regions. The last Census was undertaken in 2021. The Office for National Statistics (ONS) also provides mid-year population estimates¹⁰⁸.

All four countries of the UK saw population increases in the decade between mid-2011 and mid-2021. The highest percentage increase was in England where the population increased by 3.4 million, a rise of 6.5% between 2011 and 2021. **Error! Bookmark not defined.**

The number of people aged 65 years and over in the population continues to increase faster than the rest of the population. In England and Wales, the number of people aged 65 years and over increased from 9.2 million in 2011 to over 11 million in 2021 and the proportion of people aged 65 years and over rose from 16.4% to 18.6%¹⁰⁹.

The population of the UK increased by approximately 11.1 million (19.8%) during the last fifty years and by approximately 3.7 million (5.9%) during the last decade. Population growth in the latest decade was lower than the previous decade in all four UK countries.

For the UK as a whole, net international migration for the year to mid-2021 was an estimated 173,000 and for England and Wales it was an estimated 156,000.

The ONS notes that population growth between mid-2005 to mid-2018 has been high in comparison to historic patterns (0.67% 5-year average) however, this rate has been slowing - the slower growth in recent years is driven by a combination of both lower natural change (the balance between births and deaths) and lower net international migration.

Life Expectancy	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
All the local authority areas combined within the North East CA area have an average life expectancy at birth in 2020 to 2022 of 77.18 years for males and 81.40 years for females ¹¹⁰ .							
Life expectancy at birth in County Durham	Life expectancy at birth in Gateshead	Life expectancy at birth in Newcastle upon	Life expectancy at birth in North Tyneside Local	Life expectancy at birth in Northumberland	Life expectancy at birth in South Tyneside Local	Life expectancy at birth in Sunderland	

¹⁰⁸ ONS (2024) *Census*. Available: [Census - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)

¹⁰⁹ ONS (2023) *Profile of the older population living in England and Wales in 2021 and changes since 2011*. Available: [Profile of the older population living in England and Wales in 2021 and changes since 2011 - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)

¹¹⁰ ONS (2024) *Census*. Available: [Census - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)



Local Authority area in 2020 to 2022 was 77.15 years for males and 80.43 years for females.	Local Authority area in 2020 to 2022 was 76.65 years for males and 82.92 years for females.	Tyne Local Authority area in 2020 to 2022 was 77.15 years for males and 81.68 years for females.	Authority area in 2020 to 2022 was 77.86 years for males and 82.08 years for females.	Local Authority area in 2020 to 2022 was 78.79 years for males and 80.75 years for females.	Authority area in 2020 to 2022 was 76.60 years for males and 81.39 years for females.	Local Authority area in 2020 to 2022 was 76.11 years for males and 80.58 years for females.
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Explanatory Text and anticipated future trends:

Life expectancy (the number of years people are expected to spend in different health states among local authority areas in the UK) is measured by the Office for National Statistics (ONS).

Compared with 2017 to 2019, UK life expectancy has fallen by 38 weeks from 79.3 years for males and by 23 weeks from 83.0 years for females. In 2021, there were 586,334 deaths registered in England and Wales, which was a decrease of 3.6% compared with 2020 (607,922 deaths). In England and Wales as a whole, the leading causes of death accounted for 41.4% of all deaths registered in 2021. As in 2020, COVID-19 was the overall leading cause of death; there were 67,350 deaths with an underlying cause of COVID-19, accounting for 11.5% of all deaths registered in 2021. This was a decrease of 8.7% compared with 2020. Following COVID-19, the remaining leading causes of death in England and Wales were dementia and Alzheimer’s disease (61,250 deaths; 10.4% of all deaths, and a 12.6% decrease from 2020), ischaemic heart diseases (56,960 deaths; 9.7% of all deaths, and a 2.1% increase from 2020), cerebrovascular diseases (29,041 deaths; 5.0% of all deaths, and a 2.3% decrease from 2020) and malignant neoplasm of trachea, bronchus and lung (28,190 deaths; 4.8% of all deaths, and a 1.9% decrease from 2020)¹¹¹.

Disability	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	In the North East CA area, the proportion of the population classified as ‘Disabled’ as an average of the combined local authority proportions is 21.3% ‘Disabled’ and 78.68 ‘Not Disabled’ ¹¹² .						

¹¹¹ ONS (2022) *Deaths registered in England and Wales: 2021*. Available: [Deaths registered in England and Wales - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/deaths)

¹¹² ONS (2024) *Census*. Available: [Census - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/census)



In County Durham Local Authority area, 22.4% of the population are classified as 'Disabled' and 77.6% as 'Not-disabled'.	In Gateshead Local Authority area, 21.4% of the population are classified as 'Disabled' and 78.6% as 'Not-disabled'.	In Newcastle upon Tyne Local Authority area, 20.9% of the population are classified as 'Disabled' and 79.1% as 'Not-disabled'.	In North Tyneside Local Authority area, 19.7% of the population are classified as 'Disabled' and 80.3% as 'Not-disabled'.	In Northumberland Local Authority area, 19.6% of the population are classified as 'Disabled' and 80.4% as 'Not-disabled'.	In South Tyneside Local Authority area, 22.1% of the population are classified as 'Disabled' and 77.9% as 'Not-disabled'.	In Sunderland Local Authority area, 23.1% of the population are classified as 'Disabled' and 76.9% as 'Not-disabled'.
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Explanatory Text and anticipated future trends:

For the purposes of this analysis, a person is considered to have a disability if they have a self-reported long-standing illness, condition or impairment that causes difficulty with day-to-day activities. This definition is consistent with the Equality Act 2010 and the GSS harmonised definition¹¹³.

Specific Health Indicators – Obesity, Cancer etc.	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	In the North East region ¹¹⁴ ;						
	<ul style="list-style-type: none"> ▪ In 2022 to 2023, the percentage of adults (aged 18 and over) classified as overweight or obese was 70.2%, ▪ Prevalence of obesity in Year 6 children between 2022 to 2023 is 25.8%, ▪ The under 75 mortality rate from cancer as of 2022 is 137.2 per 100,000 people, ▪ The under 75 mortality rate from circulatory diseases as of 2022 is 90.8 per 100,000 people. ▪ Note the North East region covers a larger area and includes more local authorities than the North East CA area. 						
In 2022 to 2023, the percentage of adults (aged	In 2022 to 2023, the percentage of adults (aged	In 2022 to 2023, the percentage of adults (aged	In 2022 to 2023, the percentage of adults (aged	In 2022 to 2023, the percentage of adults (aged	In 2022 to 2023, the percentage of adults (aged	In 2022 to 2023, the percentage of adults (aged	In 2022 to 2023, the percentage of adults (aged

¹¹³ ONS (2019) *Disability, well-being and loneliness, UK: 2019*. Available: [Disability, well-being and loneliness, UK - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/peoplepopulationandcommunity/healthandcare/disability)

¹¹⁴ Office for Health Improvements and Disparities (2023) *Local Authority Health Data*. Available: [Obesity Profile: short statistical commentary May 2023 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/obesity-profile-short-statistical-commentary-may-2023)



18 and over) classified as overweight or obese was 77.7%.	18 and over) classified as overweight or obese was 70.3%.	18 and over) classified as overweight or obese was 67.0%.	18 and over) classified as overweight or obese was 63.2%.	and over) classified as overweight or obese was 69.8%.	18 and over) classified as overweight or obese was 71.1%.	18 and over) classified as overweight or obese was 65.1%.
Prevalence of obesity in Year 6 children is 25.6%.	Prevalence of obesity in Year 6 children is 24.1%.	Prevalence of obesity in Year 6 children is 29.1%.	Prevalence of obesity in Year 6 children is 22.4%.	Prevalence of obesity in Year 6 children is 23.6%.	Prevalence of obesity in Year 6 children is 26.1%.	Prevalence of obesity in Year 6 children is 27.0%.
The under 75 mortality rate from cancer is 126.8 per 100,000 people.	The under 75 mortality rate from cancer is 152.9 per 100,000 people.	The under 75 mortality rate from cancer is 135.1 per 100,000 people.	The under 75 mortality rate from cancer is 136.4 per 100,000 people.	The under 75 mortality rate from cancer is 117.2 per 100,000 people.	The under 75 mortality rate from cancer is 144.0 per 100,000 people.	The under 75 mortality rate from cancer is 148.9 per 100,000 people.
The under 75 mortality rate from circulatory diseases is 95.2 per 100,000 people.	The under 75 mortality rate from circulatory diseases is 79.2 per 100,000 people.	The under 75 mortality rate from circulatory diseases is 102.3 per 100,000 people.	The under 75 mortality rate from circulatory diseases is 87.7 per 100,000 people.	The under 75 mortality rate from circulatory diseases is 71.7 per 100,000 people.	The under 75 mortality rate from circulatory diseases is 105.0 per 100,000 people.	The under 75 mortality rate from circulatory diseases is 98.0 per 100,000 people.

Explanatory Text and anticipated future trends:

In 2022 to 2023, the percentage of adults (aged 18 and over) classified as overweight or obese in England was 64.0%. Prevalence of obesity in Year 6 children in England (2022/23) is 22.7%. The under 75 mortality rate from cancer (2022) in England is 122.4 per 100,000 people. The under 75 mortality rate from circulatory diseases (2022) in England is 77.8 per 100,000 people.



Data on specific health indicators has been collected by Public Health England for each local authority. The Local Authority Health Profiles provide an overview of health for each local authority in England. They pull together existing information in one place and contain data on a range of indicators for local populations, highlighting issues that can affect health in each locality.

The plan area is generally more obese and overweight compared to the National average. Child obesity is also higher in the North East CA area compared to the national average.

The mortality rate from cancer in under 75-year olds is generally more in the North East CA Area compared to the national average. This trend is also seen when referring to circulatory diseases.

Disability Living Allowance & Other Benefits	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
	In July 2024, 4.4% of the population in the North East region claimed out of work benefits.						
	In 2016, 2.1% of the North East region population were claiming Jobseekers Allowance (JSA) ¹¹⁵ .						
	Note the North East region covers a larger area and includes more local authorities than the North East CA area.						
	In July 2024 3.6% of people in County Durham claimed out of work benefits. In 2016 1.6% of people were claiming JSA.	In July 2024 4.8% of people in Gateshead claimed out of work benefits. In 2016 1.7% of people were claiming JSA.	In July 2024 5.0% of people in Newcastle upon Tyne claimed out of work benefits. In 2016 1.6% of people were claiming JSA.	In July 2024 3.7% of people in North Tyneside claimed out of work benefits. In 2016 1.8% of people were claiming JSA.	In July 2024 3.3% of people in Northumberland claimed out of work benefits. In 2016 1.8% of people were claiming JSA.	In July 2024 5.6% of people in South Tyneside claimed out of work benefits. In 2016 3.3% of people were claiming JSA.	In July 2024 4.8% of people in Sunderland claimed out of work benefits. In 2016 2.1% of people were claiming JSA.

¹¹⁵ Nomis (2024) *Labour Market Profile*. Available: [Labour Market Profile - Nomis - Official Census and Labour Market Statistics \(nomisweb.co.uk\)](https://nomisweb.co.uk)



Explanatory Text and anticipated future trends:

The number of people claiming Jobseeker’s Allowance has decreased nationally from 430,000 in August 2017 to 360,000 in August 2018 due to the introduction of Universal Credit.

The number of people claiming Disability Living Allowance has also continued to decrease nationally from 2013.

General Health	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>In the North East region¹¹⁶;</p> <ul style="list-style-type: none"> ▪ The suicide rate (persons, 10+) between 2022 to 2023 is recorded at 13.5 per 100,000 people, ▪ 13.1% of the North East’s adult population (18+) in 2022 were classed as current smokers, ▪ Men live for around 59.4 years in good health, compared to women who live for around 59.7 years¹¹⁷, ▪ In 2016/7, the rate of use of opiates or crack cocaine per 1,000 of the population was 11.2¹¹⁸. <p>Note the North East region covers a larger area and includes more local authorities than the North East CA area.</p>							
The suicide rate (persons, 10+) is recorded at 16.8 per 100,000 people.	The suicide rate (persons, 10+) between 2022 to 2023 is recorded at 11.0 per 100,000 people.	The suicide rate (persons, 10+) between 2022 to 2023 is recorded at 11.0 per 100,000 people.	The suicide rate (persons, 10+) between 2022 to 2023 is recorded at 11.8 per 100,000 people.	The suicide rate (persons, 10+) between 2022 to 2023 is recorded at 11.2 per 100,000 people.	The suicide rate (persons, 10+) between 2022 to 2023 is recorded at 8.9 per 100,000 people.	The suicide rate (persons, 10+) between 2022 to 2023 is recorded at 14.0 per 100,000 people.	

¹¹⁶ Office for Health Improvements and Disparities (2023) *Local Authority Health Data*. Available: [Local Authority Health Profiles - Data | Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)

¹¹⁷ ONS (2019) *Health state life expectancy at birth and at age 65 years by local areas, UK*. Available: [Health state life expectancy at birth and at age 65 years by local areas, UK - Office for National Statistics \(ons.gov.uk\)](#)

¹¹⁸ Public Health England (2024) *Opiate and crack cocaine use: prevalence estimates by local area*. Available: [Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)



15.4% of the adult population in County Durham were classed as current smokers.	11.1% of the adult population in Gateshead were classed as current smokers.	12.1% of the adult population in Newcastle upon Tyne were classed as current smokers.	11.2% of the adult population in North Tyneside were classed as current smokers.	15.4% of the adult population in county Durham were classed as current smokers.	15.2% of the adult population in South Tyneside were classed as current smokers.	13.2% of the adult population in Sunderland were classed as current smokers.
Men in this area live for around 59.3 years in good health, compared to women who live for around 58.4 years.	Men in this area live for around 60.8 years in good health, compared to women who live for around 57.7 years.	Men in this area live for around 59.2 years in good health, compared to women who live for around 59.1 years.	Men in this area live for around 60.7 years in good health, compared to women who live for around 63.3 years.	Men in this area live for around 61.2 years in good health, compared to women who live for around 63.1 years.	Men in this area live for around 58.9 years in good health, compared to women who live for around 59.3 years.	Men in this area live for around 57.9 years in good health, compared to women who live for around 56.5 years.
In 2016/17, the rate of use of opiates or crack cocaine per 1,000 of the population was 8.5.	In 2016/17, the rate of use of opiates or crack cocaine per 1,000 of the population was 14.2.	In 2016/17, the rate of use of opiates or crack cocaine per 1,000 of the population was 10.7.	In 2016/7, the rate of use of opiates or crack cocaine per 1,000 of the population was 8.0.	In 2016/7, the rate of use of opiates or crack cocaine per 1,000 of the population was 8.5.	In 2016/7, the rate of use of opiates or crack cocaine per 1,000 of the population was 7.8.	In 2016/7, the rate of use of opiates or crack cocaine per 1,000 of the population was 9.2.

Explanatory Text and anticipated future trends:

The suicide rate in the North East CA area is generally worse than the national average (10.3 per 100,000 people), but predominantly better than in the North East. The North East CA area performs slightly worse than England (12.7%) and the North East (13.1%) in relation to smoking prevalence but better in relation to good health years (53.4 years for males, 63.9 years for females). Gateshead also has a higher proportion of the population who are opiate/crack users compared to the other local authorities in relation to the national average (8.9 per 1,000).



Musculoskeletal Health

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
In the North East region in 2023, 23.1% of the population reported a long term Musculoskeletal (MSK) problem ¹¹⁹ .						
Note the North East region covers a larger area and includes more local authorities than the North East CA area.						
In County Durham in 2023, 25.0% of the population reported a long term Musculoskeletal (MSK) problem.	In Gateshead in 2023, 22.4% of the population reported a long term Musculoskeletal (MSK) problem.	In Newcastle upon Tyne in 2023, 17.6% of the population reported a long term Musculoskeletal (MSK) problem.	In North Tyneside in 2023, 21.2% of the population reported a long term Musculoskeletal (MSK) problem.	In Northumberland in 2023, 21.8% of the population reported a long term Musculoskeletal (MSK) problem.	In South Tyneside in 2023, 24.8% of the population reported a long term Musculoskeletal (MSK) problem.	In Sunderland in 2023, 26.1% of the population reported a long term Musculoskeletal (MSK) problem.
Explanatory Text and anticipated future trends:						
<p>The term Musculoskeletal Conditions (MSK) encompasses well over 200 disorders affecting bones, muscles and soft tissues and also includes musculoskeletal injuries due to sports, workplace accidents and trauma related to external causes such as falls and road traffic accidents.</p> <p>A growing level of obesity coupled with low levels of physical activity are storing up potential problems for future generations. Falls are the largest cause of emergency hospital admission amongst older people nationally and a significant determining factor in a permanent move into nursing or residential care. The majority of hospital admissions for falls within BNSSG occur in the home and relate to falls on the same level, indicating proprioception, balance or muscle strength issues – issues that could be tackled through exercise therapy or support from OT services. With some MSK conditions associated with lifestyle factors such as obesity and lack of physical activity, a preventative approach may also be possible with sub-clinical groups¹²⁰.</p>						

¹¹⁹ Office for Health Improvements and Disparities (2024) *Musculoskeletal health: local profiles*. Available: [Musculoskeletal Conditions - Data - OHID \(phe.org.uk\)](https://phe.org.uk)

¹²⁰ Bristol City Council (2023) *JSNA Health and Wellbeing Profile 2023/24*. Available: [JSNA - Falls \(bristol.gov.uk\)](https://bristol.gov.uk)



Respiratory Health

County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>In the North East region¹²¹;</p> <ul style="list-style-type: none"> In 2020, the mortality rate for respiratory disease was 127.7 deaths per 100,000 of the population, The mortality from COPD in the North East has increased from 54.7 per 100,000 in 2021 to 58.9 per 100,000 in 2022, The mortality rate from pneumonia as an underlying cause has decreased to 44.2 per 100,000 of the population between 2017-2019. <p>Note the North East region covers a larger area and includes more local authorities than the North East CA area.</p>						
In 2022 in County Durham, the mortality rate for respiratory disease was 137.1 deaths per 100,000 of the population.	In 2022 in Gateshead, the mortality rate for respiratory disease was 118.3 deaths per 100,000 of the population.	In 2022 in Newcastle upon Tyne, the mortality rate for respiratory disease was 126.9 deaths per 100,000 of the population.	In 2022 in North Tyneside, the mortality rate for respiratory disease was 122.1 deaths per 100,000 of the population.	In 2022 in Northumberland, the mortality rate for respiratory disease was 96.4 deaths per 100,000 of the population.	In 2022 in South Tyneside, the mortality rate for respiratory disease was 138.2 deaths per 100,000 of the population.	In 2022 in Sunderland, the mortality rate for respiratory disease was 139.0 deaths per 100,000 of the population.

Explanatory Text and anticipated future trends:

Respiratory disease affects one in five people and is the third biggest cause of death in England. Lung cancer, pneumonia and chronic obstructive pulmonary disease (COPD) are the biggest causes of death. Respiratory diseases are a major factor in winter pressures faced by the NHS; most respiratory admissions are non-elective and during the winter period these double in number. Incidence and mortality rates from respiratory disease are higher in disadvantaged groups and areas of social deprivation, with the gap widening and

¹²¹ Office for Health Improvements and Disparities (2024) *Respiratory disease: local profiles*. Available: [Respiratory disease - Data | Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)



leading to worse health outcomes. The most deprived communities have a higher incidence of smoking rates, exposure to higher levels of air pollution, poor housing conditions and exposure to occupational hazards.¹²²

Physical Activity including Walking & Cycling	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
In the North East region;							
<ul style="list-style-type: none"> ▪ Between 2022-23, 63.2% of the population was classed as physically active adults (19+)123, ▪ In 2019/2020, 1.8% of the population were adults who cycle for travel at least three times per week, ▪ In 2019/2020, 13.2% of the population were adults who walk for travel at least three times per week. 							
Note the North East region covers a larger area and includes more local authorities than the North East CA area.							
Between 2022-23, 62.0% of the population was classed as physically active adults in County Durham.	Between 2022-23, 56.0% of the population was classed as physically active adults in Gateshead.	Between 2022-23, 69.0% of the population was classed as physically active adults in Newcastle upon Tyne.	Between 2022-23, 62.2% of the population was classed as physically active adults in North Tyneside.	Between 2022-23, 69.2% of the population was classed as physically active adults in Northumberland.	Between 2022-23, 60.7% of the population was classed as physically active adults South Tyneside.	Between 2022-23, 63.4% of the population was classed as physically active adults in Sunderland.	
In 2019/2020, 0% of the population of County Durham were adults who cycle for travel	In 2019/2020, 2.8% of the population of Gateshead were adults who cycle for travel at least	In 2019/2020, 3.5% of the population of Newcastle upon Tyne were adults who cycle	In 2019/2020, 3.1% of the population of North Tyneside were adults who cycle for travel	In 2019/2020, 2.3% of the population of Northumberland were adults who cycle for travel at	In 2019/2020, 1.7% of the population of South Tyneside were adults who cycle for travel	In 2019/2020, 1.1% of the population of Sunderland were adults who cycle for travel	

¹²² NHS England (2024) *Respiratory Disease*. Available: [NHS England » Respiratory disease](#)

¹²³ Office for Health Improvements and Disparities (2024) *Physical Activity: local profiles*. Available: [Physical Activity - Data | Fingertips | Department of Health and Social Care \(phe.org.uk\)](#)



at least three times per week.	three times per week.	for travel at least three times per week.	at least three times per week.	least three times per week.	at least three times per week.	at least three times per week.
In 2019/2020, 10.0% of the population of County Durham were adults who walk for travel at least three times per week.	In 2019/2020, 12.2% of the population of Gateshead were adults who walk for travel at least three times per week.	In 2019/2020, 23.6% of the population of Newcastle upon Tyne were adults who walk for travel at least three times per week.	In 2019/2020, 16.7% of the population of North Tyneside were adults who walk for travel at least three times per week.	In 2019/2020, 10.5% of the population of Northumberland were adults who walk for travel at least three times per week.	In 2019/2020, 15.1% of the population of South Tyneside were adults who walk for travel at least three times per week.	In 2019/2020, 13.1% of the population of Sunderland were adults who walk for travel at least three times per week.

Explanatory Text and anticipated future trends:

The proportion of adults being active and participating in physical activity has decreased over the years. The North East CA area is generally less active than the National average (67.1%) with the proportion of those cycling (2.3%) and walking at least three times a week being higher than the average in England.

As new development occurs in the plan area opportunities to encourage physical activity among residents including the uptake of more active modes of transport in the plan area are likely to emerge. **This may include through the incorporation of open space which could serve a large number of residents or the appropriate integration of new active transport routes. It is expected that without a more strategic approach to development in the plan area these opportunities are less likely to be achieved.**



Crime & Safety	County Durham	Gateshead	Newcastle	North Tyneside	Northumberland	South Tyneside	Sunderland
<p>In the North East region in the year ending March 2024, total recorded crime (excluding fraud) was 106.3 per 1,000 of the population. Violence by the person had the highest rate at 39.9 per 1,000 population, followed by theft offences at 32.1 per 1,000¹²⁴. Note no local authority level data is freely available.</p> <p>In the North East CA area, the total reported road collisions as an average of the combined local authority totals was 2,381, of which 39 were fatal in 2022¹²⁵.</p> <p>Note the North East region covers a larger area and includes more local authorities than the North East CA area.</p>							
In County Durham, the total reported road collisions in 2022 was 507, 16 of which were fatal.	In Gateshead, the total reported road collisions in 2022 was 300, 2 of which were fatal.	In Newcastle upon Tyne, the total reported road collisions in 2022 was 433, 4 of which were fatal.	In North Tyneside, the total reported road collisions in 2022 was 203, 1 of which were fatal.	In Northumberland, the total reported road collisions in 2022 was 456, 7 of which were fatal.	In South Tyneside, the total reported road collisions in 2022 was 160, 2 of which were fatal.	In Sunderland, the total reported road collisions in 2022 was 322, 7 of which were fatal.	
<p>Explanatory Text and anticipated future trends:</p> <p>While the latest figures do not show a statistically significant change in total crime compared with the year ending March 2023, they do follow a long-term downward trend and more recent falls, with total crime 3% lower in England than the year ending March 2023. Crime across England shows regional variations, with the North East having the second highest rate of crime in the year ending March 2024 (106.3 per 1000 people, as opposed to 69.8 per 1000 people in the south west).</p>							

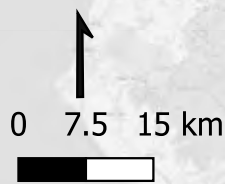
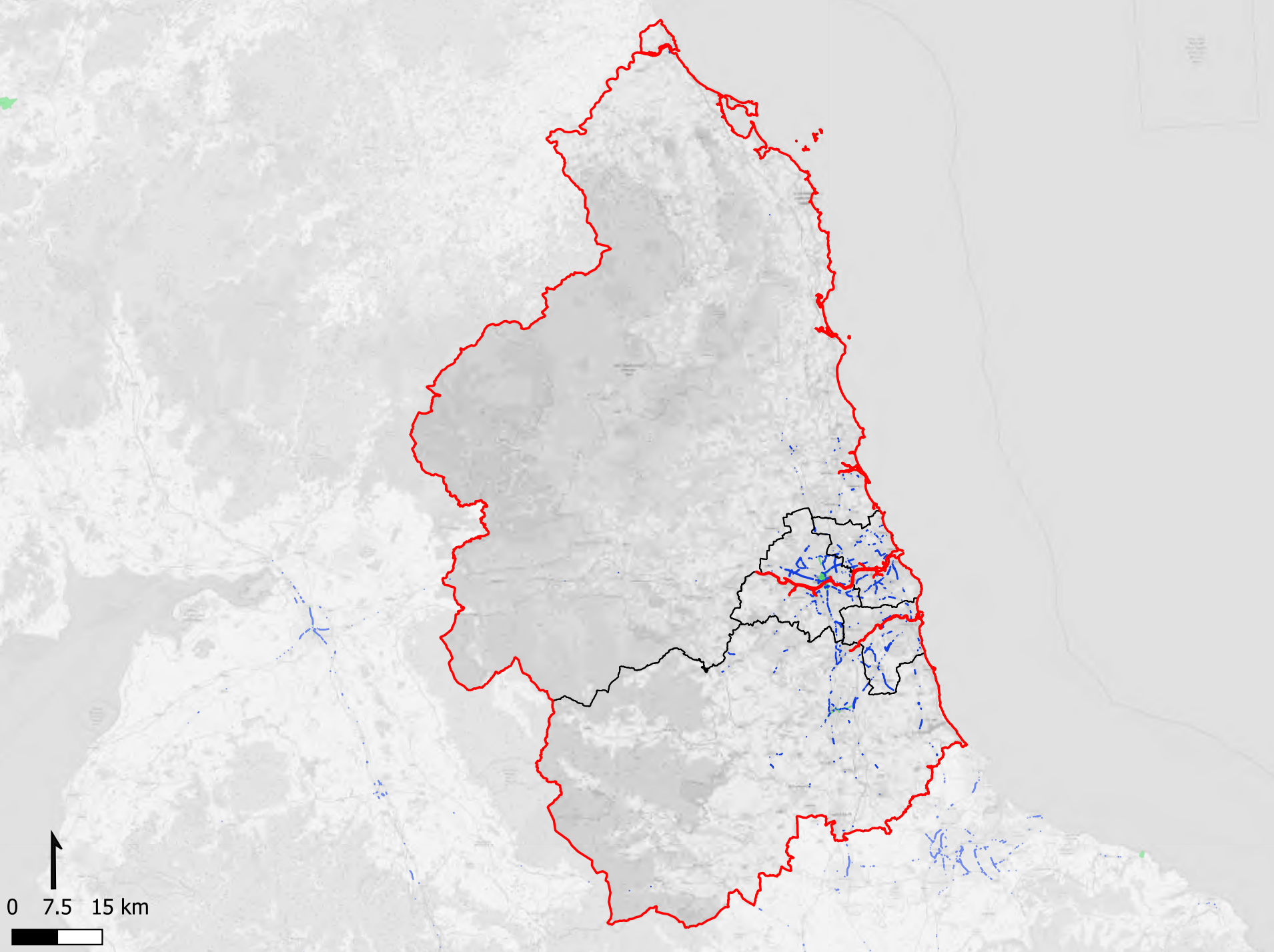
¹²⁴ ONS (2024) *Crime in England and Wales: Police Force Area Data Tables*. Available: [Crime in England and Wales: Police Force Area data tables - Office for National Statistics \(ons.gov.uk\)](#)

¹²⁵ Department for Transport (2024) [Reported road collisions, vehicles and casualties tables for Great Britain - GOV.UK \(www.gov.uk\)](#)



Appendix D. Baseline Figures





GENERAL NOTES
 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
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Legend

Boundaries

- NECA Boundary
- Local Authority Boundary

Air Quality

- Noise Action Important Area

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Project North East Local Transport Plan				Status For Issue	Drawing Number 4	Rev 0		

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KEY PLAN



SCHEME LOCATION

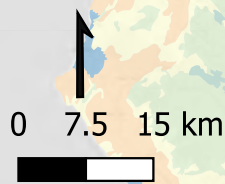
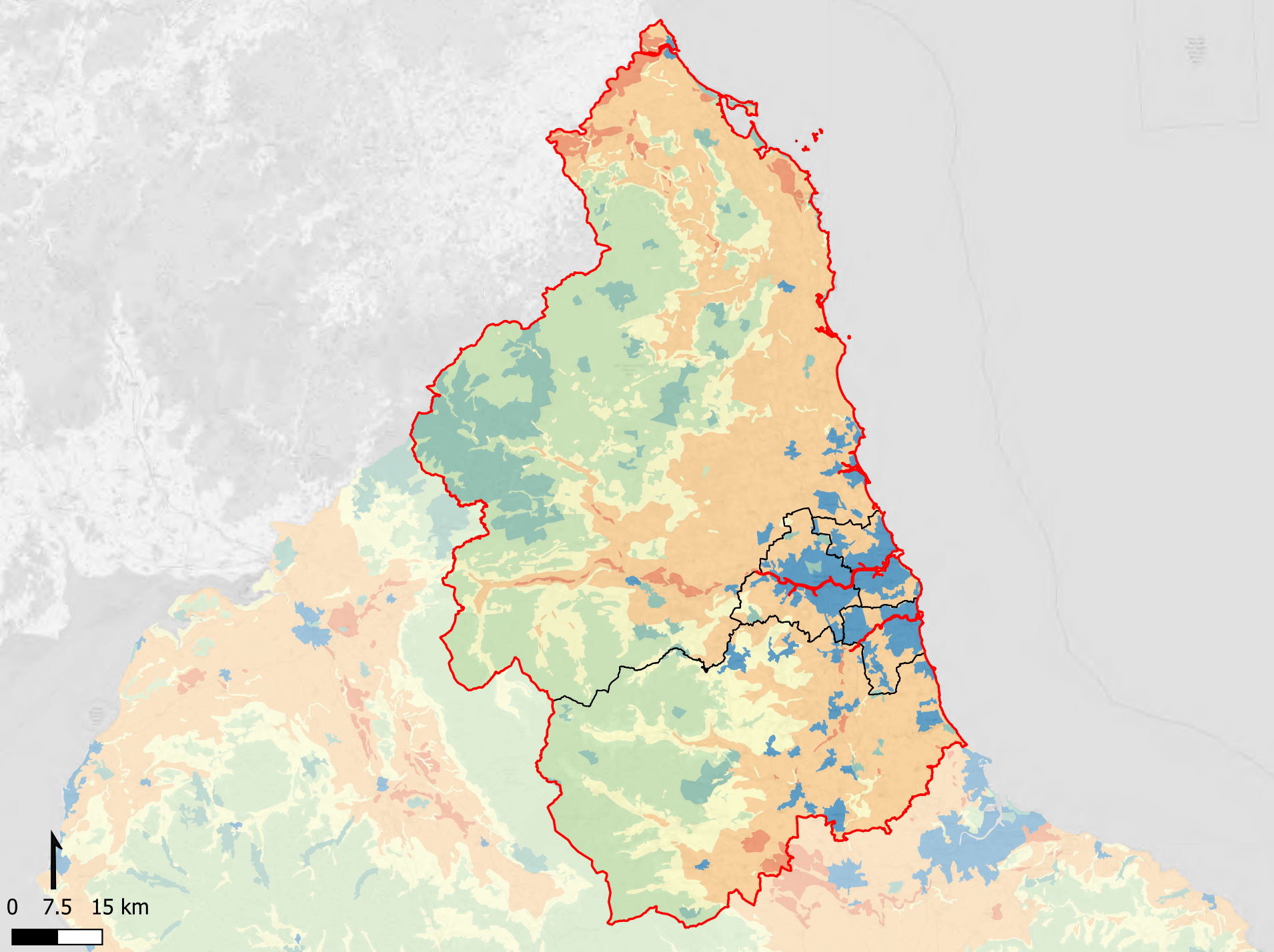
Legend

- NECA Boundary
- Local Authority Boundary

Soils, Geology & Land Use

Agricultural Land Classification

- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Non Agricultural
- Urban



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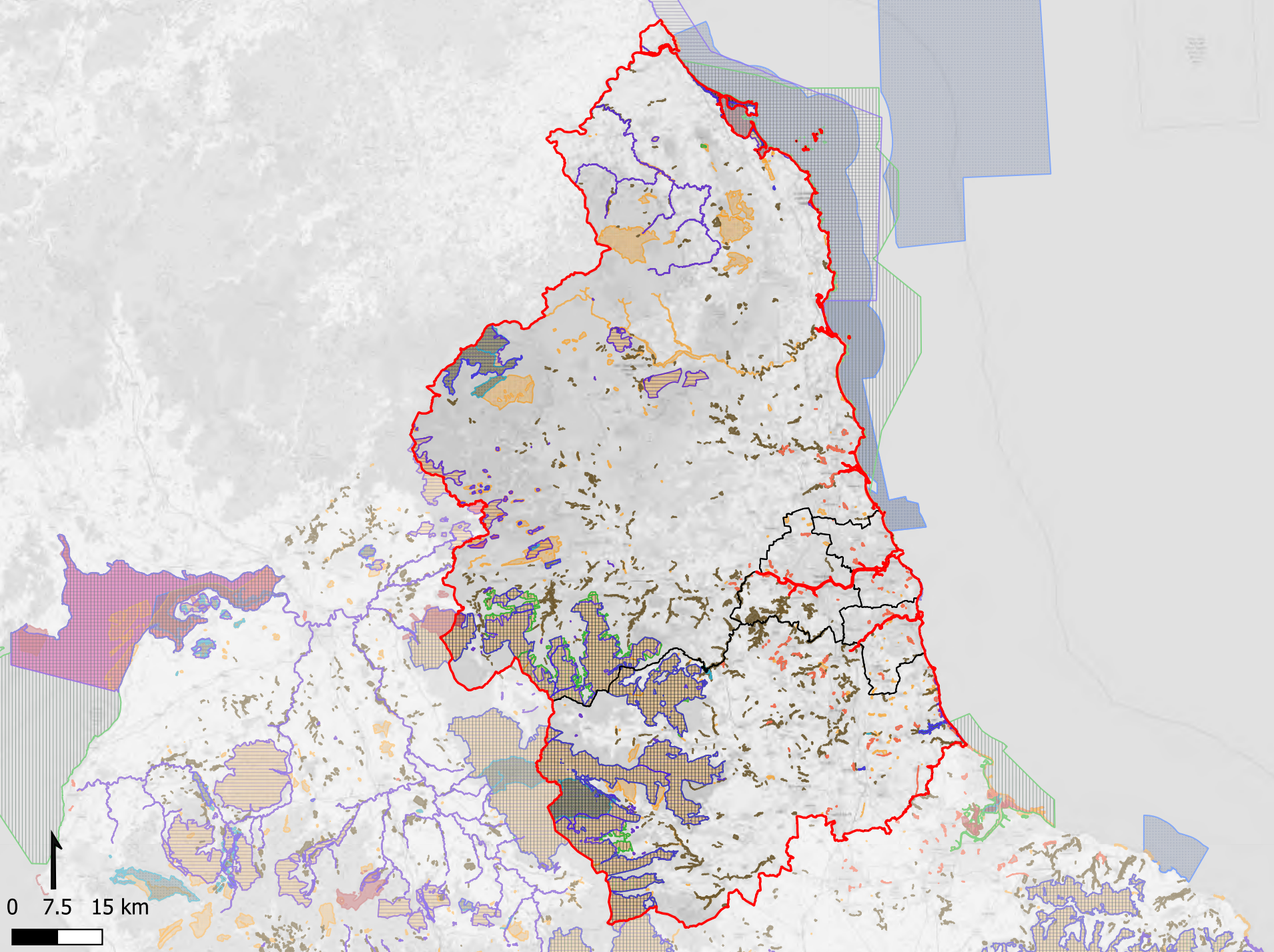
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Client	North East CA		
Project	North East Local Transport Plan		
Title	Soils, Geology and Land Use (1/2)	Des/Drawn JC	Checked CA
Date	21/08/2024	Authorised AJ	Date
Status	For Issue	Drawing Number 8	Rev 0
Purpose	ISA Report		



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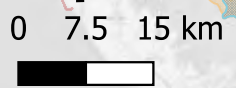
SCHEME LOCATION

Legend

- NECA Area Boundary
- Local Authority Boundary

Biodiversity

- Sites of Special Scientific Interest
- Special Areas of Conservation
- RSPB Reserves
- Local Nature Reserves
- Ancient Woodland
- Marine Conservation Zones
- National Nature Reserves
- Special Protection Area
- Ramsar Sites



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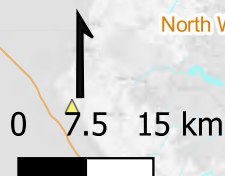
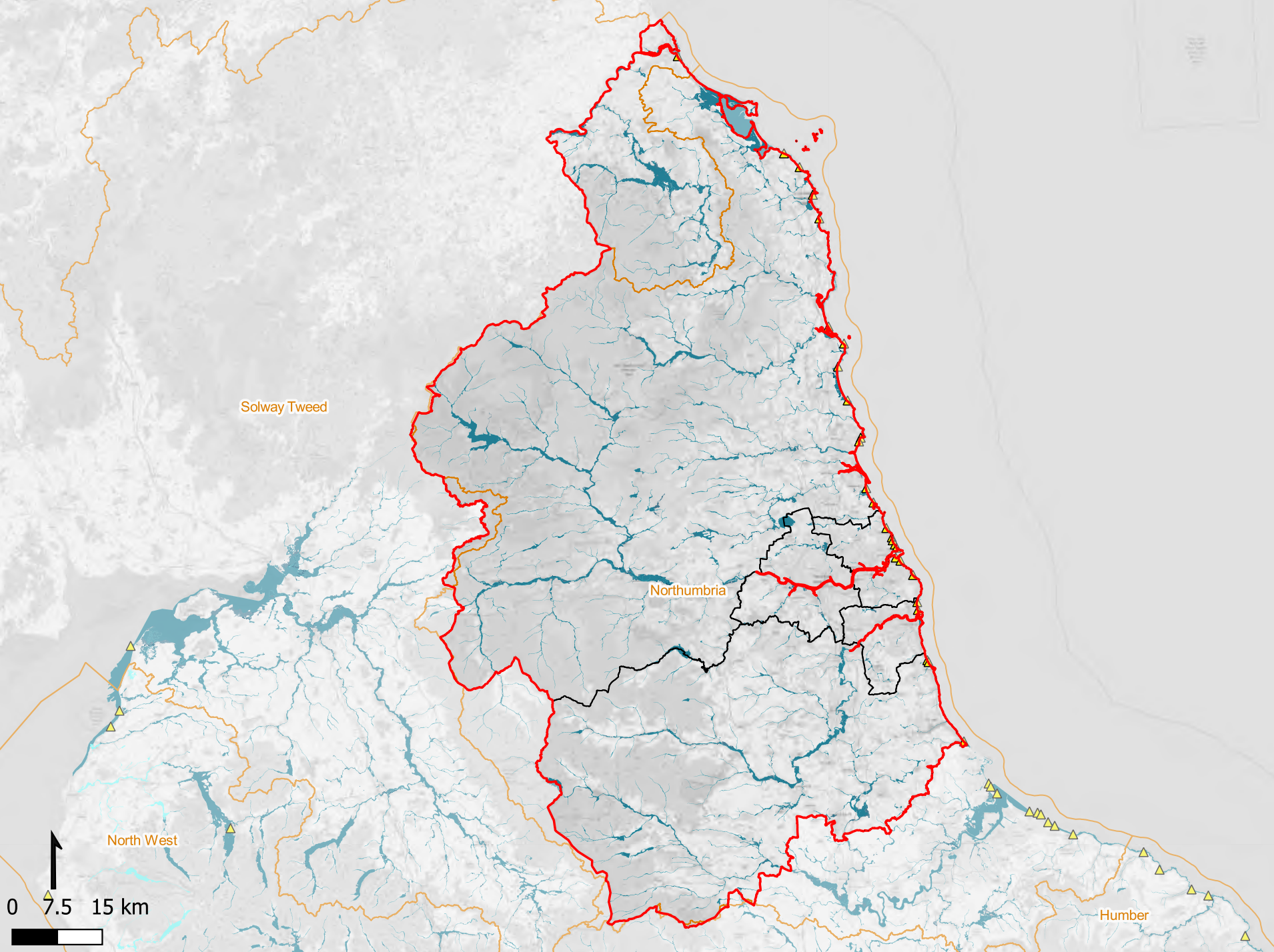
Client
North East CA

Project
North East Local Transport Plan

Purpose
ISA Report

Title Biodiversity (1/2)	Des/Drawn JC	Checked CA	Authorized AJ
	Date 21/08/2024	Date	Date

Status For Issue	Drawing Number 2	Rev 0
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- Legend**
- NECA Boundary
 - Local Authority Boundary
 - River Basin Districts
 - ▲ Bathing Water Quality Sites
 - Flood Zone 2
 - Flood Zone 3

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Title	Des/Drawn	Checked	Authorised																										
Flood Risk	JC	CA	AJ																										
	Date	Date	Date																										
	21/08/2024																												
Project	Status	Drawing Number	Rev																										
North East Local Transport Plan	For Issue	5	0																										

GENERAL NOTES

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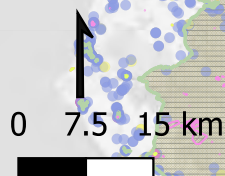
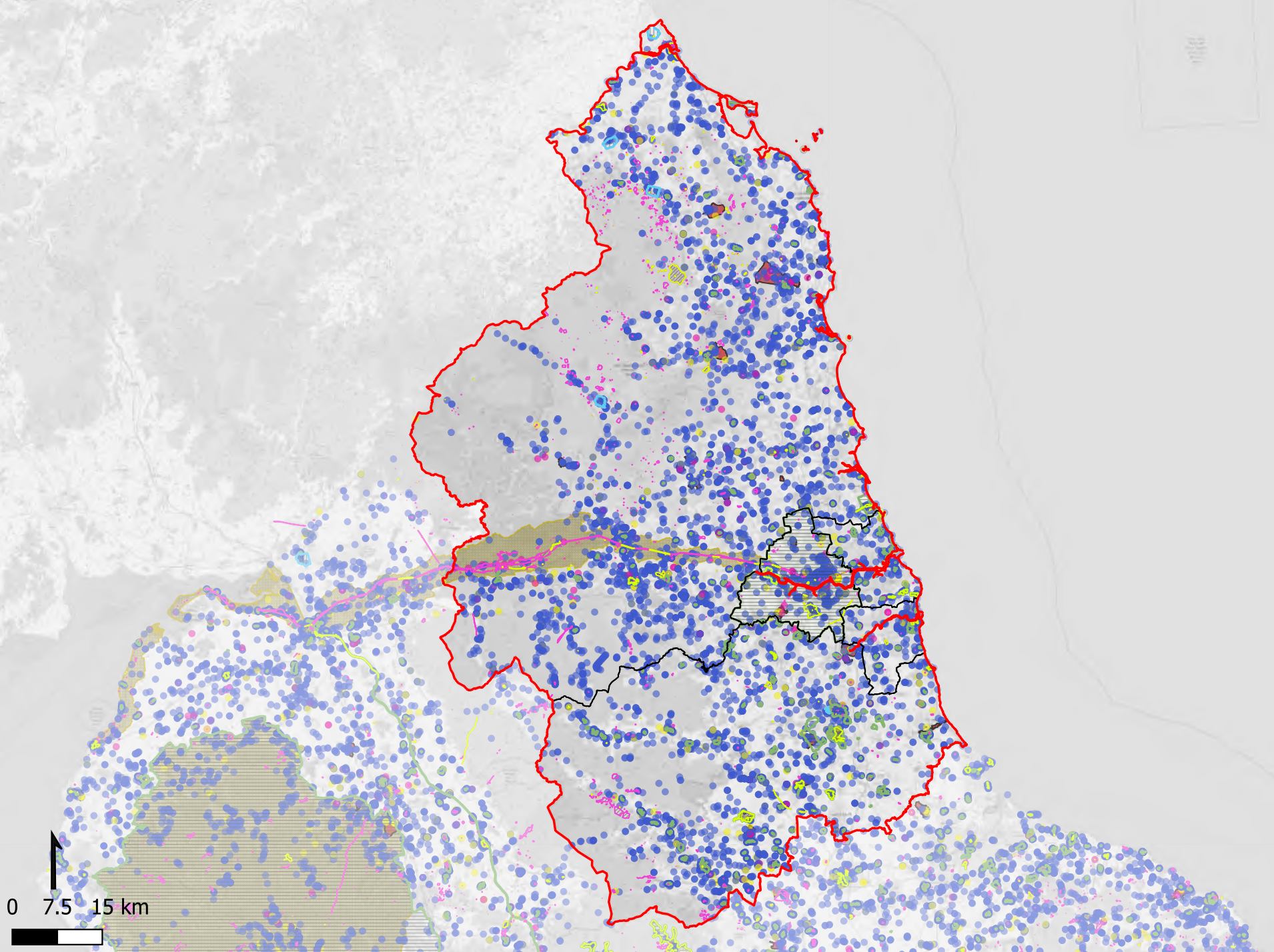
KEY PLAN



SCHEME LOCATION

Legend

- NECA Boundary
- Local Authority Boundary
- Historic Environment**
 - Heritage at Risk
 - Registered Battlefields
 - Scheduled Monuments
 - Conservation Areas
- Listed Building**
 - I
 - II
 - II*
- Registered Parks and Gardens
- World Heritage Sites



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Client
North East CA

Project
North East Local Transport Plan

ISA Report

Title Historic Environment	Des/Drawn JC	Checked CA	Authorised AJ
	Date 21/08/2024	Date	Date
Status For Issue	Drawing Number 6		Rev 0

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KEY PLAN



SCHEME LOCATION

Legend

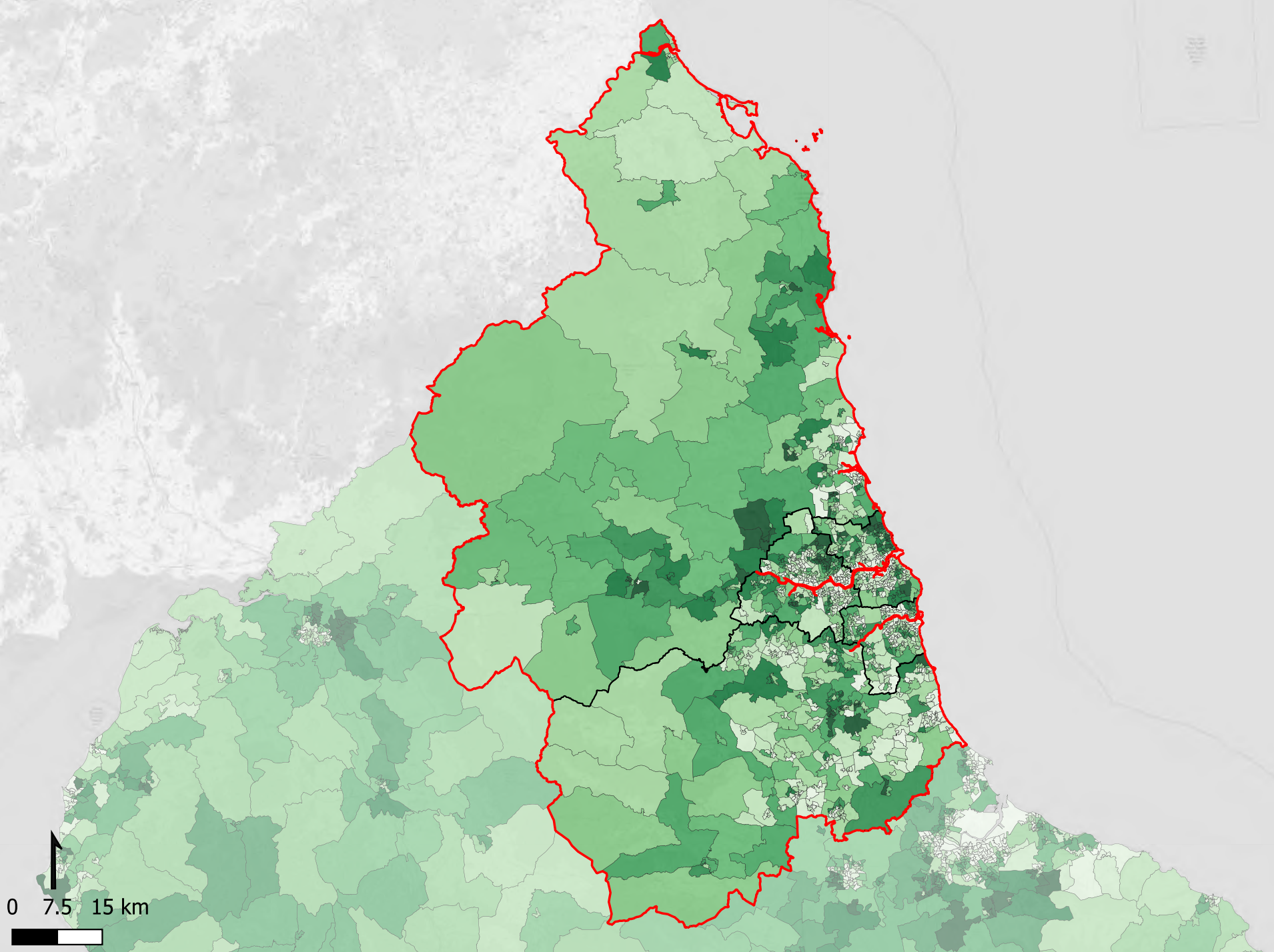
Boundaries

NECA Boundary

Local Authority Boundary

IMD2019 - Decile

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10



Purpose ISA Report

Indices of Multiple Deprivation	Des/Drawn	Checked	Authorised
	JC	CA	AJ
Date	Date	Date	
	21/08/2024		

Client	North East CA
Project	North East Local Transport Plan

Status	For Issue	Drawing Number	12	Rev	0
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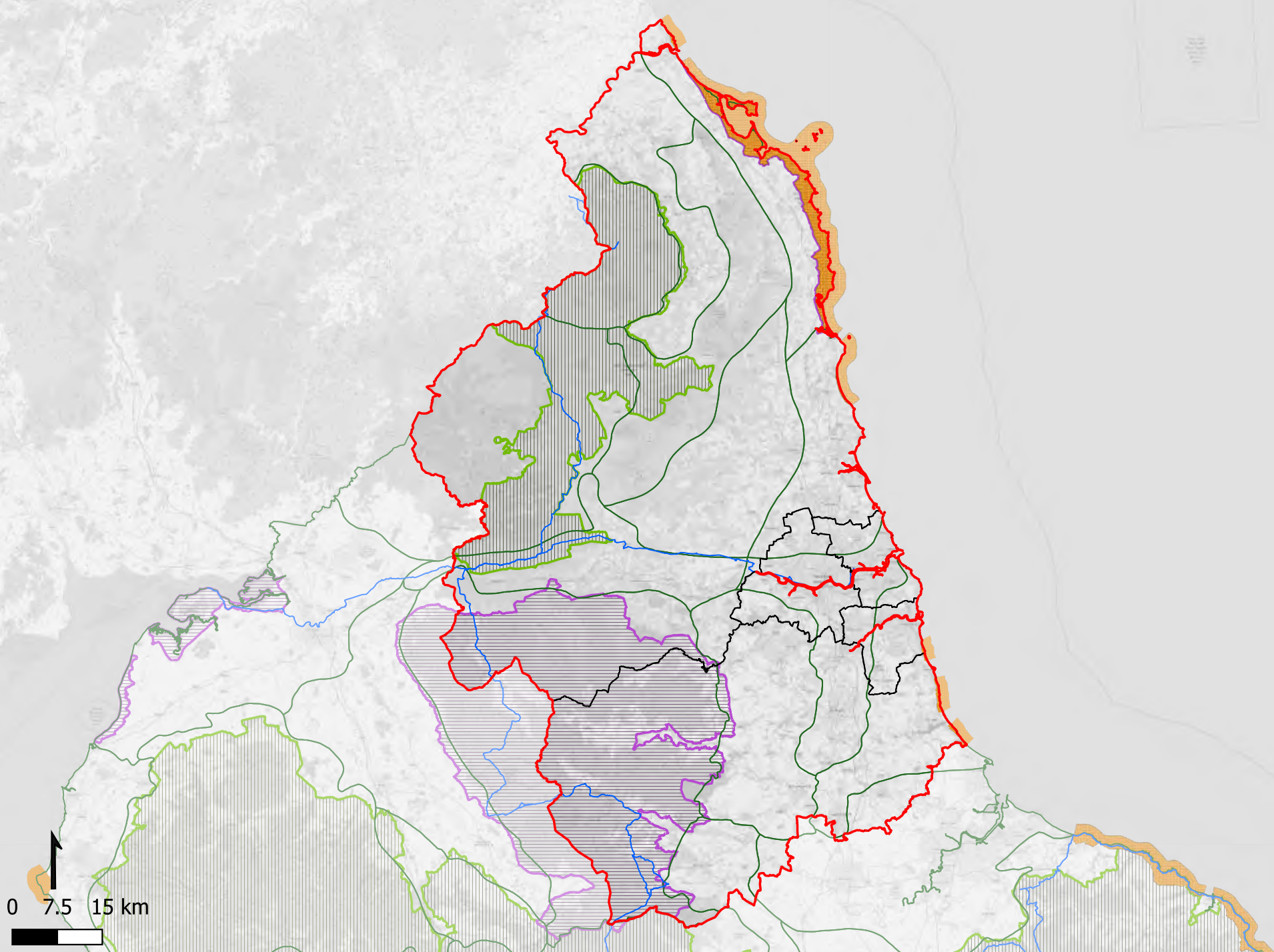
KEY PLAN



SCHEME LOCATION

Legend

-  NECA Boundary
-  Local Authority Boundary
- Landscape**
-  National Trails
-  National Character Areas
-  Heritage Coasts
-  National Landscapes (AONB)
-  National Parks



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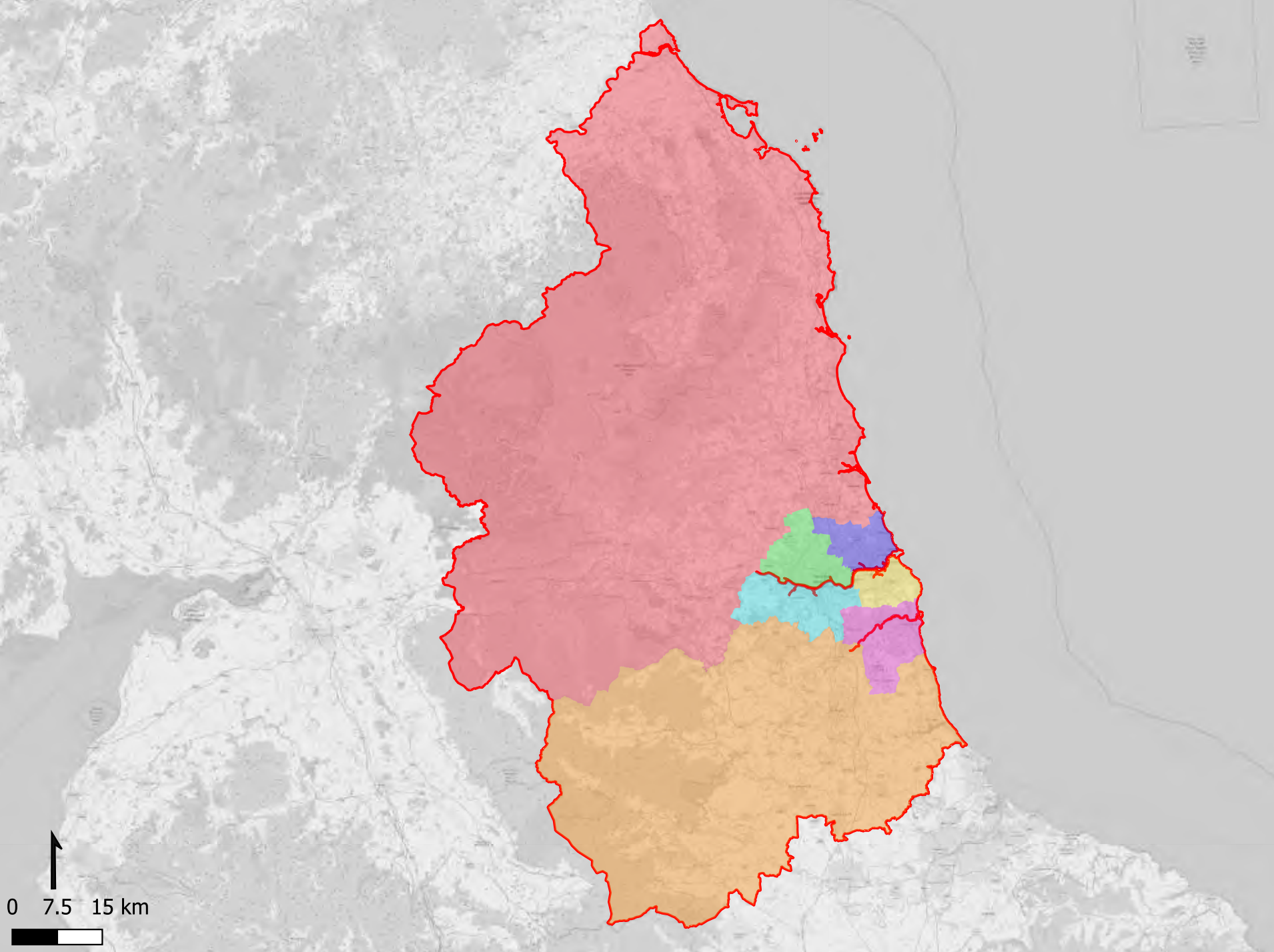
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Client	North East CA
Project	North East Local Transport Plan

Purpose **ISA Report**

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Landscape	JC	CA	AJ
	Date	Date	Date
	21/08/2024		

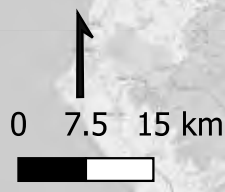
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For Issue	7	0



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- Legend**
- NECA Area Boundary
- Local Authority Boundaries**
- Northumberland
 - South Tyneside
 - Newcastle upon Tyne
 - North Tyneside
 - County Durham
 - Gateshead
 - Sunderland



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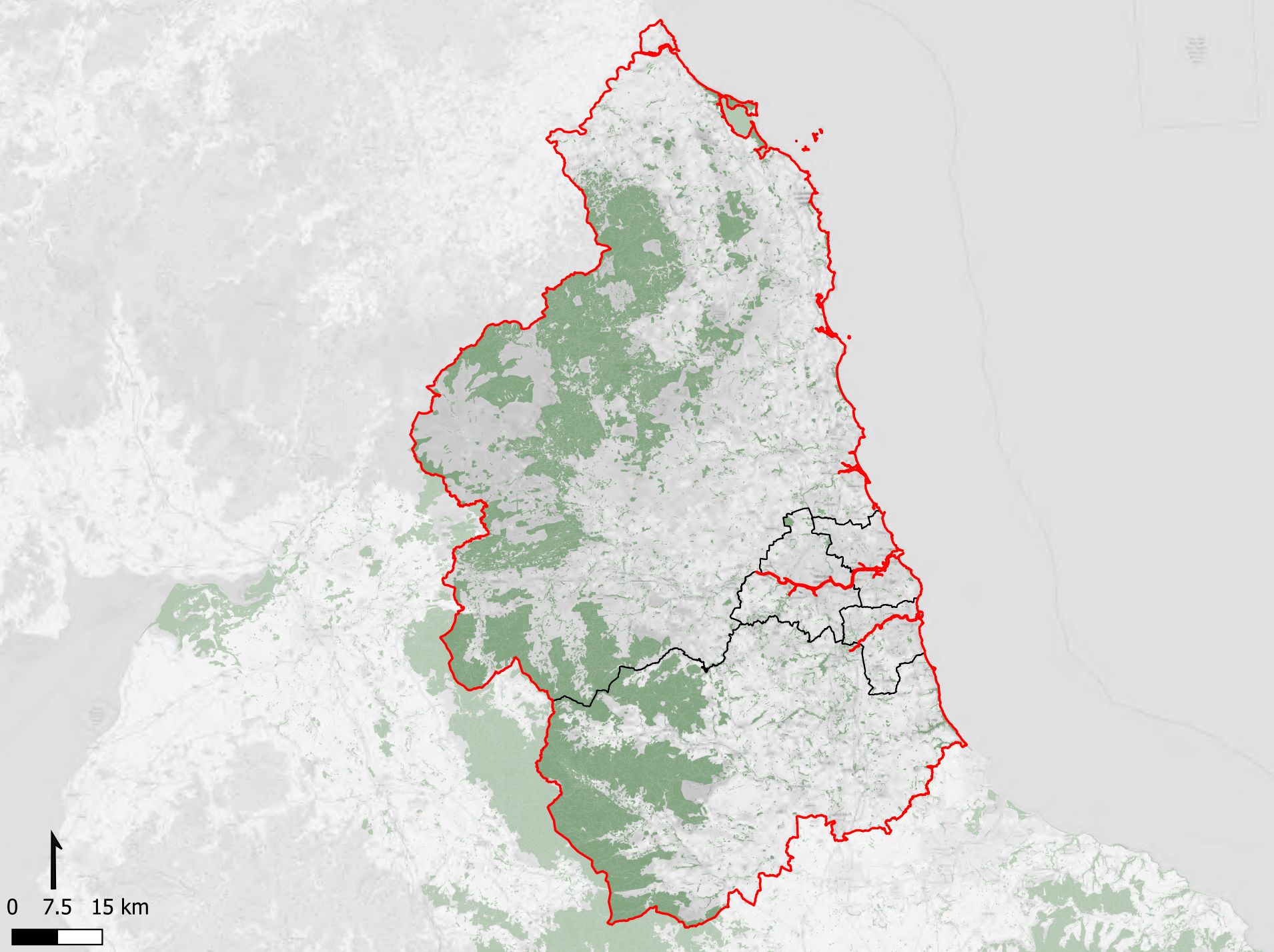


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Client	North East CA	
Project	North East Local Transport Plan	

Purpose	ISA Report		
Title	Des/Drawn	Checked	Authorized
	JC	CA	AJ
Location Map	Date	Date	Date
	21/08/2024		
Status	For Issue	Drawing Number	Rev
		1	0



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- Legend**
- NECA Boundary
 - Local Authority Boundary
- Biodiversity**
- Priority Habitat

GENERAL NOTES

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
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KEY PLAN





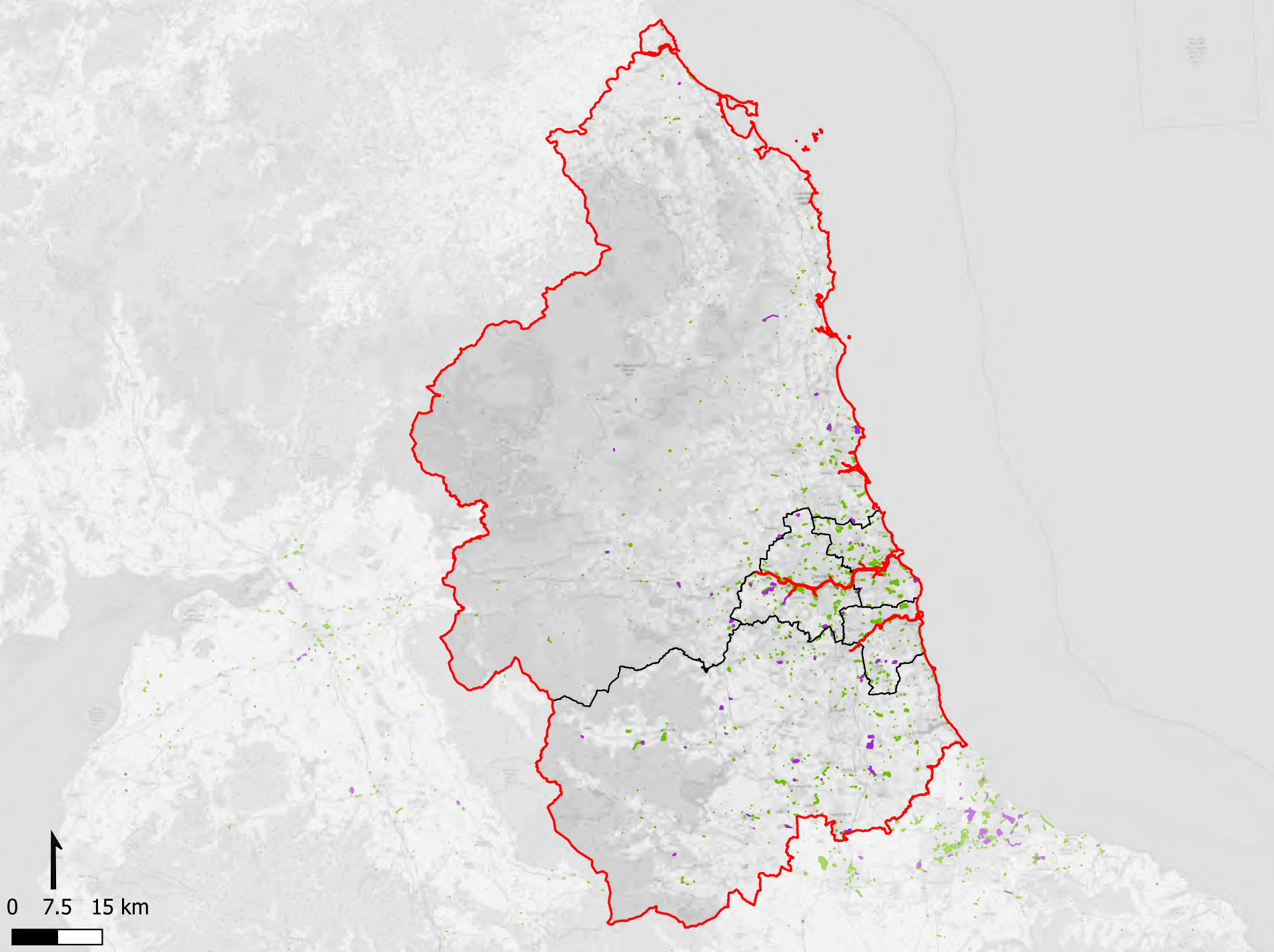
SCHEME LOCATION

Legend

-  NECA Boundary
-  Local Authority Boundary

Resources and Waste

-  Permitted Waste Sites
-  Historic Landfill Sites



Purpose: **ISA Report**

Resources & Waste	Des/Drawn	Checked	Authorised
	JC	CA	AJ
	Date	Date	Date
	21/08/2024		

Client: **North East CA**

Project: **North East Local Transport Plan**

Status	Drawing Number	Rev
For Issue	11	0

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







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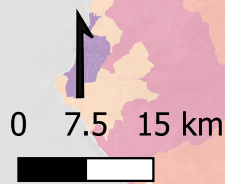
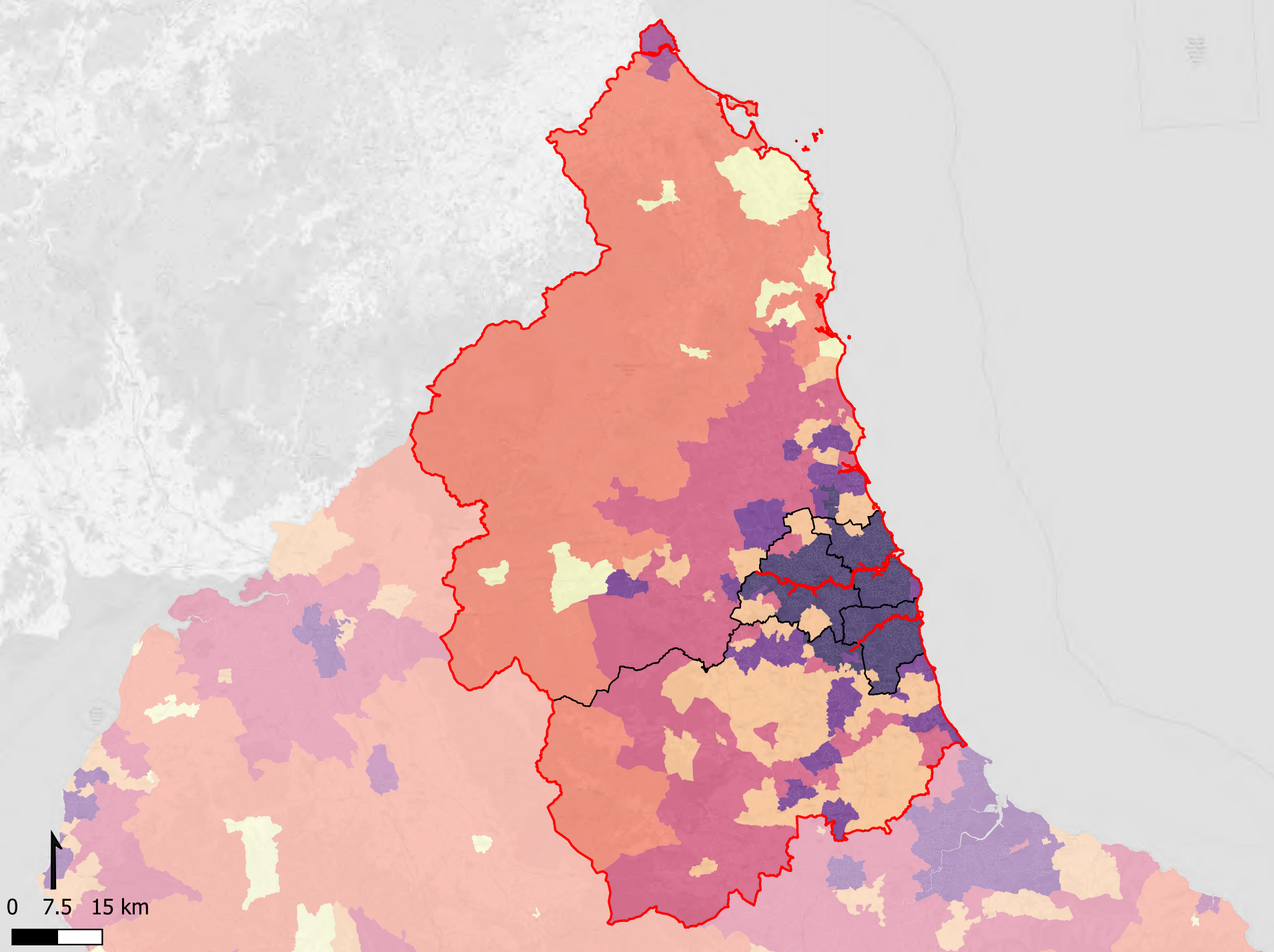
KEY PLAN



SCHEME LOCATION

Legend

-  NECA Boundary
-  Local Authority Boundary
- Rural - Urban Classification**
-  Rural town and fringe
-  Rural town and fringe in a sparse setting
-  Rural village and dispersed
-  Rural village and dispersed in a sparse setting
-  Urban city and town in a sparse setting
-  Urban city and town
-  Urban major conurbation



Purpose ISA Report

Title Rurality	Des/Drawn JC	Checked CA	Authorized AJ
	Date 21/08/2024	Date	Date

Status For Issue	Drawing Number 13	Rev 0
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AtkinsRéalis

5th Floor,
The Vantage,
32-36 Great Victoria Street,
Belfast, BT2 7BA

Client North East CA

Project North East Local Transport Plan
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GENERAL NOTES

1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE





2. ONLY WRITTEN DIMENSIONS SHOULD BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS.

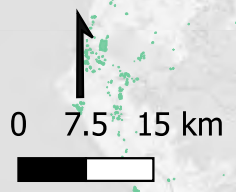
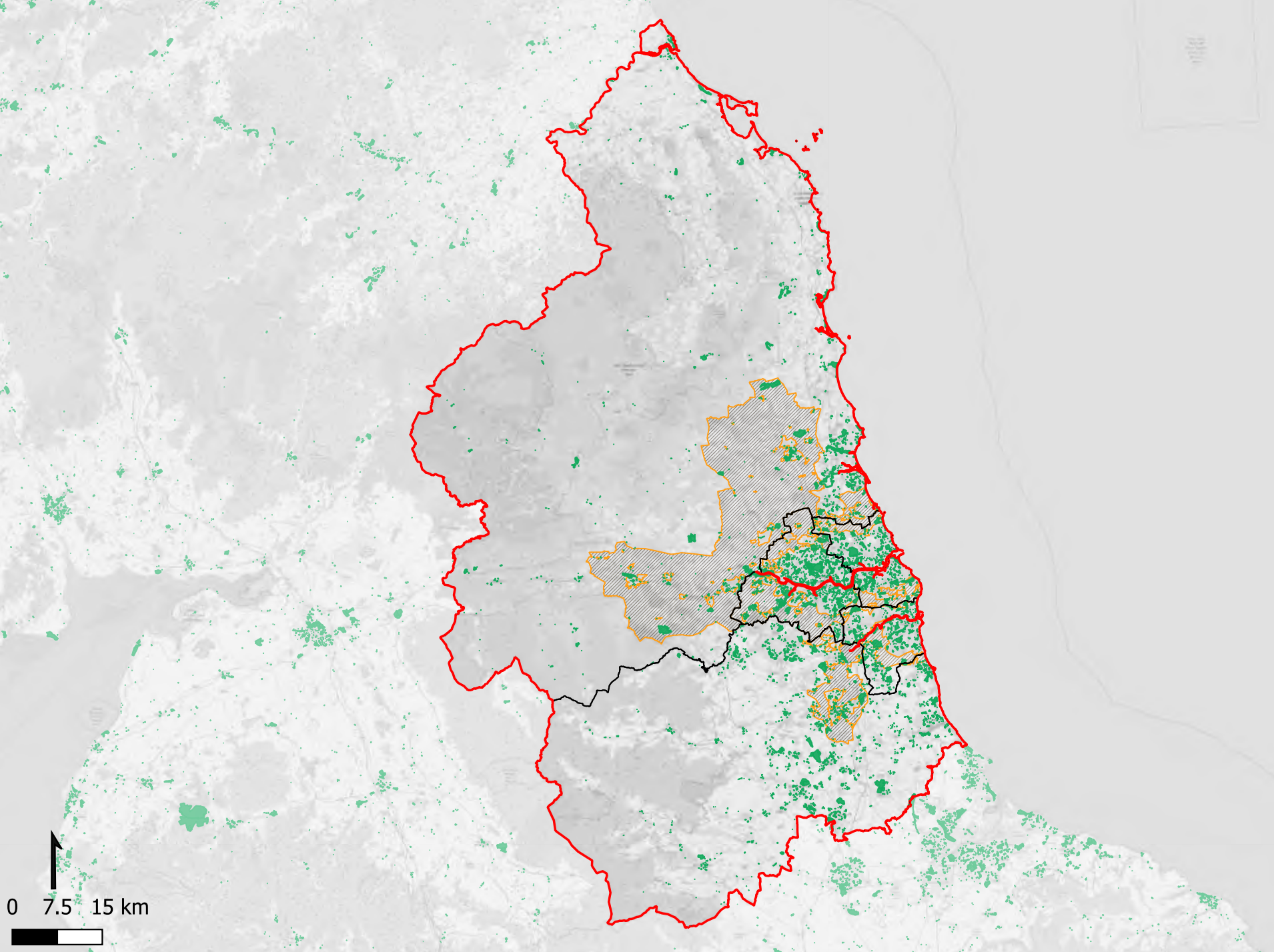
KEY PLAN



SCHEME LOCATION

Legend

-  NECA Boundary
-  Local Authority Boundary
-  OS Open Greenspace
-  Green Belt



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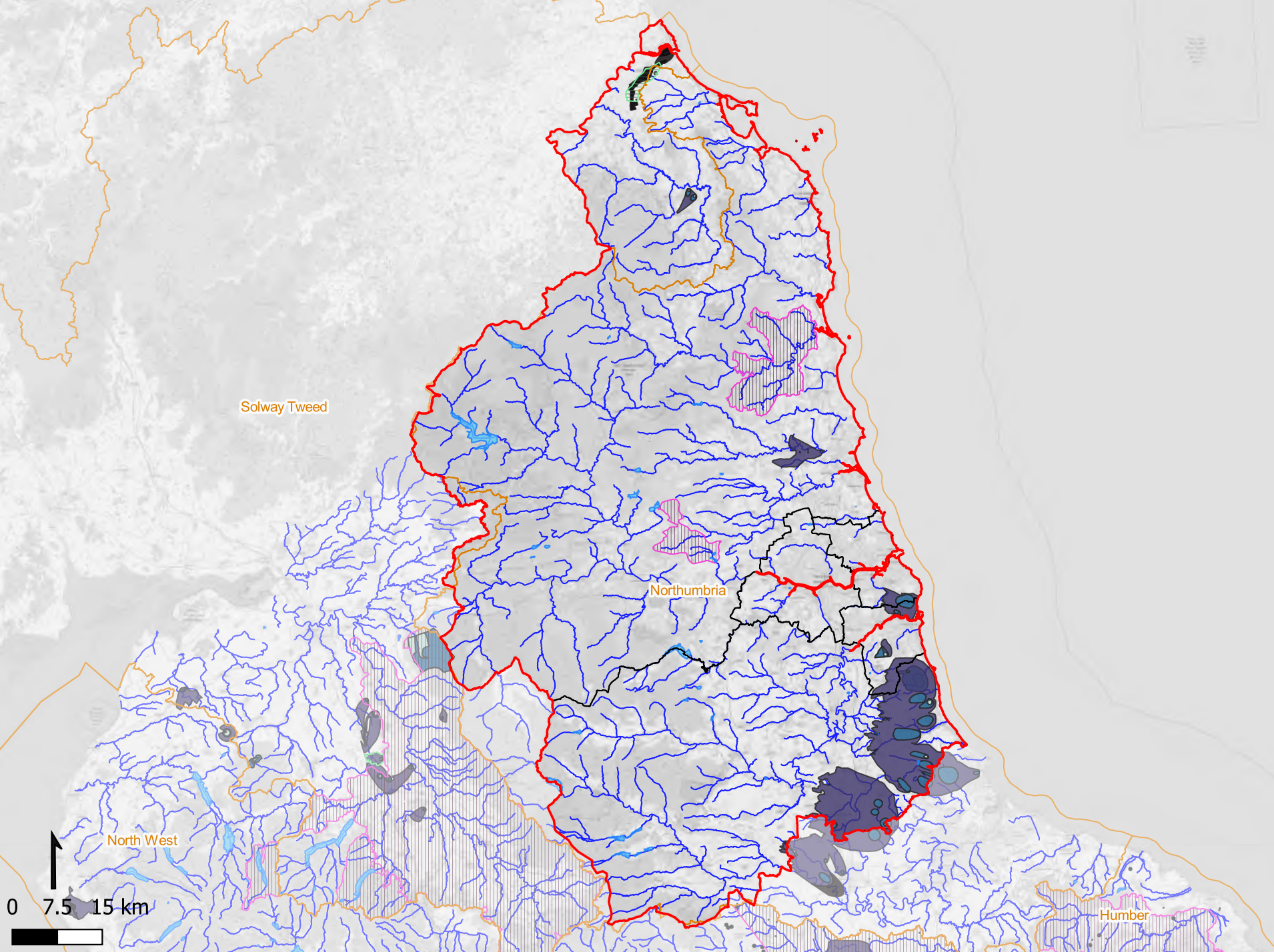
Client
North East CA

Project
North East Local Transport Plan

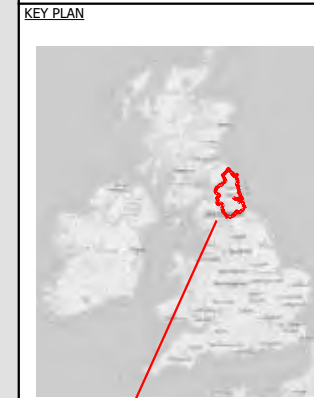
Purpose
ISA Report

Title Soils, Geology and Land Use (2/2)	Des/Drawn JC	Checked CA	Authorised AJ
	Date 21/08/2024	Date	Date

Status For Issue	Drawing Number 9	Rev 0
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GENERAL NOTES
 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
 2. ONLY WRITTEN DIMENSIONS SHOULD BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS.



SCHEME LOCATION
Legend

- NECA Boundary
- Local Authority Boundary
- Water**
- River Basin Districts
- Lakes
- Drinking Water Safeguard Zones - Surface Water
- Drinking Water Safeguard Zones - Ground Water
- Source Protection Zones**
- 1
- 1c
- 2
- 3
- 3c
- River, Canal and Surface Water Transfer

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		<p>Project</p> <p>North East Local Transport Plan</p>	<p>Purpose</p> <p>ISA Report</p>																								
		<p>Status</p> <p>For Issue</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Des/Drawn</td> <td style="width: 25%;">Checked</td> <td style="width: 25%;">Authorized</td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: center;">JC</td> <td style="text-align: center;">CA</td> <td style="text-align: center;">AJ</td> <td></td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Date</td> <td></td> </tr> <tr> <td style="text-align: center;">21/08/2024</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Drawing Number</td> <td></td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">10</td> <td></td> <td style="text-align: center;">0</td> </tr> </table>	Des/Drawn	Checked	Authorized		JC	CA	AJ		Date	Date	Date		21/08/2024				Drawing Number				10			0
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Date	Date	Date																									
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Appendix E. Assessment Tables



E.1 Policy Assessment

E.1.1 Planning Journeys Policy Assessment



E.1.1.1 Planning Journeys / informing users / supporting customers

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
1. Protect and Improve air quality	✓	Reg	LT	Perm	Med	+	++	++	++

Commentary

It is considered this policy area will help to protect and improve air quality by helping people (or freight) to utilise more sustainable modes of transport. Information on availability of cycle parking, EV charging points etc. will encourage a shift to more sustainable modes. Clearer and enhanced levels of information that is accessible to all, along with better technology will help people to transition to public transport by making journeys easier to plan and complete. Live journey information that provides detail on congestion, road works, delays etc will also help to make the transport network more efficient, thereby reducing emissions from stationary vehicles.

It is considered benefits will be slight in the short term but become more significant as greater numbers of users are attracted to public transport, undertake active travel or uptake EVs.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
2. Reduce the impact on environmental noise from transportation sources	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint. For example, information on availability of cycle parking, EV charging points etc. will encourage a shift to quieter modes. A greater shift to public transport should also help to reduce the number of vehicles on the network and (along with enhanced information) reduce congestion.

It is considered benefits will likely be slight in the short to long term, though there may potentially be more significant effects if there is a greater uptake of EVs and active modes over the long term.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
3. Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050	✓	Reg	LT	Perm	Med	+	++	++	++



Commentary

It is considered this policy area will help to reduce carbon emissions and contribute to net zero targets by helping people (or freight) to utilise more sustainable modes of transport. Information on availability of cycle parking, EV charging points etc. will encourage a shift to more sustainable modes. Clearer and enhanced levels of information that is accessible to all, along with better technology will help people to transition to public transport by making journeys easier to plan and complete. Live journey information that provides detail on congestion, road works, delays etc will also help to make the transport network more efficient, thereby reducing carbon emissions from stationary vehicles.

It is considered benefits will be slight in the short term but become more significant as greater numbers of users are attracted to public transport, undertake active travel or uptake EVs.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
4. Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

This Policy area will result in enhanced information being available, often in real time, to the travelling public. This will include information on extreme weather events (anticipated to include flooding) and how this is impacting the transport network. This will allow people to plan more effectively, or decide not to undertake journeys in the first place. Alternative routes / travel solutions etc will also be identified. This will increase the adaptability and resilience of the transport network to effects of a changing climate. Further adaptability will be realised through promotion of alternative, more flexible, modes such as cycling that may provide opportunities to undertake journeys if other modes are restricted by weather, though of course cycling could also be impacted.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
5. Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is anticipated that this Policy area will help to reduce traffic volumes (by encouraging the use of public transport or active travel modes) and make the transport network more efficient and as such will help to reduce air pollution deposition and disturbance to habitats and species.

Effects are anticipated to be slight from the short to long term, though with a potential for more significant effects as mode shift takes place.

Mitigation / Recommendations



Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
6. Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is anticipated that this Policy area will help to reduce traffic volumes (by encouraging the use of public transport or active travel modes) and make the transport network more efficient and as such will help to reduce air pollution deposition and disturbance to sites designated for nature conservation.

Effects are anticipated to be slight from the short to long term, though with a potential for more significant effects as mode shift takes place.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
7. Protect, enhance and promote geodiversity	N/A	N/A	N/A	N/A	N/A	0	0	0	0

Commentary

No interaction between this Policy area and this ISA Objective has been identified.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
8. Protect and enhance cultural heritage assets and their settings, and the wider historic environment	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-



Commentary

It is anticipated that this Policy area will help to reduce traffic volumes (by encouraging the use of public transport or active travel modes) and make the transport network more efficient and as such will help to reduce air pollution deposition on heritage assets, as well as improve the setting of assets (e.g. by removing / reducing the volume of cars). Care will need to be taken that signage or other information points / telemetry infrastructure (digital or otherwise) do not affect the setting of any heritage asset, or do not lead to ‘cluttering’ of historic centres.

It is considered there is a potential for a mix of slight beneficial and slight adverse effects.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure note is made of the need for traffic / route signage to not clutter the streetscape, particularly in historic centres. Street furniture, particularly Digital signage should not be allowed to affect the setting of any historic asset.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
9. Conserve and enhance the natural beauty the North East’s protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

It is anticipated that this Policy area will help to reduce traffic volumes (by encouraging the use of public transport or active travel modes) and make the transport network more efficient and as such will help to reduce congestion, thereby enhancing townscapes and visual amenity. Such policies may also help to reduce the need for more intrusive infrastructure such as new or widened roads, thereby helping to protect wider landscapes. Care will need to be taken that signage or other information points / telemetry infrastructure (digital or otherwise) do not affect the visual amenity of townscapes etc. by leading to cluttering.

It is considered there is a potential for a mix of slight beneficial and slight adverse effects.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure note is made of the need for traffic / route signage or other digital infrastructure to not clutter the streetscape

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
10. Protect and enhance the water environment	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

A general reduction in traffic volumes (by encouraging the use of public transport or active travel modes) or a more efficient network (including for freight movements) would help reduce the potential for polluted road runoff (hydrocarbons, tyre and brake debris) and hence help protect the water environment.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made



ISA Objective

	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
11. Protect soil resources and avoid land contamination	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

A general reduction in traffic volumes (by encouraging the use of public transport or active travel modes) or a more efficient network (including for freight movements) would help reduce the potential for pollution events to occur that could lead to soil degradation or land contamination.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
12. Promote sustainable use of resources and natural assets	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

A general reduction in traffic volumes (by encouraging the use of public transport or active travel modes) or a more efficient network (including for freight movements) would help reduce the need to use hydrocarbon fuels.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
13. Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	✓	Local	LT	Perm	Med	+	++	++	++

Commentary

There is a clear focus in these policy areas to provide enhanced levels of information to make it easier for residents and visitors to the region to travel to and from stations, tourism assets and employment centres by sustainable modes. This will enable economic growth and job creation, as well as improve connectivity – for example connections between and within communities will be enhanced by better information, increased mode options (such as better information on cycle facilities), increased network efficiency and so on.

Effects are considered to be of moderate benefit in the longer term as people get used to new connections etc.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made



ISA Objective

	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
14. Support the wider coordination of land use and energy planning across the North East CA area	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

These policy areas focus on providing more and enhanced joined up information – this covers all aspects of the transport network. For example there will be information on EV charging facility availability. Data will be centrally handled, coordinated and consistent. It is anticipated that ensuring that information is up to date and robust will require an understanding of land use and energy planning, both long term and day to day – for example note is made of how interactively changing how the network performs will be possible.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective

	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
15. Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	✓	Local	LT	Perm	Med	++	++	++	++

Commentary

This Policy area will help improve accessibility by providing information (including signage) that is clear and accessible to all and which can be adapted to suit individual needs. Note is made that enhanced levels of information should make it easier for residents and visitors to travel to and from stations, tourism assets and employment centres by sustainable transport. This is anticipated to also include leisure services and amenities.

Note is made of the use of new technology – while this would benefit all groups, some groups such as older people, those with certain disabilities or those on low incomes (who may not be able to keep up with latest technology) may not be able to utilise this as much as others.

Some groups such as those with certain disabilities or the elderly may also not be able to avail of public transport or active travel modes as much as others, though this policy area does include measures which would make the wider transport network, more efficient, including information on car parking spaces and those who are more reliant on private cars should benefit.

Better planned journeys, with greater information on the network and its up to date condition should allow people to make the most efficient journey possible, likely reducing costs. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc.

Increased network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost, particularly benefitting those on lower or fixed incomes. Encouragement is also made to allow people to utilise more active, low cost modes such as cycling. However, the need for new technology to utilise the latest apps etc may have cost implications for some groups.

Clarity should be provided that apps will be made available for free.

It is anticipated this Policy area will lead to reduced congestion and a more efficient transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit. More detailed, clear information etc. including disruptions caused by extreme weather will also allow people to plan journeys better, or avoid the need to undertake journeys. Greater consistency of journey length (including bus services running to timetable) will also provide reassurance to people of when their journey will be over – this can be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a bus stop.



Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through better, more clear information that are anticipated to make travel to and from stations and other assets and centres easier.

Connections between and within communities will be enhanced by better information, increased mode options (such as better information on cycle facilities), increased network efficiency and so on.

It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint, as well as reduced emissions. This will help to improve health and reduce stress, with particular benefits for those in areas with poorer air quality (frequently those more deprived areas), as well as children, the elderly and those with certain health conditions. For example, information on availability of cycle parking, EV charging points etc. will encourage a shift to quieter modes. A greater shift to public transport should also help to reduce the number of vehicles on the network and (along with enhanced information) reduce congestion.

In addition, this Policy area does provide encouragement for an uptake of active travel e.g. by providing information on cycling facilities and this will allow for more active lifestyle opportunities, though not all groups would benefit to the same degree. Those in rural areas with no access to a private vehicle could remain disadvantaged given the longer distances to services and facilities they need.

This policy area improves access to active travel modes such as cycling by providing greater and more up to date information on facilities such as cycle parking / storage or cycle hire availability. Active travel will also be made easier through better signage, information on road works etc. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions.

Access to public transport will be improved via greater and clearer information. Journey times will also become more reliable and quicker. Access to / from stations will also be enhanced. Better technology etc. will allow easier access to timetables, ticketing options and so on. All groups are anticipated to benefit.

Greater information on journey length, journey options, issues such as congestion, roadworks etc., will help to improve people’s confidence in the transport network, reduce traveller stress and help reduce perceived safety issues. For example, knowing a bus is going to be late means people can delay starting their journey in order to avoid waiting at a stop, perhaps on their own. Overall reduced congestion, or greater network efficiency should make actual safety greater.

There is an opportunity to provide wider safety / health related messaging – it is recommended that in addition to providing travel information, opportunities should also be taken to provide travellers with information on where they can find help should they be suffering a mental health crises – this could include providing emergency services details should they be suffering an acute crises. Similarly, in addition to direct travel information, messaging could be developed in conjunction with health partners to encourage the use of more active modes or where general health information can be found.

No specific note is made of safety by design in this Policy area.

It is anticipated that reduced congestion (through improvements to network efficiency and a shift to public or active modes) would help to improve the street environment, with beneficial effects on health and wellbeing. All groups would benefit.

This Policy area will result in people being able to better plan individual journeys, with information provided that can be adapted to suit individual needs. It is noted that customer support for an integrated network should include everything users need to support them in making a journey.

Better information for travellers, better network efficiency, better reliability, better sources of information that is up to date etc., should result in a better informed and less stressed travelling public. This could result in less conflict with the transport network workforce and help maintain their health and wellbeing.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Clarity should be provided that apps will be made available for free.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm



16. Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)

✓	Local	LT	Perm	Med	+	++	++	++
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Commentary

This Policy area will help improve accessibility by providing information (including signage) that is clear and accessible to all and which can be adapted to suit individual needs. Note is made that enhanced levels of information should make it easier for residents and visitors to travel to and from stations, tourism assets and employment centres by sustainable transport.

Note is made of the use of new technology – while this would benefit all groups, some groups such as older people, those with certain disabilities may not be able to utilise this as much as others. There may also be language barriers for some groups to utilising new information sources – It is worth noting that Age and gender also influence languages spoken, meaning that older BAME women are much less likely to speak English as their first language. It is recommended that note is made of the requirement for information to be provided in a range of languages and formats, particularly any messaging relating to emergency conditions / safety related.

Some groups such as those with certain disabilities, the elderly or those who are heavily pregnant may also not be able to avail of public transport or active travel modes as much as others, though this policy area does include measures which would make the wider transport network, more efficient, including information on car parking spaces and those who are more reliant on private cars should benefit. It is recommended that in addition to noting the availability of car park spaces, the new information should also provide information on the number of disabled spaces that are available and their location.

Better planned journeys, with greater information on the network and its up to date condition should allow people to make the most efficient journey possible, likely reducing costs. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc. Increased network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost, particularly benefitting those on lower or fixed incomes. Encouragement is also made to allow people to utilise more active, low cost modes such as cycling. However, the need for new technology to utilise the latest apps etc may have cost implications for some groups or may not be able to be used by those with certain disabilities. Language of such apps could also be a barrier to their uptake with potential implications for those of minority faith or ethnic groups.

Clarity should be provided that apps will be made available for free and should be available in different languages if possible.

It is anticipated this Policy area will lead to reduced congestion and a more efficient transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit. More detailed, clear information etc. including disruptions caused by extreme weather will also allow people to plan journeys better, or avoid the need to undertake journeys. Greater consistency of journey length (including bus services running to timetable) will also provide reassurance to people of when their journey will be over – this can be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a bus stop.

These policy areas will encourage an uptake in public transport through providing better information etc. and benefits should be experienced for all groups. However, the policy areas may not result in increased public transport provision in themselves.

Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through better, more clear information that are anticipated to make travel to and from stations and other assets and centres easier. All groups should benefit but note that some groups may not be able to access information as readily as others due to language barriers or for reasons of disability.

It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint, as well as reduced emissions. This will help to improve health and reduce stress, with particular benefits for those in areas with poorer air quality (frequently those more deprived areas in which ethnic minorities are more likely to live), as well as children, the elderly and those with certain disabilities.

In addition, this Policy area does provide encouragement for an uptake of active travel e.g. by providing information on cycling facilities and this will allow for more active lifestyle opportunities, though not all groups would benefit to the same degree.



This policy area improves access to active travel modes such as cycling by providing greater and more up to date information on facilities such as cycle parking / storage or cycle hire availability. Active travel will also be made easier through better signage, information on road works etc. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions.

It is anticipated that enhanced levels of information will make it easier for all groups to access transport facilities and infrastructure, though challenges will remain, particularly for certain groups such as the elderly, those with certain disabilities, ethnic and faith groups and those of certain sexuality and gender reassignment.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: It is recommended that note is made of the requirement for information to be provided in a range of languages and formats, particularly any messaging relating to emergency conditions / safety related.

Clarity should be provided that apps will be made available for free and should be available in different languages if possible.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
17. Promote fairness and equity in rural connectivity	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

All users in rural areas will benefit from enhanced travel information. This will include up to date information on network conditions and may help people to decide not to undertake journeys if conditions will be challenging, or they will miss appointments etc. This could be particularly valuable to those in rural areas given greater journey length / time. However, given greater distances etc., there will be reduced opportunity for an uptake in active modes.

Greater network efficiency and improvements to real time travel information should help rural areas to grow their economy by making it easier to move goods across the region. Up to date traffic management may also allow for greater reliability in journey time planning, with benefits for ‘just in time’ deliveries or those businesses that require efficient movement of goods (such as foodstuffs) or livestock.

These policy areas do encourage / enable an uptake in active modes, which would help connect people with nature. Given greater distances in rural areas, this is more likely to be on a recreational basis, with longer journeys less likely.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made



E.1.1.2 Health Impact Assessment Table

HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
1	Improve accessibility to health, employment opportunities and leisure services and facilities and amenities for all	+	+	+	+	+++	+	+	+++	+++	++	<p>This Policy area will help improve accessibility by providing information (including signage) that is clear and accessible to all and which can be adapted to suit individual needs. Note is made that enhanced levels of information should make it easier for residents and visitors to travel to and from stations, tourism assets and employment centres by sustainable transport. This is anticipated to also include leisure services and amenities.</p> <p>Note is made of the use of new technology – while this would benefit all groups, some groups such as older people, those with certain disabilities or those on low incomes (who may not be able to keep up with latest technology) may not be able to utilise this as much as others.</p> <p>Some groups such as those with certain disabilities or the elderly may also not be able to avail of public transport or active travel modes as much as others, though this policy</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												area does include measures which would make the wider transport network, more efficient, including information on car parking spaces and those who are more reliant on private cars should benefit.
2	Improve affordability of transport	+	++	+	++	+++	+	+	++	++	++	Better planned journeys, with greater information on the network and its up to date condition should allow people to make the most efficient journey possible, likely reducing costs. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc. Increased network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost, particularly benefitting those on lower or fixed incomes. Encouragement is also made to allow people to utilise more active, low cost modes such as cycling. However, the need for new technology to utilise the latest apps etc may have cost implications for some groups.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												Clarity should be provided that apps will be made available for free.
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	++	+	+	+	+	+	+	+	+	+	It is anticipated this Policy area will lead to reduced congestion and a more efficient transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit. More detailed, clear information etc. including disruptions caused by extreme weather will also allow people to plan journeys better, or avoid the need to undertake journeys. Greater consistency of journey length (including bus services running to timetable) will also provide reassurance to people of when their journey will be over – this can be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a bus stop.
4	Reduce severance	+	+	+	+	+	+	+	+	+	+	Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through better, more clear information that are anticipated to make travel



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												to and from stations and other assets and centres easier.
5	Improve connections between and within communities	+	+	+	+	+	+	+	+	+	+	Connections between and within communities will be enhanced by better information, increased mode options (such as better information on cycle facilities), increased network efficiency and so on.
6	Protect health by reducing air, noise, odour and light pollution from transport	++	++	+	++	++	+	++	++	++	++	It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint, as well as reduced emissions. This will help to improve health and reduce stress, with particular benefits for those in areas with poorer air quality (frequently those more deprived areas), as well as children, the elderly and those with certain health conditions. For example, information on availability of cycle parking, EV charging points etc. will encourage a shift to quieter modes. A greater shift to public transport should also help to reduce the number of vehicles on the network and (along with enhanced information) reduce congestion.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												In addition, this Policy area does provide encouragement for an uptake of active travel e.g. by providing information on cycling facilities and this will allow for more active lifestyle opportunities, though not all groups would benefit to the same degree. Those in rural areas with no access to a private vehicle could remain disadvantaged given the longer distances to services and facilities they need.
7	Improve access to active travel modes	+	+	+	++	+++	+	++	++	++	++	This policy area improves access to active travel modes such as cycling by providing greater and more up to date information on facilities such as cycle parking / storage or cycle hire availability. Active travel will also be made easier through better signage, information on road works etc. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions.
8	Improve access to public transport	++	++	++	++	++			++	++	++	Access to public transport will be improved via greater and clearer information. Journey times will also become more reliable and quicker. Access to / from stations will also be enhanced. Better technology etc. will allow



HIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	
											easier access to timetables, ticketing options and so on. All groups are anticipated to benefit.
9	Improve actual and perceived safety and security issues	+	+	+	+	+			+	+	<p>Greater information on journey length, journey options, issues such as congestion, roadworks etc., will help to improve people's confidence in the transport network, reduce traveller stress and help reduce perceived safety issues. For example, knowing a bus is going to be late means people can delay starting their journey in order to avoid waiting at a stop, perhaps on their own. Overall reduced congestion, or greater network efficiency should make actual safety greater.</p> <p>There is an opportunity to provide wider safety / health related messaging – it is recommended that in addition to providing travel information, opportunities should also be taken to provide travellers with information on where they can find help should they be suffering a mental health crises – this could include providing emergency services details should they be suffering an acute crises. Similarly, in</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												addition to direct travel information, messaging could be developed in conjunction with health partners to encourage the use of more active modes or where general health information can be found.
10	Encourage and promote safety by design	0	0	0	0	0			0	0	0	No specific note is made of safety by design in this Policy area.
11	Improve the street environment to create healthier, safer and more pleasant places for people to spend time in or travel through	+	+	+	+	+			+	+	+	It is anticipated that reduced congestion (through improvements to network efficiency and a shift to public or active modes) would help to improve the street environment, with beneficial effects on health and wellbeing. All groups would benefit.
12	Involve, support and empower communities to identify interventions that address their transport needs	+	+	+	+	+			+	+	+	This Policy area will result in people being able to better plan individual journeys, with information provided that can be adapted to suit individual needs. It is noted that customer support for an integrated network should include everything users need to support them in making a journey.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
13	Support a healthy and resilient workforce to deliver and operate a reliable public transport system	+	+	+	+	+			+	+	+	Better information for travellers, better network efficiency, better reliability, better sources of information that is up to date etc., should result in a better informed and less stressed travelling public. This could result in less conflict with the transport network workforce and help maintain their health and wellbeing.



E.1.1.3 Equalities Impact Assessment Table

EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
1	Improve accessibility to services, facilities and amenities for all, in particular by active travel modes	+	++	+	+	++	++	+	++	++	<p>This Policy area will help improve accessibility by providing information (including signage) that is clear and accessible to all and which can be adapted to suit individual needs. Note is made that enhanced levels of information should make it easier for residents and visitors to travel to and from stations, tourism assets and employment centres by sustainable transport.</p> <p>Note is made of the use of new technology – while this would benefit all groups, some groups such as older people, those with certain disabilities may not be able to utilise this as much as others. There may also be language barriers for some groups to utilising new information sources – It is worth noting that Age and gender also influence languages spoken, meaning that older BAME women are much less likely to speak English as their first language. It is recommended that note is made of the requirement for information to be provided in a range of languages and formats, particularly any messaging relating to emergency conditions / safety related.</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											Some groups such as those with certain disabilities, the elderly or those who are heavily pregnant may also not be able to avail of public transport or active travel modes as much as others, though this policy area does include measures which would make the wider transport network, more efficient, including information on car parking spaces and those who are more reliant on private cars should benefit. It is recommended that in addition to noting the availability of car park spaces, the new information should also provide information on the number of disabled spaces that are available and their location.
2	Improve affordability of transport	++	++	+	+	+	++	++	++	++	Better planned journeys, with greater information on the network and its up to date condition should allow people to make the most efficient journey possible, likely reducing costs. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc. Increased network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost, particularly benefitting those on lower or fixed incomes. Encouragement is also made to allow people to utilise more active, low cost modes such as cycling. However, the need for new technology to



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											<p>utilise the latest apps etc may have cost implications for some groups or may not be able to be used by those with certain disabilities. Language of such apps could also be a barrier to their uptake with potential implications for those of minority faith or ethnic groups.</p> <p>Clarity should be provided that apps will be made available for free and should be available in different languages if possible.</p>
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	++	++	++	++	++	++	++	++	++	<p>It is anticipated this Policy area will lead to reduced congestion and a more efficient transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit. More detailed, clear information etc. including disruptions caused by extreme weather will also allow people to plan journeys better, or avoid the need to undertake journeys. Greater consistency of journey length (including bus services running to timetable) will also provide reassurance to people of when their journey will be over – this can be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a bus stop.</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
4	Improve provision of public transport in rural areas or to those areas experiencing constraint in public transport provision	+	+	+	+	+	+	+	+	+	These policy areas will encourage an uptake in public transport through providing better information etc. and benefits should be experienced for all groups. However, the policy areas may not result in increased public transport provision in themselves.
5	Reduce severance	+	+	+	+	+	+	+	+	+	Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through better, more clear information that are anticipated to make travel to and from stations and other assets and centres easier. All groups should benefit but note that some groups may not be able to access information as readily as others due to language barriers.
6	Reduce air, noise, odour and light pollution from transport	+	+	+	+	+	+	+	+	+	It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint, as well as reduced emissions. This will help to improve health and reduce stress, with particular benefits for those in areas with poorer air quality (frequently those more deprived areas in which ethnic minorities are more likely to live), as well as children, the elderly and those with certain disabilities. In addition, this Policy area does provide encouragement for an uptake of active travel e.g. by providing information on cycling facilities and this will



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											allow for more active lifestyle opportunities, though not all groups would benefit to the same degree.
7	Improve actual and perceived safety and security issues	++	++	++	+	+	+	++	++	++	This policy area improves access to active travel modes such as cycling by providing greater and more up to date information on facilities such as cycle parking / storage or cycle hire availability. Active travel will also be made easier through better signage, information on road works etc. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions.
8	Provide accessible transport facilities and infrastructure that encourage use by a range of groups	+	+	+	+	+	+	++	++	+	It is anticipated that enhanced levels of information will make it easier for all groups to access transport facilities and infrastructure, though challenges will remain, particularly for certain groups such as the elderly, those with certain disabilities, ethnic and faith groups and those of certain sexuality and gender reassignment.



E.1.1.4 Rural Proofing Assessment Table

Rural Needs sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
1	Increase access via a range of transport modes for rural communities.	+	+	+	+	+	+	+	+	+	+	All users in rural areas will benefit from enhanced travel information. This will include up to date information on network conditions and may help people to decide not to undertake journeys if conditions will be challenging, or they will miss appointments etc. This could be particularly valuable to those in rural areas given greater journey length / time. However, given greater distances etc., there will be reduced opportunity for an uptake in active modes.
2	Enable economic growth, and employment diversification in rural areas.	+	+	+	+	+	+	+	+	+	+	Greater network efficiency and improvements to real time travel information should help rural areas to grow their economy by making it easier to move goods across the region. Up to date traffic management may also allow for greater reliability in journey time planning, with benefits for 'just in time' deliveries or those businesses that require efficient movement of goods (such as foodstuffs) or livestock.
3	Connecting people with nature	+	+	+	+	+	+	+	+	+	+	These policy areas do encourage / enable an uptake in active modes, which would help connect people with nature. Given greater



Rural Needs sub-objective	Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
	Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											distances in rural areas, this is more likely to be on a recreational basis, with longer journeys less likely.



E.1.2 Ticketing and Fares Policy Assessment



E.1.2.1 Ticketing and Fares

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
1. Protect and Improve air quality	✓	Local	LT	Perm	Med	+	++	++	++

Commentary

This policy and its associated commitments are aimed at making ticketing and fares affordable, convenient and simple to use, shifting people away from private cars and into more sustainable modes of transport (bus, Metro, rail and Ferry) and will therefore contribute to the achievement of this objective. Simplifying payment, fare capping and a fully integrated transport system (single ticket payment) will help people to transition to public transport by making journeys easier to complete.

The integration of ticketing with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, will result in less congestion on the roads which will help to make the transport network more efficient, thereby reducing emissions from stationary / idling vehicles.

It is considered benefits will be slight in the short term but become more significant as greater numbers of users are attracted to public transport.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
2. Reduce the impact on environmental noise from transportation sources	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint. For example, the integration of ticketing with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, enabling network users to plan and pay for their entire journey will encourage a shift to quieter modes. A more affordable, convenient and simple to use ticketing system will also promote a greater shift to public transport which should also help to reduce the number of vehicles on the network and reduce congestion.

It is considered benefits will likely be slight but potentially become more significant as greater numbers of users are attracted to public transport.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm



3. Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050

✓	Reg	LT	Perm	Med	+	++	++	++
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Commentary

This policy and its associated commitments are aimed at making ticketing and fares more affordable, convenient and simple to use, shifting people away from private cars and into more sustainable modes of transport (bus, Metro, rail and Ferry). Utilising more sustainable modes of transport will help to reduce carbon emissions and contribute to net zero targets. Simplifying payment, fare capping and a fully integrated transport system (single ticket payment) will help people to transition to public transport by making journeys easier to complete. Less vehicles on the transport network will reduce carbon emissions from stationary / idling vehicles. It is considered benefits will likely be slight in the short term but become more significant as greater numbers of users are attracted to public transport.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
4. Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	N/A	N/A	N/A	N/A	N/A	0	0	0	0

Commentary

No interaction between this Policy area and this ISA Objective has been identified.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
5. Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars and into more sustainable modes of transport) and make the transport network more efficient and as such will help to reduce air pollution deposition and disturbance to habitats and species.

Effects are anticipated to be slight from the short to long term, though with a potential for more significant effects as mode shift takes place.

Mitigation / Recommendations

Mitigation Measures: N/A



Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
6. Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars) and make the transport network more efficient and as such will help to reduce air pollution deposition and disturbance to sites designated for nature conservation.

Effects are anticipated to be slight from the short to long term, though with a potential for more significant effects as mode shift takes place.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
7. Protect, enhance and promote geodiversity	N/A	N/A	N/A	N/A	N/A	0	0	0	0

Commentary

No interaction between this Policy area and this ISA Objective has been identified.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
8. Protect and enhance cultural heritage assets and their settings, and the wider historic environment	✓	Local	LT	Perm	Med	+	+	+	+



Commentary

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars) and make the transport network more efficient and as such will help to reduce air pollution deposition on heritage assets, as well as improve the setting of assets (e.g. by removing / reducing the volume of cars).

Effects are anticipated to be slight from the short to long term, though with a potential for more significant effects as mode shift takes place.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
9. Conserve and enhance the natural beauty the North East’s protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars) and make the transport network more efficient and as such will help to reduce congestion, thereby enhancing townscapes and visual amenity.

Effects are anticipated to be slight from the short to long term, though with a potential for more significant effects as mode shift takes place.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
10. Protect and enhance the water environment	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

A general reduction in traffic volumes (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars) would help reduce the potential for polluted road runoff (hydrocarbons, tyre and brake debris) and hence help protect the water environment.

Effects are anticipated to be slight from the short to long term, though with a potential for more significant effects as mode shift takes place.

Mitigation / Recommendations



Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
11. Protect soil resources and avoid land contamination	✓	Local	LT	Perm	Med	+	+	+	+

Commentary

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars) and make the transport network more efficient and as such will help to reduce air pollution deposition on soils and reduce the risk of land contamination.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
12. Promote sustainable use of resources and natural assets	✓	Reg	LT	Perm	Med	+	+	+	+

Commentary

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars) and result in overall less use of hydrocarbons.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
13. Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	✓	Reg	LT	Perm	Med	+	++	++	++

Commentary

This Policy, and its commitments, has a specific focus on offering great value ticketing and fare products to help people reach education or new employment opportunities previously beyond their reach. In addition to this, the policy notes the need to include specific initiatives to support people getting back into work or training.

The policy focusses on making ticketing affordable, convenient and simple to use, with a single ticket payment across different types of transport making journeys from door to door seamless across the entire region, including between rural and urban areas.



Note is also made that ticketing and fares initiatives should also support and promote the North East’s tourism assets, making sustainable travel more convenient for tourists visiting the region. This would boost the tourism offering and therefore help this important economic sector.

It is considered benefits will likely be slight in the short term but become more significant as greater numbers of users are attracted to public transport.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
14. Support the wider coordination of land use and energy planning across the North East CA area	N/A	N/A	N/A	N/A	N/A	0	0	0	0

Commentary

No interaction between this Policy area and this ISA Objective has been identified.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
15. Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	✓	Reg	LT	Perm	Med	+	++	++	++

Commentary

This policy area and its commitments, will help make journeys easier by providing integrated ticketing that is more affordable, convenient and simple to use. Note is made that ticketing and payments will integrate with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, enabling network users to plan and pay for their entire door to door journey through a single offer and platform. It is also noted that there will be ticketing and fares products which help people reach education or new employment opportunities previously beyond their reach. This could potentially be of particular benefit to those on low incomes, the disabled, older people and those generally who wish to upskill or enter the employment market – there will also be specific initiatives to support people getting back into work or training.

In addition, although not specifically stated, it can be anticipated that the ticketing measures will also increase access to health and leisure services and facilities.

Note is made that there should be simple fare bands which are affordable. This should include fare capping with a maximum daily, and weekly fare charge regardless of the number of journeys made – this will be of benefit to those making frequent or daily journeys such as employees or school children. This should also include initiatives for children and young people to ensure fares are affordable, helping to reduce child poverty in the region.

Note is also made that there should be a specific focus on offering great value ticketing and fares products. It is also noted that there should be a range of payment methods that can be used to support people who don't use a smart phone or have access to online banking. This will be of use to younger children and older people, as well as to those on low incomes (some of whom may not have a bank account) or those with certain disabilities.



No interaction with the safety of the transport network and accidents / incidents has been identified for this policy area.

Making journeys cheaper and easier will reduce severance across the region, with benefits for all groups.

Making journeys cheaper and easier (including reducing unnecessary complexity) will improve connections between and within communities – this will help facilitate greater social interactions between families and friends, or to undertake hobbies or visits with beneficial effects on wellbeing for all, though with potentially more significance for those groups who may be more socially isolated such as older members of society.

It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint. For example, the integration of ticketing with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, enabling network users to plan and pay for their entire journey will encourage a shift to quieter modes. A more affordable, convenient and simple to use ticketing system will also promote a greater shift to public transport which should also help to reduce the number of vehicles on the network and reduce congestion.

Although the interaction of ticketing and active travel is limited, note is made that the hire of bike / e-scooters (to undertake part of a journey) will be facilitated through the seamless ticket offering.

Seamless and convenient, affordable access to public transport will be improved by the ticket offerings made under this Policy area. Benefits will be experienced across all groups.

Safety and security should be improved through a reduction in the need to use cash for payments to the transport network. Benefits are likely to be experienced by all users, though some groups may still be more likely to use cash payments – older people or those on low income for example and as such may be more vulnerable to crime or have a perception of vulnerability.

No interaction with safety by design has been identified for this policy area.

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes and reduce congestion (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars). This is anticipated to improve the street environment, with potentially greater benefit for those who find navigating streets more challenging such as the very young, the elderly, disabled people (for example through high numbers of parked cars etc).

A reduction in cash handling could make drivers etc. less vulnerable to crime / perception of crime and reduce stress in the workforce. Their ability to continue to operate a reliable transport system will benefit all groups.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
16. Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)	✓	Reg	LT	Perm	Med	++	++	++	++

Commentary

This policy area and its commitments, will help make journeys easier by providing integrated ticketing that is more affordable, convenient and simple to use. Note is made that the ticketing and fare structure should be perceived as fair, with benefits across all groups anticipated. Note is also made that ticketing and payments will integrate with wider transport services such as cycle and e-scooter hire.

Note is made that there should be simple fare bands which are affordable. This should include fare capping with a maximum daily, and weekly fare charge regardless of the number of journeys made. This should also include initiatives for children and young people to ensure fares are affordable, helping to reduce child poverty in the region.



Note is also made that there should be a specific focus on offering great value ticketing and fares products. It is also noted that there should be a range of payment methods that can be used to support people who don't use a smart phone or have access to online banking. This will be of use to younger children and older people, as well as to those on low incomes (some of whom may not have a bank account) or those with certain disabilities. It is also to be noted that some minority ethnic groups (particularly women from such groups) may have less access to bank facilities, or may struggle with Apps in the English language and as such would benefit from a wide range of ways to pay, including more traditional methods.

It is recommended that further clarification is provided that cash will remain a viable payment method.

No interaction with the safety of the transport network and accidents / incidents has been identified for this policy area.

This policy area will apply common ticketing and fares across the region and will make access to public transport more affordable and seamless. Benefits would be experienced across all groups.

Making journeys cheaper and easier will reduce severance across the region, with benefits for all groups.

It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint. For example, the integration of ticketing with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, enabling network users to plan and pay for their entire journey will encourage a shift to quieter modes. A more affordable, convenient and simple to use ticketing system will also promote a greater shift to public transport which should also help to reduce the number of vehicles on the network and reduce congestion.

Safety and security should be improved through a reduction in the need to use cash for payments to the transport network. Benefits are likely to be experienced by all users, though some groups may still be more likely to use cash payments – older people, those on low income or those from some minority ethnic groups (particularly women) for example and as such may be more vulnerable to crime or have a perception of vulnerability.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: It is recommended that further clarification is provided that cash will remain a viable payment method.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
17. Promote fairness and equity in rural connectivity	✓	Reg	LT	Perm	Med	++	++	++	++

Commentary

It is a key element of this policy area that people should be able to travel across the whole region, between rural and urban areas incorporating bus, Metro, rail, and the Shields Ferry without needing to buy multiple tickets and with payment methods that enable seamless travel. It is anticipated that this will be of benefit to all groups, particularly as it is clear from the policy area that there will be simple fare bands which are affordable. This should include fare capping with a maximum daily, and weekly fare charge regardless of the number of journeys made. This should also include initiatives for children and young people to ensure fares are affordable, helping to reduce child poverty in the region.

Note is also made that there should be a specific focus on offering great value ticketing and fares products which help people reach education or new employment opportunities previously beyond their reach. In addition to this, there should be specific initiatives to support people getting back into work or training.

Better integrated ticketing and fares should mean easier journeys, which will be of benefit to both residents and visitors to the region – this should make travel easier and encourage people to visit different parts (with likely spend in those areas). The focus on value will also help enable people to take up employment or training opportunities, with consequential beneficial effects on the economy. It is also possible that reduced cost to travel and easier, quicker journeys, may encourage people to stay in rural areas (or coastal areas and small villages) and journey further for work. This could allow rural enterprises to develop to serve a greater residential population. On the other hand, making rural and coastal areas cheaper and more convenient to access may also encourage people from more urban centres to take up employment in such areas and therefore help rural businesses to attract staff with the right skills they need.



Ticketing and fares initiatives should also support and promote the North East's tourism assets, making sustainable travel more convenient for tourists visiting the region, with consequent benefits for the economy.

Cheaper and easier ticketing may encourage people from urban areas to travel to more rural or coastal locations. While reasons for travel will vary, this would allow people opportunities to connect with nature through green spaces, rural landscapes, seascapes etc.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.



E.1.2.2 Health Impact Assessment Table

HIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees		Assessment summary
1	Improve accessibility to employment opportunities, health and leisure services and facilities and amenities for all	++	++	++	++	++	++	++	++	++	++	<p>This policy area and its commitments, will help make journeys easier by providing integrated ticketing that is more affordable, convenient and simple to use. Note is made that ticketing and payments will integrate with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, enabling network users to plan and pay for their entire door to door journey through a single offer and platform. It is also noted that there will be ticketing and fares products which help people reach education or new employment opportunities previously beyond their reach. This could potentially be of particular benefit to those on low incomes, the disabled, older people and those generally who wish to upskill or enter the employment market – there will also be specific initiatives to support people getting back into work or training.</p> <p>In addition, although not specifically stated, it can be anticipated that the ticketing measures</p>



HIA sub-objective	Scale of Effect											Description of effect/Recommendations for mitigation or enhancement
	Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary		
												will also increase access to health and leisure services and facilities.
2	Improve affordability of transport	++	++	++	++	++	++	++	++	++	++	<p>Note is made that there should be simple fare bands which are affordable. This should include fare capping with a maximum daily, and weekly fare charge regardless of the number of journeys made – this will be of benefit to those making frequent or daily journeys such as employees or school children. This should also include initiatives for children and young people to ensure fares are affordable, helping to reduce child poverty in the region.</p> <p>Note is also made that there should be a specific focus on offering great value ticketing and fares products. It is also noted that there should be a range of payment methods that can be used to support people who don't use a smart phone or have access to online banking. This will be of use to younger children and older people, as well as to those on low incomes (some of whom may not have a bank account) or those with certain disabilities.</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction with the safety of the transport network and accidents / incidents has been identified for this policy area.
4	Reduce severance	+	+	+	+	+	+	+	+	+	+	Making journeys cheaper and easier will reduce severance across the region, with benefits for all groups.
5	Improve connections between and within communities	++	++	+	+	+	+	+	+	+	+	Making journeys cheaper and easier (including reducing unnecessary complexity) will improve connections between and within communities – this will help facilitate greater social interactions between families and friends, or to undertake hobbies or visits with beneficial effects on wellbeing for all, though with potentially more significance for those groups who may be more socially isolated such as older members of society.
6	Protect health by reducing air, noise, odour and light pollution from transport	+	+	+	+	+	+	+	+	+	+	It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint. For example, the integration of ticketing with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire,



HIA sub-objective	Scale of Effect											Description of effect/Recommendations for mitigation or enhancement
	Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary		
												enabling network users to plan and pay for their entire journey will encourage a shift to quieter modes. A more affordable, convenient and simple to use ticketing system will also promote a greater shift to public transport which should also help to reduce the number of vehicles on the network and reduce congestion.
7	Improve access to active travel modes	+	+	+	+	+	+	+	+	+	+	Although the interaction of ticketing and active travel is limited, note is made that the hire of bike / e-scooters (to undertake part of a journey) will be facilitated through the seamless ticket offering.
8	Improve access to public transport	++	++	++	++	++	++	++	++	++	++	Seamless and convenient, affordable access to public transport will be improved by the ticket offerings made under this Policy area. Benefits will be experienced across all groups.
9	Improve actual and perceived safety and security issues	+	+/-	+	+/-	+	+	+	+	+	+	Safety and security should be improved through a reduction in the need to use cash for payments to the transport network. Benefits are likely to be experienced by all users, though some groups may still be more likely to use cash payments – older people or



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												those on low income for example and as such may be more vulnerable to crime or have a perception of vulnerability.
10	Encourage and promote safety by design	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction with safety by design has been identified for this policy area.
11	Improve the street environment to create healthier, safer and more pleasant places for people to spend time in or travel through	++	++	++	+	+	+	+	+	+	+	It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes and reduce congestion (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars). This is anticipated to improve the street environment, with potentially greater benefit for those who find navigating streets more challenging such as the very young, the elderly, disabled people (for example through high numbers of parked cars etc).
12	Involve, support and empower communities to identify interventions that address their transport needs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction has been identified.



HIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees		Assessment summary
13	Support a healthy and resilient workforce to deliver and operate a reliable public transport system	+	+	+	+	+	+	+	+	+	+	A reduction in cash handling could make drivers etc. less vulnerable to crime / perception of crime and reduce stress in the workforce. Their ability to continue to operate a reliable transport system will benefit all groups.



E.1.2.3 Equalities Impact Assessment Table

HIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees		Assessment summary
1	Improve accessibility to employment opportunities, health and leisure services and facilities and amenities for all	++	++	++	++	++	++	++	++	++	++	<p>This policy area and its commitments, will help make journeys easier by providing integrated ticketing that is more affordable, convenient and simple to use. Note is made that ticketing and payments will integrate with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, enabling network users to plan and pay for their entire door to door journey through a single offer and platform. It is also noted that there will be ticketing and fares products which help people reach education or new employment opportunities previously beyond their reach. This could potentially be of particular benefit to those on low incomes, the disabled, older people and those generally who wish to upskill or enter the employment market – there will also be specific initiatives to support people getting back into work or training.</p> <p>In addition, although not specifically stated, it can be anticipated that the ticketing measures</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												will also increase access to health and leisure services and facilities.
2	Improve affordability of transport	++	++	++	++	++	++	++	++	++	++	<p>Note is made that there should be simple fare bands which are affordable. This should include fare capping with a maximum daily, and weekly fare charge regardless of the number of journeys made – this will be of benefit to those making frequent or daily journeys such as employees or school children. This should also include initiatives for children and young people to ensure fares are affordable, helping to reduce child poverty in the region.</p> <p>Note is also made that there should be a specific focus on offering great value ticketing and fares products. It is also noted that there should be a range of payment methods that can be used to support people who don't use a smart phone or have access to online banking. This will be of use to younger children and older people, as well as to those on low incomes (some of whom may not have a bank account) or those with certain disabilities.</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction with the safety of the transport network and accidents / incidents has been identified for this policy area.
4	Reduce severance	+	+	+	+	+	+	+	+	+	+	Making journeys cheaper and easier will reduce severance across the region, with benefits for all groups.
5	Improve connections between and within communities	++	++	+	+	+	+	+	+	+	+	Making journeys cheaper and easier (including reducing unnecessary complexity) will improve connections between and within communities – this will help facilitate greater social interactions between families and friends, or to undertake hobbies or visits with beneficial effects on wellbeing for all, though with potentially more significance for those groups who may be more socially isolated such as older members of society.
6	Protect health by reducing air, noise, odour and light pollution from transport	+	+	+	+	+	+	+	+	+	+	It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint. For example, the integration of ticketing with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire,



HIA sub-objective	Scale of Effect											Description of effect/Recommendations for mitigation or enhancement
	Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary		
												enabling network users to plan and pay for their entire journey will encourage a shift to quieter modes. A more affordable, convenient and simple to use ticketing system will also promote a greater shift to public transport which should also help to reduce the number of vehicles on the network and reduce congestion.
7	Improve access to active travel modes	+	+	+	+	+	+	+	+	+	+	Although the interaction of ticketing and active travel is limited, note is made that the hire of bike / e-scooters (to undertake part of a journey) will be facilitated through the seamless ticket offering.
8	Improve access to public transport	++	++	++	++	++	++	++	++	++	++	Seamless and convenient, affordable access to public transport will be improved by the ticket offerings made under this Policy area. Benefits will be experienced across all groups.
9	Improve actual and perceived safety and security issues	+	+/-	+	+/-	+	+	+	+	+	+	Safety and security should be improved through a reduction in the need to use cash for payments to the transport network. Benefits are likely to be experienced by all users, though some groups may still be more likely to use cash payments – older people or



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												those on low income for example and as such may be more vulnerable to crime or have a perception of vulnerability.
10	Encourage and promote safety by design	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction with safety by design has been identified for this policy area.
11	Improve the street environment to create healthier, safer and more pleasant places for people to spend time in or travel through	++	++	++	+	+	+	+	+	+	+	It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes and reduce congestion (by making ticketing and fares affordable, convenient and simple to use and thereby shifting people away from private cars). This is anticipated to improve the street environment, with potentially greater benefit for those who find navigating streets more challenging such as the very young, the elderly, disabled people (for example through high numbers of parked cars etc).
12	Involve, support and empower communities to identify interventions that address their transport needs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction has been identified.



HIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees		Assessment summary
13	Support a healthy and resilient workforce to deliver and operate a reliable public transport system	+	+	+	+	+	+	+	+	+	+	A reduction in cash handling could make drivers etc. less vulnerable to crime / perception of crime and reduce stress in the workforce. Their ability to continue to operate a reliable transport system will benefit all groups.



E.1.2.4 Rural Proofing Assessment Table

Rural Needs sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships		Assessment summary
1	Increase access via a range of transport modes for rural communities.	++	++	++	++	++	++	++	++	++	++	<p>It is a key element of this policy area that people should be able to travel across the whole region, between rural and urban areas incorporating bus, Metro, rail, and the Shields Ferry without needing to buy multiple tickets and with payment methods that enable seamless travel. It is anticipated that this will be of benefit to all groups, particularly as it is clear from the policy area that there will be simple fare bands which are affordable. This should include fare capping with a maximum daily, and weekly fare charge regardless of the number of journeys made. This should also include initiatives for children and young people to ensure fares are affordable, helping to reduce child poverty in the region.</p> <p>Note is also made that there should be a specific focus on offering great value ticketing and fares products which help people reach education or new employment opportunities previously beyond their reach. In addition to this, there should be specific initiatives to support people getting back into work or training.</p>



Rural Needs sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships		Assessment summary
2	Enable economic growth, and employment diversification in rural areas.	++	++	++	++	++	++	++	++	++	++	<p>Better integrated ticketing and fares should mean easier journeys, which will be of benefit to both residents and visitors to the region – this should make travel easier and encourage people to visit different parts (with likely spend in those areas). The focus on value will also help enable people to take up employment or training opportunities, with consequential beneficial effects on the economy. It is also possible that reduced cost to travel and easier, quicker journeys, may encourage people to stay in rural areas (or coastal areas and small villages) and journey further for work. This could allow rural enterprises to develop to serve a greater residential population. On the other hand, making rural and coastal areas cheaper and more convenient to access may also encourage people from more urban centres to take up employment in such areas and therefore help rural businesses to attract staff with the right skills they need.</p> <p>Ticketing and fares initiatives should also support and promote the North East’s tourism assets, making sustainable travel more convenient for tourists visiting the region, with consequent benefits for the economy.</p>



Rural Needs sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships		Assessment summary
3	Connecting people with nature	+	+	+	+	+	+	+	+	+	+	Cheaper and easier ticketing may encourage people from urban areas to travel to more rural or coastal locations. While reasons for travel will vary, this would allow people opportunities to connect with nature through green spaces, rural landscapes, seascapes etc.



E.1.3 Reach and Resilience Policy Assessment



E.1.3.1 Reach and Resilience of Infrastructure

ISA Objective	Effects					Assessment							
	Mag	Scale	Dur	T/P	Cert	ST		MT		LT		Sm	
1. Protect and Improve air quality	✓	Reg	LT	Perm	Med	+	-	+	-	+	-	+	-

Commentary

There are many aspects of this policy area that should result in the protection of or improvements to air quality. For example, note is made that active modes are to be central to the transport network – this will include expansion of the cycle network to cover more of the region. Note is also made of elements such as bike hire, car sharing, MAAS, sharing opportunities (pedestrian and freight). Park & Ride will also be expanded to facilitate use of more sustainable modes and this will also facilitate a reduction in town centre traffic levels. Note is made of connecting employment and residential areas with sustainable modes and sustainable links will be a requirement of any new development.

However, it is also to be noted that there are aspects such as highway capacity improvements, extended rail services / capacity, re-opening of rail lines and so on that could have adverse effects on air quality, particularly at a local level. Nevertheless, there is also an emphasis placed on the provision of infrastructure that will encourage and facilitate an uptake in EVs, or other zero emission fuels such as hydrogen, which could be utilised by heavier vehicles.

Effects are considered to be moderate beneficial, though with some moderate adverse effects, particularly in earlier years prior to an uptake in LZEVs (including for heavier vehicles).

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment							
	Mag	Scale	Dur	T/P	Cert	ST		MT		LT		Sm	
2. Reduce the impact on environmental noise from transportation sources	✓	Local	LT	Perm	Med	+/-		+/-		+/-		+/-	

Commentary

A focus on sustainable modes (such as active travel) and moving people onto public transport, or freight onto rail, should reduce overall noise from the road network. It is noted that new developments will need to be connected via sustainable modes and this will reduce noise in residential areas etc. An uptake in EVs could also reduce overall noise levels.

However, note is also made of expanded highway capacity, expanded rail services, new park & ride sites and so on, which would have noise implications – both during construction and operation, though these would likely be at a local level. Note is also made of public transport services starting earlier and finishing later – while this will benefit some travellers, it may have noise implications along transport routes.

Mitigation / Recommendations

Mitigation Measures: N/A



Recommendations: Consideration should be given to provision of sound proofing for sensitive receptors in proximity to particularly noisy aspects of the transport network, or for those individuals whom it can be shown are particularly sensitive to noise.

ISA Objective	Effects					Assessment							
	Mag	Scale	Dur	T/P	Cert	ST		MT		LT		Sm	
3. Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050	✓	Local	LT	Perm	Low	+	-	+	-	+	-	+	-
						+	-	+	-	+	-	+	-

Commentary

As with air quality emissions, many aspects of this policy area will reduce carbon emissions – for example the focus on sustainable (including active) travel. Of particular note is the emphasis on LZEVs and newer fuels such as Hydrogen. Increased uptake of these fuels can be expected to contribute to meeting net zero targets, particularly in the longer term as there is an uptake of EVs or alternative fuels though it is uncertain to the degree this will take place.

Nevertheless, there are elements of this policy area that could increase carbon emissions (or result in increased levels of embedded carbon), both during construction and operation. Such elements include new infrastructure (including that related to sustainable modes) as well as road and rail infrastructure.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment							
	Mag	Scale	Dur	T/P	Cert	ST		MT		LT		Sm	
4. Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	✓	Reg	LT	Perm	Med	++		++		++		++	

Commentary

Clear note is made that the network should be able to deal with disruptions and extreme weather more effectively. Specific note is made of the need for investment and maintenance requirements and that pothole and surface imperfections will be addressed swiftly and drainage should be regularly maintained to mitigate flooding. Further note is made of the development of a strategy to maintain and improve transport assets (Transport Asset Management Plan) and it is anticipated this would help long term asset performance that would require addressing effects of a changing climate.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment							
	Mag	Scale	Dur	T/P	Cert	ST		MT		LT		Sm	
5. Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	✓	Local	LT	Perm	Med	+/-		+/-		+/-		+/-	

Commentary



A general reduction in traffic levels (encouraged by the shift to active and public transport) could potentially reduce disturbance to habitats and species. However, there is a focus in this Policy area on road and rail upgrades where required. This would potentially adversely effect biodiversity through increased disturbance, loss of habitat and so on.

Effects would be slight (beneficial and adverse) and experienced at the local scale.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
6. Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (encouraged by the shift to active and public transport) could potentially reduce disturbance to sites designated for nature conservation. There would though be potential for adverse effects (direct or indirect) if any new infrastructure such as park & ride sites or new / upgraded road and rail links are located in proximity to sites designated for nature conservation.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure new park & ride sites or other infrastructure does not have a direct / indirect effect on sites designated for nature conservation. Undertake project level HRA.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
7. Protect, enhance and promote geodiversity	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

New infrastructure such as park & ride sites or new physical links (road and rail) could lead to the loss of geodiversity, though it is anticipated this would be slight and at a local stage if it were to occur. Opportunities could be taken to avoid sites noted for geodiversity, or could be designed to allow these sites to show local geological features.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
8. Protect and enhance cultural heritage assets and their settings, and the wider historic environment	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-



Commentary

A general reduction in traffic levels (encouraged by the shift to active and public transport) could potentially reduce disturbance to cultural heritage assets and their settings. However, development of new infrastructure such as park & ride sites or new physical road and rail links could lead to disturbance or destruction of unknown archaeological remains, or a deterioration in settings.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
9. Conserve and enhance the natural beauty the North East’s protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A In addition, the focus within LTP4 to reduce the amount of congestion and provide for greater sustainable modes, as well as a focus on place making / public realm etc. will provide a range of opportunities to improve townscapes, the general landscape and the setting of heritage assets. However, this policy area will also result in new infrastructure in the landscape, including in rural areas, with the potential for adverse effects. These are likely to be at a local scale and likely to be largely mitigable by careful consideration of scheme location and landscaping.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure scheme design includes for appropriate landscaping.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
10. Protect and enhance the water environment	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (encouraged by the shift to active and public transport) could reduce the potential for pollution incidents from hydrocarbon spillages or reduce the level of polluted runoff of brake and tyre detritus. However, new Park & Ride sites or new physical road and rail links could represent new sources of polluted runoff, though careful design and implementation of pollution control measures would reduce this threat.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure scheme design includes for pollution control.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm



11. Protect soil resources and avoid land contamination

✓ Local LT Perm Med +/- +/- +/- +/-

Commentary

New infrastructure such as park & ride sites or new road and rail physical links could lead to the loss of soil resources (particularly in rural areas), though it is anticipated this would be slight and at a local stage if it were to occur. A reduction in general traffic could help to avoid contamination by reducing the amount of polluted runoff to surrounding areas.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
12. Promote sustainable use of resources and natural assets	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

Facilitating more sustainable modes (rail, buses, active travel, shared transport etc.) would help to reduce the use of resources such as hydrocarbons. The increased uptake of EVs would also have a similar effect. However, new infrastructure would require the use of resources / materials particularly during construction.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
13. Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	✓	Reg	LT	Perm	Med	++	+++	+++	+++

Commentary

There is a focus in these policy areas on connectivity – locally, across the region and beyond. This increased connectivity will be in respect of both people and goods – for example, note is made of improving long distance rail links to help welcome new business and organisations to be based in the north east. Similarly, note is made of enhanced infrastructure to improve freight connectivity and delivery services and it is noted that it is anticipated that there will be reduced journey times for the movement of people, and goods between freight centres in the region, across the UK and internationally. An example of improved road freight movements to the airport and the five sea ports is given. Note is made of enhancing links by sustainable means to new employment sites and that the reach of the integrated transport network should be expanded, connecting people to towns, cities, employment, education and essential services. More generally, facilitating journeys by a range of modes will make it easier for people to access employment and economic opportunities more widely across the region. Note is also made of better facilitation for disabled travellers – this could help to make it easier for people with disabilities to access the job market and therefore increase the workforce. Similarly, an example of the Metro serving disadvantaged areas is given and this could help make people in those areas access jobs or training opportunities further afield. It is anticipated that effects would be significantly beneficial across the longer term.

Mitigation / Recommendations



Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
14. Support the wider coordination of land use and energy planning across the North East CA area	✓	Reg	LT	Perm	Med	++	++	++	++

Commentary

Clear note is made of the need to have a joined up and approach to transport infrastructure investment and spatial planning. Elements include the need for sustainable modes to serve new developments (employment and housing sites), along with enhanced infrastructure to serve freight and delivery services. Routes, services and infrastructure should also directly connect communities to large employment sites, urban centres, out of town business parks, rural coastal communities and village centres. Note is made of the need for NECA to work with Local Authorities.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
15. Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	✓	Reg	LT	Perm	Med	++	++	++	++

Commentary

There is a clear focus in this Policy area on improving accessibility. Specific note is made that the reach of the integrated transport network should be expanded, connecting people to towns, cities, employment, education, housing growth and essential services – it is anticipated this would include health and leisure services and amenities but it is recommended that this is clarified.

This increased accessibility would be facilitated via a range of modes, which would include active travel. Note is made that sustainable transport provision should be an integral part of any new development and that routes, services and infrastructure should also directly connect communities to employment sites, urban centres, out of town business parks, rural coastal communities and village centres – all the areas where essential services, facilities and amenities would be found.

It is anticipated that all groups would benefit, While some elements such as active travel may not be fully accessible to all, note is made that there will be a review of public transport accessibility to inform where there are gaps and improvements needed. An example is given of the need to ensure stops are accessible to disabled people and that staff are provided with Disability Equality Training. Note is also made that it is anticipated that people of all ages, especially those without access to a car should benefit from enhanced connectivity and reach.

Finally, the Policy area aims to ensure there is no ‘one size fits all’ and that it will be ensured that the needs of people living in rural areas are taken into account, helping to address transport related social exclusion – it is anticipated this would include coastal communities and other urban areas (villages, small towns) that would potentially feel ‘left behind’ as the policy states that the reach of the network would extend into every community, including rural and coastal areas.

Across the region, there will be opportunities for all to avail of cheaper transport – this could be through active travel modes or approaches such as bike hire, car hire and sharing clubs. Note is made that bike hire will be affordable. MAAS also allows opportunities for savings on ticketing etc, or other ways of sharing costs for both people and freight.



Note is made of linking employment areas etc. with sustainable modes – this would allow employees to access work safely with active travel modes that would be of zero cost (after initial purchase of bike).

Note is made that public transport services will start earlier and finish later – this access to public transport and removal of the need for private cars / use of taxis will be of particular importance to those engaged in shift work (often of lower income) who may start / finish outside typical working hours.

Similarly, increased access to public transport through its increased reach, will provide better opportunities for people across the region in rural areas or other more isolated communities to access other forms of transport other than the private car or taxis. This approach of increased accessibility will also benefit disabled people, with note made of increasing access at stops and providing training to transport staff.

Note is also made that there will be provision of EV chargers in remote rural areas as well as urban areas with high deprivation and low car ownership to ensure comprehensive provision – the implication is that charging would be low cost in these locations but this would need to be clarified.

Overall safety for all groups should be improved through a general reduction in traffic due to a shift to more active or public transport modes. Nevertheless, there will still be a need for private vehicles and note is made that in relation to highways, safety enhancements and regular maintenance for all users will be prioritised. It is also noted that issues such as potholes and drains will be addressed swiftly and this, along with a greater resilience to extreme weather, should reduce the risk of accidents.

Note is also made that there will be wide, segregated and well maintained pedestrian infrastructure, with reduced street clutter, dropped kerbs, ramp access provision where needed and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to more vulnerable groups such as pedestrians, the elderly, those with disabilities, children.

Severance will be reduced across the region as the reach of the transport network expands – the Policy area sets out the mechanisms through which this will be done, such as Demand Responsive Transport and so on. All groups can be expected to benefit.

Connections will be enhanced across the region, including rural areas and coastal communities, with all groups benefitting via a range of mechanisms that aims to recognise that no 'one size fits all' i.e. the range of transport choice means that journeys can be tailored to suit individual circumstances.

A focus on sustainable modes (such as active travel) and moving people onto public transport, or freight onto rail, should reduce overall noise and pollution emissions from the road network. It is noted that new developments will need to be connected via sustainable modes and this will reduce noise and pollution levels in residential areas etc. An uptake in EVs could also reduce overall noise levels. Reduction in pollution will be of particular benefit for children, the elderly and people with breathing related health issues.

However, note is also made of expanded highway capacity, expanded rail services, new park & ride sites and so on, which would have noise implications – both during construction and operation, though these would likely be at a local level. Note is also made of public transport services starting earlier and finishing later – while this will benefit some travellers, it may have noise implications along transport routes. It is worth noting that some individuals may also experience a greater reaction to increased noise than others, though this would be for the population as a whole, rather than unique to any vulnerable group.

Expansion of the transport network across the region, including rural and coastal areas, also includes for active travel modes. For example, clear note is made that the current cycle network will be expanded. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions. Residents of rural areas will benefit, though this may be of less significance given relative distances to travel.

This policy area will extend the reach of public transport across the region, with a clear intention that all areas are well served. All groups will benefit.

Clear note is made that the network should be able to deal with disruptions, accidents and extreme weather more effectively. This will include prioritising safety enhancements and regular maintenance (including of road surfaces), which can be anticipated to reduce the potential for accidents to occur. Note is also made there should be wide, segregated and well maintained pedestrian infrastructure with reduced street clutter, dropped kerbs, ramp access provision and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to more vulnerable groups such as pedestrians, the elderly, those with disabilities, children.

On a wider note, there is an emphasis on active travel and access to green spaces. While there are clear direct health benefits to active travel and this is a safe way to travel (if separated adequately from other road users), it is worth noting that there are indirect benefits to be had to mental health and general wellbeing.

While no specific note is made, it is anticipated that the aim to prioritise safety enhancements will require consideration of safety by design. All groups should benefit.



Note is also made there should be wide, segregated and well maintained pedestrian infrastructure with reduced street clutter, dropped kerbs, ramp access provision and other inclusive infrastructure such as well designed crossing points. Aspects such as these will make for healthier, safer and more pleasant places.

Clear note is made that there will be engagement with communities to ensure that elements of the network properly meet local needs and circumstances.

A transport network that is reflective of what communities want and need (as set out in this policy area) should result in less stressed and better catered for travellers, thereby reducing the potential for conflict with the transport workforce. This will help to enable them to remain healthy and resilient, with less stress or physical risk.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Provide clarification that expansion of services would include for greater access to health and leisure services and amenities.

Provide clarification on the cost of public EV charging in rural and deprived areas.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
16. Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)	✓	Reg	LT	Perm	Med	++	++	++	++

Commentary

There is a clear focus in this Policy area on improving accessibility. Specific note is made that the reach of the integrated transport network should be expanded, connecting people to towns, cities, employment, education, housing growth and essential services and a key element will be via active modes. Note is made for example of expanding the cycle network.

Across the region, there will be opportunities for all to avail of cheaper transport – this could be through active travel modes or approaches such as bike hire, car hire and sharing clubs. Note is made that bike hire will be affordable. MAAS also allows opportunities for savings on ticketing etc, or other ways of sharing costs for both people and freight.

Note is made of linking employment areas etc. with sustainable modes – this would allow employees to access work safely with active travel modes that would be of zero cost (after initial purchase of bike).

Note is made that public transport services will start earlier and finish later – this access to public transport and removal of the need for private cars / use of taxis will be of particular importance to those engaged in shift work (often of lower income) who may start / finish outside typical working hours.

Similarly, increased access to public transport through its increased reach, will provide better opportunities for people across the region in rural areas or other more isolated communities to access other forms of transport other than the private car or taxis. This approach of increased accessibility will also benefit disabled people, with note made of increasing access at stops and providing training to transport staff.

Overall safety for all groups should be improved through a general reduction in traffic due to a shift to more active or public transport modes. Nevertheless, there will still be a need for private vehicles and note is made that in relation to highways, safety enhancements and regular maintenance for all users will be prioritised. It is also noted that issues such as potholes and drains will be addressed swiftly and this, along with a greater resilience to extreme weather, should reduce the risk of accidents.

Note is also made that there will be wide, segregated and well maintained pedestrian infrastructure, with reduced street clutter, dropped kerbs, ramp access provision where needed and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to more vulnerable groups such as pedestrians, the elderly, those with disabilities, children.



This policy area provides a strong emphasis on expanding the reach of the transport network to all communities in the region – including coastal and rural. A range of mechanisms are set out that aims to recognise that no ‘one size fits all’ i.e. the range of transport choice means that journeys can be tailored to suit individual circumstances.

Severance will be reduced across the region as the reach of the transport network expands – the Policy area sets out the mechanisms through which this will be done, such as Demand Responsive Transport and so on. All groups can be expected to benefit.

A focus on sustainable modes (such as active travel) and moving people onto public transport, or freight onto rail, should reduce overall noise and pollution emissions from the road network. It is noted that new developments will need to be connected via sustainable modes and this will reduce noise and pollution levels in residential areas etc. An uptake in EVs could also reduce overall noise levels. Reduction in pollution will be of particular benefit for children, the elderly and people with breathing related health issues.

However, note is also made of expanded highway capacity, expanded rail services, new park & ride sites and so on, which would have noise implications – both during construction and operation, though these would likely be at a local level. Note is also made of public transport services starting earlier and finishing later – while this will benefit some travellers, it may have noise implications along transport routes.

Clear note is made that the network should be able to deal with disruptions, accidents and extreme weather more effectively. This will include prioritising safety enhancements and regular maintenance (including of road surfaces), which can be anticipated to reduce the potential for accidents to occur. Note is also made there should be wide, segregated and well maintained pedestrian infrastructure with reduced street clutter, dropped kerbs, ramp access provision and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to groups such as pedestrians, the elderly, those with disabilities, children.

This policy area provides a focus on expanding the range of services and the range of transport modes. It recognises that ‘one size does not fit all’ and as such a range of mechanisms for increasing travel choice are provided. All groups will benefit.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations:

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
17. Promote fairness and equity in rural connectivity	✓	Reg	LT	Perm	Med	++	++	++	++

Commentary

Clear note is made that the geographical reach of the integrated transport network should extend into every community, including rural and coastal areas. It is the intention that ‘routes, services and infrastructure should directly connect communities to large employment sites, urban centres, out of town business parks, village centres, rural and coastal communities. Examples are given of a range of modes for how this is to be done, including demand responsive transport, community transport, mobility hubs and services feeding interchanges and stations. Active travel will also feature, with an expanded cycle network to rural areas, though distances involved mean this is more likely to be used for recreational purposes rather than commuting and would not offer the same advantages to all in the community

Note is also made that public chargepoint infrastructure should cover remote rural communities where there are lower levels of utilisation of EVs. There will also be more park & ride provision in rural and coastal communities.

It is anticipated that all groups will benefit from this policy area.

Increased linkages within rural communities, as well as to urban centres and further afield outside the region will help to enable economic growth. This will make it easier for people to travel to work, or for goods to be moved efficiently - note is made of improving long distance rail links to help welcome new business and organisations to be based in the north east. Similarly, note is made of enhanced infrastructure to improve freight connectivity and delivery services and it is noted that it is anticipated that there will be



reduced journey times for the movement of people, and goods between freight centres in the region, across the UK and internationally. This will be of benefit for rural businesses moving perishable goods or livestock.

While a key element of this policy area is concerned with ensuring rural and coastal communities have access to the wider transport network, it will also work in the other direction, with people in the urban communities ultimately having greater access to rural areas and allow people to better connect with nature. Benefits could be expected across all groups in the community.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.



E.1.3.2 Health Impact Assessment Table

HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
1	Improve accessibility to employment opportunities, health and leisure services and facilities and amenities for all	++	++	++	++	++	++	++	++	++	++	<p>There is a clear focus in this Policy area on improving accessibility. Specific note is made that the reach of the integrated transport network should be expanded, connecting people to towns, cities, employment, education, housing growth and essential services – it is anticipated this would include health and leisure services and amenities but it is recommended that this is clarified.</p> <p>This increased accessibility would be facilitated via a range of modes, which would include active travel. Note is made that sustainable transport provision should be an integral part of any new development and that routes, services and infrastructure should also directly connect communities to employment sites, urban centres, out of town business parks, rural coastal communities and village centres – all the areas where essential</p>



HIA sub-objective	Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
	Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
											<p>services, facilities and amenities would be found.</p> <p>It is anticipated that all groups would benefit, While some elements such as active travel may not be fully accessible to all, note is made that there will be a review of public transport accessibility to inform where there are gaps and improvements needed. An example is given of the need to ensure stops are accessible to disabled people and that staff are provided with Disability Equality Training. Note is also made that it is anticipated that people of all ages, especially those without access to a car should benefit from enhanced connectivity and reach.</p> <p>Finally, the Policy area aims to ensure there is no 'one size fits all' and that it will be ensured that the needs of people living in rural areas are taken into account, helping to address transport related social exclusion – it is anticipated this would include coastal communities and other urban areas (villages, small towns) that would potentially feel 'left behind' as the policy states that the reach of</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												the network would extend into every community, including rural and coastal areas.
2	Improve affordability of transport	++	++	++	++	+++	++	++	++	++	++	<p>Across the region, there will be opportunities for all to avail of cheaper transport – this could be through active travel modes or approaches such as bike hire, car hire and sharing clubs. Note is made that bike hire will be affordable. MAAS also allows opportunities for savings on ticketing etc, or other ways of sharing costs for both people and freight.</p> <p>Note is made of linking employment areas etc. with sustainable modes – this would allow employees to access work safely with active travel modes that would be of zero cost (after initial purchase of bike).</p> <p>Note is made that public transport services will start earlier and finish later – this access to public transport and removal of the need for private cars / use of taxis will be of particular importance to those engaged in shift work (often of lower income) who may start / finish outside typical working hours.</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												<p>Similarly, increased access to public transport through its increased reach, will provide better opportunities for people across the region in rural areas or other more isolated communities to access other forms of transport other than the private car or taxis. This approach of increased accessibility will also benefit disabled people, with note made of increasing access at stops and providing training to transport staff.</p> <p>Note is also made that there will be provision of EV chargers in remote rural areas as well as urban areas with high deprivation and low car ownership to ensure comprehensive provision – the implication is that charging would be low cost in these locations but this would need to be clarified.</p>
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	++	++	++	++	++	++	++	++	++	++	<p>Overall safety for all groups should be improved through a general reduction in traffic due to a shift to more active or public transport modes. Nevertheless, there will still be a need for private vehicles and note is made that in relation to highways, safety enhancements and regular maintenance for</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												<p>all users will be prioritised. It is also noted that issues such as potholes and drains will be addressed swiftly and this, along with a greater resilience to extreme weather, should reduce the risk of accidents.</p> <p>Note is also made that there will be wide, segregated and well maintained pedestrian infrastructure, with reduced street clutter, dropped kerbs, ramp access provision where needed and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to more vulnerable groups such as pedestrians, the elderly, those with disabilities, children.</p>
4	Reduce severance	++	++	++	++	++	++	++	++	++	++	Severance will be reduced across the region as the reach of the transport network expands – the Policy area sets out the mechanisms through which this will be done, such as Demand Responsive Transport and so on. All groups can be expected to benefit.
5	Improve connections between and within communities	++	++	++	++	++	++	++	++	++	++	Connections will be enhanced across the region, including rural areas and coastal communities, with all groups benefitting via a



HIA sub-objective	Scale of Effect											Description of effect/Recommendations for mitigation or enhancement
	Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary		
												range of mechanisms that aims to recognise that no 'one size fits all' i.e. the range of transport choice means that journeys can be tailored to suit individual circumstances.
6	Protect health by reducing air, noise, odour and light pollution from transport	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	A focus on sustainable modes (such as active travel) and moving people onto public transport, or freight onto rail, should reduce overall noise and pollution emissions from the road network. It is noted that new developments will need to be connected via sustainable modes and this will reduce noise and pollution levels in residential areas etc. An uptake in EVs could also reduce overall noise levels. Reduction in pollution will be of particular benefit for children, the elderly and people with breathing related health issues. However, note is also made of expanded highway capacity, expanded rail services, new park & ride sites and so on, which would have noise implications – both during construction and operation, though these would likely be at a local level. Note is also made of public transport services starting earlier and finishing later – while this will benefit some travellers, it may have noise



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												implications along transport routes. It is worth noting that some individuals may also experience a greater reaction to increased noise than others, though this would be for the population as a whole, rather than unique to any vulnerable group.
7	Improve access to active travel modes	+	+	+	++	+++	+	++	++	++	++	Expansion of the transport network across the region, including rural and coastal areas, also includes for active travel modes. For example, clear note is made that the current cycle network will be expanded. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions. Residents of rural areas will benefit, though this may be of less significance given relative distances to travel.
8	Improve access to public transport	++	++	++	++	++	++	++	++	++	++	This policy area will extend the reach of public transport across the region, with a clear intention that all areas are well served. All groups will benefit.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
9	Improve actual and perceived safety and security issues	++	++	++	++	++	++	++	++	++	++	<p>Clear note is made that the network should be able to deal with disruptions, accidents and extreme weather more effectively. This will include prioritising safety enhancements and regular maintenance (including of road surfaces), which can be anticipated to reduce the potential for accidents to occur. Note is also made there should be wide, segregated and well maintained pedestrian infrastructure with reduced street clutter, dropped kerbs, ramp access provision and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to more vulnerable groups such as pedestrians, the elderly, those with disabilities, children.</p> <p>On a wider note, there is an emphasis on active travel and access to green spaces. While there are clear direct health benefits to active travel and this is a safe way to travel (if separated adequately from other road users), it is worth noting that there are indirect benefits to be had to mental health and general wellbeing.</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
10	Encourage and promote safety by design	++	++	++	++	++	++	++	++	++	++	While no specific note is made, it is anticipated that the aim to prioritise safety enhancements will require consideration of safety by design. All groups should benefit.
11	Improve the street environment to create healthier, safer and more pleasant places for people to spend time in or travel through	+++	+++	+++	++	+++	++	++	++	++	+++	Note is also made there should be wide, segregated and well maintained pedestrian infrastructure with reduced street clutter, dropped kerbs, ramp access provision and other inclusive infrastructure such as well designed crossing points. Aspects such as these will make for healthier, safer and more pleasant places.
12	Involve, support and empower communities to identify interventions that address their transport needs	++	++	++	++	++	++	++	++	++	++	Clear note is made that there will be engagement with communities to ensure that elements of the network properly meet local needs and circumstances.
13	Support a healthy and resilient workforce to deliver and operate a reliable public transport system	+	+	+	+	+	+	+	+	+	+	A transport network that is reflective of what communities want and need (as set out in this policy area) should result in less stressed and better catered for travellers, thereby reducing the potential for conflict with the transport workforce. This will help to enable them to



HIA sub-objective	Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
	Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
											remain healthy and resilient, with less stress or physical risk.



E.1.3.3 Equalities Impact Assessment Table

EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
1	Improve accessibility to services, facilities and amenities for all, in particular by active travel modes	++	++	++	++	++	++	++	++	++	There is a clear focus in this Policy area on improving accessibility. Specific note is made that the reach of the integrated transport network should be expanded, connecting people to towns, cities, employment, education, housing growth and essential services and a key element will be via active modes. Note is made for example of expanding the cycle network.
2	Improve affordability of transport	++	++	++	++	++	++	++	++	++	<p>Across the region, there will be opportunities for all to avail of cheaper transport – this could be through active travel modes or approaches such as bike hire, car hire and sharing clubs. Note is made that bike hire will be affordable. MAAS also allows opportunities for savings on ticketing etc, or other ways of sharing costs for both people and freight.</p> <p>Note is made of linking employment areas etc. with sustainable modes – this would allow employees to access work safely with active travel modes that would be of zero cost (after initial purchase of bike).</p> <p>Note is made that public transport services will start earlier and finish later – this access to public</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											<p>transport and removal of the need for private cars / use of taxis will be of particular importance to those engaged in shift work (often of lower income) who may start / finish outside typical working hours.</p> <p>Similarly, increased access to public transport through its increased reach, will provide better opportunities for people across the region in rural areas or other more isolated communities to access other forms of transport other than the private car or taxis. This approach of increased accessibility will also benefit disabled people, with note made of increasing access at stops and providing training to transport staff.</p>
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	++	++	++	++	++	++	++	++	++	<p>Overall safety for all groups should be improved through a general reduction in traffic due to a shift to more active or public transport modes. Nevertheless, there will still be a need for private vehicles and note is made that in relation to highways, safety enhancements and regular maintenance for all users will be prioritised. It is also noted that issues such as potholes and drains will be addressed swiftly and this, along with a greater</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											<p>resilience to extreme weather, should reduce the risk of accidents.</p> <p>Note is also made that there will be wide, segregated and well maintained pedestrian infrastructure, with reduced street clutter, dropped kerbs, ramp access provision where needed and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to more vulnerable groups such as pedestrians, the elderly, those with disabilities, children.</p>
4	Improve provision of public transport in rural areas, coastal communities, or to those areas experiencing constraint in public transport provision	++	++	++	++	++	++	++	++	++	This policy area provides a strong emphasis on expanding the reach of the transport network to all communities in the region – including coastal and rural. A range of mechanisms are set out that aims to recognise that no ‘one size fits all’ i.e. the range of transport choice means that journeys can be tailored to suit individual circumstances.
5	Reduce severance	++	++	++	++	++	++	++	++	++	Severance will be reduced across the region as the reach of the transport network expands – the Policy area sets out the mechanisms through which this will be done, such as Demand Responsive Transport and so on. All groups can be expected to benefit.



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
6	Reduce air, noise, odour and light pollution from transport	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	<p>A focus on sustainable modes (such as active travel) and moving people onto public transport, or freight onto rail, should reduce overall noise and pollution emissions from the road network. It is noted that new developments will need to be connected via sustainable modes and this will reduce noise and pollution levels in residential areas etc. An uptake in EVs could also reduce overall noise levels.</p> <p>Reduction in pollution will be of particular benefit for children, the elderly and people with breathing related health issues.</p> <p>However, note is also made of expanded highway capacity, expanded rail services, new park & ride sites and so on, which would have noise implications – both during construction and operation, though these would likely be at a local level. Note is also made of public transport services starting earlier and finishing later – while this will benefit some travellers, it may have noise implications along transport routes.</p>
7	Improve actual and perceived safety and security issues	++	++	++	++	++	++	++	++	++	<p>Clear note is made that the network should be able to deal with disruptions, accidents and extreme weather more effectively. This will include prioritising safety enhancements and regular maintenance (including of road surfaces), which can be anticipated to reduce the potential for accidents to</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											occur. Note is also made there should be wide, segregated and well maintained pedestrian infrastructure with reduced street clutter, dropped kerbs, ramp access provision and other inclusive infrastructure such as well designed crossing points. This will be of particular importance to groups such as pedestrians, the elderly, those with disabilities, children.
8	Provide accessible transport facilities and infrastructure that encourage use by a range of groups	++	++	++	++	++	++	++	++	++	This policy area provides a focus on expanding the range of services and the range of transport modes. It recognises that 'one size does not fit all' and as such a range of mechanisms for increasing travel choice are provided. All groups will benefit.



E.1.3.4 Rural Proofing Assessment Table

Rural Needs sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
1	Increase access via a range of transport modes for rural communities.	++	++	++	++	++	++	++	++	++	++	<p>Clear note is made that the geographical reach of the integrated transport network should extend into every community, including rural and coastal areas. It is the intention that 'routes, services and infrastructure should directly connect communities to large employment sites, urban centres, out of town business parks, village centres, rural and coastal communities. Examples are given of a range of modes for how this is to be done, including demand responsive transport, community transport, mobility hubs and services feeding interchanges and stations. Active travel will also feature, with an expanded cycle network to rural areas, though distances involved mean this is more likely to be used for recreational purposes rather than commuting and would not offer the same advantages to all in the community</p> <p>Note is also made that public chargepoint infrastructure should cover remote rural communities where there is lower levels of utilisation of EVs. There will also be more park & ride provision in rural and coastal communities.</p>



Rural Needs sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
												It is anticipated that all groups will benefit from this policy area.
2	Enable economic growth, and employment diversification in rural areas.	++	++	++	++	++	++	++	++	++	++	Increased linkages within rural communities, as well as to urban centres and further afield outside the region will help to enable economic growth. This will make it easier for people to travel to work, or for goods to be moved efficiently - note is made of improving long distance rail links to help welcome new business and organisations to be based in the north east. Similarly, note is made of enhanced infrastructure to improve freight connectivity and delivery services and it is noted that it is anticipated that there will be reduced journey times for the movement of people, and goods between freight centres in the region, across the UK and internationally. This will be of benefit for rural businesses moving perishable goods or livestock.
3	Connecting people with nature	+	+	+	+	+	+	+	+	+	+	While a key element of this policy area is concerned with ensuring rural and coastal communities have access to the wider transport network, it will also work in the other direction, with people in the urban communities ultimately having greater access to rural areas and allow people to better connect with nature. Benefits



Rural Needs sub-objective	Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
	Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											could be expected across all groups in the community.



E.1.4 Safety of Women and Girls Policy Assessment



E.1.4.1 ISA Assessment Table

ISA Objective	Effects					Assessment				
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm	
1. Protect and Improve air quality	✓	Reg	LT / ST	Perm / Temp	Med	+	-	++	++	++

Commentary

Many aspects of this focus area, and its associated commitments, should result in the protection of, or improvements to air quality. The policy is aimed at improving service quality to ensure all people, especially women and girls, feel safe whilst travelling around the north east. Increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements will result in the uptake of increased public transport choices by vulnerable people that will reduce congestion and the number of cars on the road, thereby improving air quality in the region. Note is made of the need to ensure that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport. Again, this uptake of sustainable travel options will reduce the number of cars on the road. The need to have consistent and cohesive branding across the entire network, including in rural and coastal areas should lead to increased awareness of travel opportunities and help to increase the proportion of journeys made sustainably, assisting in protecting and improving air quality.

The policy specifically notes that communities should not be impacted negatively by vehicular traffic, with volumes, speeds, and any resultant air pollution being kept to a minimum. This includes ensuring heavy goods vehicles avoid residential areas where possible. The policy also notes that the North East's two Urban Traffic Management Control (UTMC) centres will be used to improve the functionality and performance of the integrated transport network, which is assumed to improve the flow of traffic in towns and cities where AQMAs have been declared (within Durham, Gateshead, Newcastle and North Tyneside), thus improving air quality. The policy notes enhanced use of Intelligent Transport Systems (ITS) incorporating UTMC and live journey time control to improve journey time reliability and reduce congestion, improving air quality impacts.

It is however to be noted that some of the physical infrastructure improvements identified may have the potential to have short term, temporary adverse effects on air quality during construction e.g construction of taxi and car club infrastructure. Effects are not expected to continue into the operational phase.

Effects are considered to be moderately beneficial, though with some minor adverse effects, particularly in the short term.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Requirement for contractors to produce a CEMP, including Construction Dust Assessment, as required by IAQM Guidance

Ensure that UTMC centres improve the flow of traffic in towns and cities where there are designated AQMAs.

ISA Objective	Effects					Assessment				
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm	
2. Reduce the impact on environmental noise from transportation sources	✓	Reg	LT / ST	Perm / Temp	Med	+	-	++	++	++

Commentary



A focus on increased trust, confidence and perception of the transport network and making it safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport should result in the increased uptake of public transport and active travel choices that will reduce overall noise from the road network.

Specific note is made to the need for communities not to be negatively impacted by vehicular traffic, with volumes, speeds, and it is assumed by association noise pollution being kept to a minimum. This includes ensuring heavy goods vehicles avoid residential areas where possible.

The policy notes a specific focus on making roads safer for the most vulnerable users, including pedestrians and cyclists, which should increase the number of active travellers on the network reducing noise from vehicles.

Improvements to physical infrastructure, such as well lit and high passing footfall locations for public electric vehicle charging infrastructure should result in an uptake of EVs which could also reduce overall noise levels.

It is however to be noted that some of the physical infrastructure improvements identified may have the potential to have short term, temporary effects on noise during construction e.g. construction of taxi and car club infrastructure, especially if in the vicinity of sensitive individuals. Effects are not expected to continue into the operational phase.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Requirement for contractors to produce a CEMP, including a Noise Impact Assessment, if required.

ISA Objective	Effects					Assessment				
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm	
3. Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050	✓	Reg	LT / ST	Perm / Temp	Med	+ +	- +	+ +	- +	- +

Commentary

This policy specifically notes that the integrated network must help enable significant reduction in greenhouse gas emissions from transport. It further sets out that the North East should set the highest standards for a fleet of green, Zero Emission Buses operating as part of an integrated network. In addition, the policy sets out the need for high quality facilities for HGV drivers with alternative fuel infrastructure in place to support the decarbonisation of road freight. All of these initiatives will help reduce carbon emissions and contribute to meeting national carbon targets.

Similar to air quality emissions, many aspects of this policy will further reduce carbon emissions by promoting the uptake of public transport choices by more vulnerable people that will reduce congestion. The policy notes that improving service quality to ensure all people, especially women and girls, feel safe whilst travelling around the north east will increase trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements. Note is made of the need to ensure that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport. Again, this uptake of sustainable and active travel options will reduce the number of cars on the road and associated emissions. The need to have consistent and cohesive branding across the entire network, including in rural and coastal areas should lead to increased awareness of travel opportunities and help to increase the proportion of journeys made sustainably, assisting in reducing carbon emissions.

The policy notes a specific focus on making roads safer for the most vulnerable users, including pedestrians and cyclists, which should increase the number of active travellers on the network reducing carbon emissions from cars.

Nevertheless, there are elements of this policy area that could increase carbon emissions (or result in increased levels of embedded carbon) e.g. improvements to physical infrastructure, during both construction (for example construction of car club infrastructure) and operation (e.g. additional lighting or CCTV cameras).



Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Consideration should be given to specifying the provision of better lighting and CCTV should be from renewable sources

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
4. Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	✓	Reg	LT	Perm	Med	+	+	+	+

Commentary

Clear note is made of ensuring that Asset Management Plans consider the effects of future weather patterns, assumed to include extreme weather events such as flooding, and that such patterns do not cause undue disruption. The policy specifies that the North Easts two Urban Traffic Management Control (UTMC) centres should be used to improve the functionality and performance of the integrated transport network, assumed to include during extreme events.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
5. Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (encouraged by increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements thereby shifting more people to active and public transport) could potentially reduce disturbance to habitats and species. However, the policy specifically notes that to improve the perception of safety and allow women and girls to build confidence in using the transport network, obstructions such as vegetation will be removed from routes. This would adversely effect biodiversity through increased disturbance and loss of habitat. Further improvements to physical infrastructure noted in the policy e, g new bus stops or car club infrastructure, is also likely to have negative impacts on biodiversity. Effects would be slight (beneficial and adverse) and experienced at the local scale.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure that vegetation removal is done so outside of bird breeding season – this could be noted in a CEMP

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm



6. Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-
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Commentary

A general reduction in traffic levels (encouraged by increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements thereby shifting more people to active and public transport) could potentially reduce disturbance to sites designated for nature conservation.

However, the policy specifically notes that to improve the perception of safety and to allow women and girls to build confidence in using the transport network, obstructions such as vegetation will be removed from routes. Further improvements to physical infrastructure noted in the policy e.g. new bus stops or car club infrastructure, may also result in potential adverse effects if located in proximity to sites designated for nature conservation.

Effects would be slight (beneficial and adverse) and experienced at the local scale.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure any new physical infrastructure schemes e.g car club infrastructure, do not have a direct / indirect effect on sites designated for nature conservation. Undertake project level HRA.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
7. Protect, enhance and promote geodiversity	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

New physical infrastructure, such as bus stations or car pool infrastructure, could lead to the loss of geodiversity, though it is anticipated this would be slight and at a local stage if it were to occur. Opportunities could be taken to avoid sites noted for geodiversity or could be designed to allow these sites to show local geological features.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
8. Protect and enhance cultural heritage assets and their settings, and the wider historic environment	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (encouraged by increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements thereby shifting more people to active and public transport) could potentially reduce disturbance to cultural heritage assets and their settings. However, development of new physical infrastructure, such as bus stations or car pool infrastructure, could lead to disturbance or destruction of unknown archaeological remains, or a deterioration in settings.

Mitigation / Recommendations



Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
9. Conserve and enhance the natural beauty the North East’s protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (encouraged by increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements, thereby shifting more people to active and public transport) could potentially enhance landscapes and townscapes etc. by removing traffic and improving overall visual amenity. The policy notes that maintenance should be carried out promptly across the whole integrated transport network with assets required to be maintained in the best possible condition to ensure their continued efficiency of operation and to create a positive first impression. That, alongside comprehensive cleaning regimes should help to improve visual amenity, particularly in townscapes.

This policy area will also result in new physical infrastructure in the landscape, including in rural areas, with the potential for adverse effects. These are likely to be at a local scale and likely to be largely mitigable by careful consideration of scheme location and landscaping

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure scheme design includes for appropriate landscaping should it be required.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
10. Protect and enhance the water environment	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (encouraged by the shift to active and public transport) could reduce the potential for pollution incidents from hydrocarbon spillages or reduce the level of polluted runoff of brake and tyre detritus. However, new taxi or car club infrastructure sites could represent new sources of polluted runoff, though careful design and implementation of pollution control measures would reduce this threat.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure scheme design includes for pollution control – this could include the use of Sustainable Drainage (SuDS).

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
11. Protect soil resources and avoid land contamination	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-



Commentary

New infrastructure such as taxi and car club infrastructure could lead to the loss of soil resources (particularly in rural areas), though it is anticipated this would be slight and at a local stage if it were to occur. A reduction in general traffic could help to avoid contamination by reducing the amount of polluted runoff to surrounding areas or reduce airborne pollution deposition.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
12. Promote sustainable use of resources and natural assets	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

Encouraging more sustainable modes (rail, buses, active travel, shared transport etc.) would help to reduce the use of resources such as hydrocarbons. The increased uptake of EVs, by providing accessible, well maintained, public electric vehicle charging infrastructure which is situated in well-lit locations with high passing footfall would also have a similar effect. However, new infrastructure would require the use of resources / materials particularly during construction.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
13. Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	✓	Reg	LT	Perm	Med	+	++	++	++

Commentary

The focus of this policy area is to ensure that all people, especially women and girls, feel safe whilst travelling around the North East. The policy specifically notes that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport. Improvements to physical infrastructure should play a significant role in this. The policy further notes that services should be accessible to all. More generally, increased trust and confidence in the safety of the network will encourage more people to access employment and economic opportunities more widely across the region.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made



ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
14. Support the wider coordination of land use and energy planning across the North East CA area	N/A	N/A	N/A	N/A	N/A	0	0	0	0

Commentary

No interaction between this Policy area and this ISA Objective has been identified.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
15. Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	✓	Reg	LT	Perm	Med	+	++	++	++

This policy and its commitments will help make journeys easier and thereby improve access to services by ensuring all users, especially women and girls, have increased trust, confidence and perceptions of safety when using the transport network. The policy notes that all road users in the North East should feel safe when using the network, including pedestrians, cyclists, wheelers, car drivers, and heavy goods vehicle drivers, with there being a specific focus on making roads safer for the most vulnerable users (defined as pedestrians, cyclists, and motorcyclists).

The policy notes that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport.

The policy notes that the North East’s two Urban Traffic Management Control (UTMC) centres should be used to improve the functionality and performance of the integrated transport network. Public transport services should have timely arrivals and departures with minimal delays.

Note is made of the need for signage and wayfinding to be consistent across the entire network, regardless of the type of location, including rural and coastal areas leading to increased awareness and travel opportunities.

No interaction with the affordability of transport has been identified for this policy area.

The policy aims to reduce the amount of road casualties and fatalities year on year and aspires for zero road deaths and serious injuries. This will be done so by developing an action plan covering a holistic set of measures to reduce the number of North East road casualties.

A greater uptake of people on sustainable transport methods, will reduce the number of private vehicle users, further reducing road accidents and collisions.

Making people feel safer using the transport system will reduce severance across the region, with benefits for most groups.

Connections will be enhanced across the region, including rural areas and coastal communities, with all groups benefitting by providing a transport network that is safer and more reliable, that people have more trust and confidence in using.

Many aspects of this focus area, and its associated commitments, should result in the protection of, or improvements to human health. The policy is aimed at improving service quality to ensure people feel safe whilst travelling around the North East. Increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements will result in the uptake of increased public transport choices by vulnerable people that will reduce congestion and the number of cars on the road, thereby improving air quality in the region for all. Whilst there is a particular focus on women and girls, it is assumed it will increase uptake across all groups.



The policy notes that active travel infrastructure should be well integrated with public transport to ensure there are not long distances that need to be travelled at night between transport options, and these facilities should also be well-lit.

A prominent, unified transport network should lead to increased awareness of travel opportunities and help to increase the proportion of journeys made sustainably.

The policy notes that the public travel infrastructure improvements it promotes, such as public transport stops and stations improvements, will make it safer and easier to use the public transport network. The policy further notes that active travel, taxi and car club infrastructure should be well integrated with public transport to ensure there are not long distances that need to be travelled at night between transport options, and these facilities should also be well-lit.

Further accessibility improvements on public transport so it is a truly integrated service and people with additional needs should be supported by staff on the network.

The policy area is centred around making travelling safer. The policy sets out clear initiatives for ensuring that people using the network have increased trust, confidence and perceptions of safety. The policy notes the need for clear and effective channels through which to report harassment and violence and a need for targeted action and resources assigned to prevent violence against women and girls on the region’s transport network. Whilst this specifically notes women and girls, it is assumed this will benefit all vulnerable users.

A number of physical infrastructure improvements have been identified to build confidence in using the transport network, including better lighting, additional CCTV, new safe bus stops, secure car parks and cycle storage etc. Further accessibility improvements on public transport are noted so as to provide a truly integrated service, making clear that people with additional needs should be supported by staff on the network.

Designing systems and processes/procedures from the outset to minimise or eliminate potential hazards is inherent to this policy. The policy is centred on ensuring vulnerable users, specifically women and girls, feel safe using the public transport network. The policy notes that looking at the root causes of why women and girls can feel unsafe on the network, and taking targeted action to fix them, the CA can ensure that all people feel safe whilst travelling around the North East.

It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes and reduce congestion (by increasing peoples trust, confidence and perceptions of safety on the transport network and thereby shifting people away from private cars). This is anticipated to improve the street environment, with potentially greater benefit for those who find navigating streets more challenging such as the very young, the elderly, disabled people (for example through high numbers of parked cars etc).

A number of physical infrastructure improvements have been identified in the policy which will create healthier, safer and more pleasant places for people to spend time in or travel through. This includes improvements to public transport stops and stations, and investment into placemaking around transport hubs, making them pleasant places to be, increasing footfall and reducing the likelihood of people having to wait by themselves. Note is made of streets being welcoming and safe spaces for all people, enabling more journeys to be made by active travel and public transport.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
16. Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)	✓	Reg	LT	Perm	Med	++	++	++	++

Commentary

This policy and its commitments will help make journeys easier and thereby improve access to services by ensuring all users, especially women and girls, have increased trust, confidence and perceptions of safety when using the transport network.



The policy notes that all road users in the North East should feel safe when using the network, including pedestrians, cyclists, wheelers, car drivers, and heavy goods vehicle drivers, with there being a specific focus on making roads safer for the most vulnerable users (defined as pedestrians, cyclists, and motorcyclists).

The policy notes that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport.

There should be further accessibility improvements on public transport so it is a truly integrated service and people with additional needs should be supported by staff on the network

The policy notes that the North East’s two Urban Traffic Management Control (UTMC) centres should be used to improve the functionality and performance of the integrated transport network. Public transport services should have timely arrivals and departures with minimal delays.

No interaction with the safety of women and girls and affordability of transport has been identified for this policy area.

The policy aims to reduce the amount of road casualties and fatalities year on year and aspires for zero road deaths and serious injuries. This will be done so by developing an action plan covering a holistic set of measures to reduce the number of North East road casualties.

A greater uptake of people on sustainable transport methods, will reduce the number of private vehicle users, further reducing road accidents and collisions.

The policy notes that consistent signage and wayfinding across the entire network, regardless of the type of location, including rural and coastal areas will lead to increased awareness of travel opportunities and help to increase the proportion of journeys made sustainably.

Making people feel safer using the transport system will reduce severance across the region, with benefits for most groups.

Many aspects of this focus area, and its associated commitments, should result in the protection of, or improvements to human health. The policy is aimed at improving service quality to ensure people feel safe whilst travelling around the North East. Increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements will result in the uptake of increased public transport choices by vulnerable people that will reduce congestion and the number of cars on the road, thereby improving air quality in the region for all. Whilst there is a particular focus on women and girls, it is assumed it will increase uptake across protected characteristic groups.

The policy area is centered around making travelling safer. The policy sets out clear initiatives for ensuring that people using the network have increased trust, confidence and perceptions of safety. The policy notes the need for clear and effective channels through which to report harassment and violence and a need for targeted action and resources assigned to prevent violence against women and girls on the region’s transport network. Whilst this specifically notes women and girls, it is assumed this will benefit all protected characteristic groups.

A number of physical infrastructure improvements have been identified to build confidence in using the transport network, including better lighting, additional CCTV, new safe bus stops, secure car parks and cycle storage etc. Further accessibility improvements on public transport are noted so as to provide a truly integrated service, making clear that people with additional needs should be supported by staff on the network.

The policy notes that the public travel infrastructure improvements it promotes, such as public transport stops and stations improvements, will make it safer and easier to use the public transport network. The policy further notes that active travel, taxi and car club infrastructure should be well integrated with public transport to ensure there are not long distances that need to be travelled at night between transport options, and these facilities should also be well-lit.

Further accessibility improvements on public transport so it is a truly integrated service and people with additional needs should be supported by staff on the network

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm



17. Promote fairness and equity in rural connectivity

✓ | Reg | LT | Perm | Med | + | + | + | +

Commentary

Access will be enhanced across the region, including rural areas and coastal communities, with all groups benefitting by providing a transport network that is safer and more reliable, that people have more trust and confidence in using.

The focus of this policy area is to ensure that all people, especially women and girls, feel safe whilst travelling around the North East. The policy specifically notes that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport. Increased trust and confidence in the safety of the network will encourage more people to access employment and economic opportunities more widely across the region.

The focus on safety will also help enable people to take up employment or training opportunities, with consequential beneficial effects on the economy. It is also possible that safer travel opportunities may encourage people to stay in rural areas (or coastal areas and small villages) and journey further for work. This could allow rural enterprises to develop to serve a greater residential population.

The policy further notes that services should be accessible to all.

No interaction with the safety of women and girls and connecting people with nature has been identified for this policy area.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.



E.1.4.2 Health Impact Assessment Table

HIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement	
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees		Assessment summary
1	Improve accessibility to employment opportunities, health and leisure services and facilities and amenities for all	++	++	++	0	++	+	0	+	+	+	<p>This policy and its commitments will help make journeys easier and thereby improve access to services by ensuring all users, especially women and girls, have increased trust, confidence and perceptions of safety when using the transport network.</p> <p>The policy notes that all road users in the North East should feel safe when using the network, including pedestrians, cyclists, wheelers, car drivers, and heavy goods vehicle drivers, with there being a specific focus on making roads safer for the most vulnerable users (defined as pedestrians, cyclists, and motorcyclists).</p> <p>The policy notes that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport.</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												<p>There should be further accessibility improvements on public transport so it is a truly integrated service and people with additional needs should be supported by staff on the network</p> <p>The policy notes that the North East's two Urban Traffic Management Control (UTMC) centres should be used to improve the functionality and performance of the integrated transport network. Public transport services should have timely arrivals and departures with minimal delays.</p> <p>Note is made of the need for signage and wayfinding to be consistent across the entire network, regardless of the type of location, including rural and coastal areas leading to increased awareness and travel opportunities.</p>
2	Improve affordability of transport	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction with the affordability of transport has been identified for this policy area.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	++	++	++	++	++	++	++	++	++	++	<p>The policy notes that all road users in the region should feel safe when using the network, including pedestrians, cyclists, wheelers, car drivers, and heavy goods vehicle drivers. There is a specific focus on the most vulnerable users, defined as pedestrians, cyclists, and motorcyclists.</p> <p>The policy aims to reduce the amount of road casualties and fatalities year on year and aspires for zero road deaths and serious injuries. This will be done so by developing an action plan covering a holistic set of measures to reduce the number of North East road casualties.</p> <p>A greater uptake of people on sustainable transport methods, will reduce the number of private vehicle users, further reducing road accidents and collisions.</p>
4	Reduce severance	+	+	+	0	+	+	+	+	+	+	Making people feel safer using the transport system will reduce severance across the region, with benefits for most groups.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
5	Improve connections between and within communities	++	++	++	0	++	++	++	++	++	++	Connections will be enhanced across the region, including rural areas and coastal communities, with all groups benefitting by providing a transport network that is safer and more reliable, that people have more trust and confidence in using.
6	Protect health by reducing air, noise, odour and light pollution from transport	++	++	++	++	++	++	++	++	++	++	Many aspects of this focus area, and its associated commitments, should result in the protection of, or improvements to human health. The policy is aimed at improving service quality to ensure people feel safe whilst travelling around the North East. Increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements will result in the uptake of increased public transport choices by vulnerable people that will reduce congestion and the number of cars on the road, thereby improving air quality in the region for all. Whilst there is a particular focus on women and girls, it is assumed it will increase uptake across all groups.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
7	Improve access to active travel modes	+	+	+	+	+	+	+	+	+	+	<p>It is anticipated this policy will improve access to active travel modes by making it safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys. Whilst there is a particular focus on women and girls, it is assumed it will increase uptake across all vulnerable groups.</p> <p>The policy notes that active travel infrastructure should be well integrated with public transport to ensure there are not long distances that need to be travelled at night between transport options, and these facilities should also be well-lit.</p> <p>A prominent, unified transport network should lead to increased awareness of travel opportunities and help to increase the proportion of journeys made sustainably.</p>
8	Improve access to public transport	+	+	+	+	+	+	+	+	+	+	<p>The policy notes that the public travel infrastructure improvements it promotes, such as public transport stops and stations improvements, will make it safer and easier to use the public transport network. The policy further notes that active travel, taxi and car</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												<p>club infrastructure should be well integrated with public transport to ensure there are not long distances that need to be travelled at night between transport options, and these facilities should also be well-lit.</p> <p>Further accessibility improvements on public transport so it is a truly integrated service and people with additional needs should be supported by staff on the network.</p>
9	Improve actual and perceived safety and security issues	++	++	++	++	++	++	++	++	++	++	<p>The policy area is centered around making travelling safer. The policy sets out clear initiatives for ensuring that people using the network have increased trust, confidence and perceptions of safety. The policy notes the need for clear and effective channels through which to report harassment and violence and a need for targeted action and resources assigned to prevent violence against women and girls on the region's transport network. Whist this specifically notes women and girls, it is assumed this will benefit all vulnerable users.</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												<p>A number of physical infrastructure improvements have been identified to build confidence in using the transport network, including better lighting, additional CCTV, new safe bus stops, secure car parks and cycle storage etc. Further accessibility improvements on public transport are noted so as to provide a truly integrated service, making clear that people with additional needs should be supported by staff on the network.</p> <p>The policy notes it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport.</p>
10	Encourage and promote safety by design	++	++	++	++	++	++	++	++	++	++	<p>Designing systems and processes/procedures from the outset to minimise or eliminate potential hazards is inherent to this policy. The policy is centred on ensuring vulnerable users, specifically women and girls, feel safe using the public transport network. The policy notes that looking at the root causes of why</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												women and girls can feel unsafe on the network, and taking targeted action to fix them, the CA can ensure that all people feel safe whilst travelling around the North East.
11	Improve the street environment to create healthier, safer and more pleasant places for people to spend time in or travel through	++	++	++	++	++	++	++	++	++	++	<p>It is anticipated that this policy, and its associated commitments, will help to reduce traffic volumes and reduce congestion (by increasing peoples trust, confidence and perceptions of safety on the transport network and thereby shifting people away from private cars). This is anticipated to improve the street environment, with potentially greater benefit for those who find navigating streets more challenging such as the very young, the elderly, disabled people (for example through high numbers of parked cars etc).</p> <p>A number of physical infrastructure improvements have been identified in the policy which will create healthier, safer and more pleasant places for people to spend time in or travel through. This includes improvements to public transport stops and stations, and investment into placemaking around transport hubs, making them pleasant</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												places to be, increasing footfall and reducing the likelihood of people having to wait by themselves. Note is made of streets being welcoming and safe spaces for all people, enabling more journeys to be made by active travel and public transport.
12	Involve, support and empower communities to identify interventions that address their transport needs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction has been identified.
13	Support a healthy and resilient workforce to deliver and operate a reliable public transport system	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction has been identified.



E.1.4.3 Equalities Impact Assessment Table

EqIA sub-objective		Scale of Effect								Description of effect/Recommendations for mitigation or enhancement	
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships		Assessment summary
1	Improve accessibility to services, facilities and amenities for all, in particular by active travel modes	++	++	++	++	++	++	++	++	++	<p>This policy and its commitments will help make journeys easier and thereby improve access to services by ensuring all users, especially women and girls, have increased trust, confidence and perceptions of safety when using the transport network.</p> <p>The policy notes that all road users in the North East should feel safe when using the network, including pedestrians, cyclists, wheelers, car drivers, and heavy goods vehicle drivers, with there being a specific focus on making roads safer for the most vulnerable users (defined as pedestrians, cyclists, and motorcyclists).</p> <p>The policy notes that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport.</p> <p>There should be further accessibility improvements on public transport so it is a truly integrated service</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											<p>and people with additional needs should be supported by staff on the network</p> <p>The policy notes that the North East's two Urban Traffic Management Control (UTMC) centres should be used to improve the functionality and performance of the integrated transport network. Public transport services should have timely arrivals and departures with minimal delays.</p>
2	Improve affordability of transport	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction with the safety of women and girls and affordability of transport has been identified for this policy area.
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	++	++	++	++	++	++	++	++	++	<p>The policy notes that all road users in the region should feel safe when using the network, including pedestrians, cyclists, wheelers, car drivers, and heavy goods vehicle drivers. There is a specific focus on women and girls, however it is expected all protected characteristic groups will benefit.</p> <p>The policy aims to reduce the amount of road casualties and fatalities year on year and aspires for zero road deaths and serious injuries. This will be done so by developing an action plan covering a</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											<p>holistic set of measures to reduce the number of North East road casualties.</p> <p>A greater uptake of people on sustainable transport methods, will reduce the number of private vehicle users, further reducing road accidents and collisions.</p>
4	Improve provision of public transport in rural areas, coastal communities, or to those areas experiencing constraint in public transport provision	+	+	+	+	+	+	+	+	+	The policy notes that consistent signage and wayfinding across the entire network, regardless of the type of location, including rural and coastal areas will lead to increased awareness of travel opportunities and help to increase the proportion of journeys made sustainably.
5	Reduce severance	+	+	+	+	+	+	+	+	+	Making people feel safer using the transport system will reduce severance across the region, with benefits for most groups.
6	Reduce air, noise, odour and light pollution from transport	++	++	++	++	++	++	++	++	++	Many aspects of this focus area, and its associated commitments, should result in the protection of, or improvements to human health. The policy is aimed at improving service quality to ensure people feel safe whilst travelling around the North East. Increased trust, confidence and perception of the transport network, alongside noted physical infrastructure improvements will result in the uptake of increased public transport choices by vulnerable



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											people that will reduce congestion and the number of cars on the road, thereby improving air quality in the region for all. Whilst there is a particular focus on women and girls, it is assumed it will increase uptake across protected characteristic groups.
7	Improve actual and perceived safety and security issues	++	++	++	++	++	++	++	++	++	<p>The policy area is centered around making travelling safer. The policy sets out clear initiatives for ensuring that people using the network have increased trust, confidence and perceptions of safety. The policy notes the need for clear and effective channels through which to report harassment and violence and a need for targeted action and resources assigned to prevent violence against women and girls on the region's transport network. Whilst this specifically notes women and girls, it is assumed this will benefit all protected characteristic groups.</p> <p>A number of physical infrastructure improvements have been identified to build confidence in using the transport network, including better lighting, additional CCTV, new safe bus stops, secure car parks and cycle storage etc. Further accessibility improvements on public transport are noted so as to provide a truly integrated service, making clear that</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											<p>people with additional needs should be supported by staff on the network.</p> <p>The policy notes it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport.</p>
8	Provide accessible transport facilities and infrastructure that encourage use by a range of groups	+	+	+	+	+	+	+	+	+	<p>The policy notes that the public travel infrastructure improvements it promotes, such as public transport stops and stations improvements, will make it safer and easier to use the public transport network. The policy further notes that active travel, taxi and car club infrastructure should be well integrated with public transport to ensure there are not long distances that need to be travelled at night between transport options, and these facilities should also be well-lit.</p> <p>Further accessibility improvements on public transport so it is a truly integrated service and people with additional needs should be supported by staff on the network</p>



E.1.4.4 Rural Proofing Assessment Table

Rural Needs sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
1	Increase access via a range of transport modes for rural communities.	+	+	+	+	+	+	+	+	+	+	Access will be enhanced across the region, including rural areas and coastal communities, with all groups benefitting by providing a transport network that is safer and more reliable, that people have more trust and confidence in using.
2	Enable economic growth, and employment diversification in rural areas.	+	+	+	+	+	+	+	+	+	+	<p>The focus of this policy area is to ensure that all people, especially women and girls, feel safe whilst travelling around the North East. The policy specifically notes that it should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport. Increased trust and confidence in the safety of the network will encourage more people to access employment and economic opportunities more widely across the region.</p> <p>The focus on safety will also help enable people to take up employment or training opportunities, with consequential beneficial effects on the economy. It is also possible that safer travel opportunities may encourage people to stay in rural areas (or</p>



Rural Needs sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
												<p>coastal areas and small villages) and journey further for work. This could allow rural enterprises to develop to serve a greater residential population.</p> <p>The policy further notes that services should be accessible to all.</p>
3	Connecting people with nature	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No interaction with the safety of women and girls and connecting people with nature has been identified for this policy area.



E.1.5 Connections Between Transport Type Policy Assessment



E.1.5.1 ISA Assessment Table

ISA Objective	Effects					Assessment					
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm		
1. Protect and Improve air quality	✓	Reg	LT	Perm	Med	+	-	+	-	+	-

Commentary

This policy area aims to make more sustainable travel options possible by offering a more seamless experience across a range of modes – allowing people to access modes such as bus and rail as well as active travel routes. Greater uptake of public transport would also be encouraged through better coordination of services and timetabling. This should lead to air quality improvements, though there are also elements of this policy area with potential adverse effects. For example, note is made of a greater role for park & ride – while this will facilitate access to bus and rail services, it could lead to a deterioration of air quality in the local area in which the park & ride site is located. Note is also made of the continued use of private vehicles / taxis, though note is also made of provision of EV charging provision which would help to encourage uptake of EVs.

Effects are anticipated to be moderately beneficial, with some slight adverse effects.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
2. Reduce the impact on environmental noise from transportation sources	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

It is considered this policy area will help to encourage people to utilise modes which would have a quieter footprint. For example greater uptake of public transport should lead to a general reduction in traffic levels. Note is also made of active travel modes and there could be some encouragement for uptake of EVs. However, there is a potential for local noise impacts in the vicinity of new park & ride sites, or in the vicinity of other interchange types. Similarly, although outside the scope of the assessment, it is worth noting that increasing connections to airport could lead to a greater number of flights, with noise implications.

It is considered benefits will likely be slight in the short to long term, though there may potentially be more significant effects if there is a greater uptake of EVs and active modes over the long term. Adverse effects would be slight and very localised from the short to the long term, potentially declining as more EV vehicles are added to the network.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects	Assessment
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	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
3. Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050	✓	Reg	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

This policy area aims to make more sustainable travel options possible by offering a more seamless experience across a range of modes – allowing people to access modes such as bus and rail as well as active travel routes. Greater uptake of public transport would also be encouraged through better coordination of services and timetabling. This should lead to an overall reduction in carbon emissions. Note is also made of EV charging provision and bike parking. Nevertheless, it is anticipated that there would be ongoing carbon emissions through provision of park & ride sites (including embedded carbon in construction) and the continued role of the private car.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
4. Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

While a greater range of connection and mode types should help build resilience into the transport network, other elements of this policy area could have adverse implications – for example new park & ride sites (or new and expanded interchange hubs) in rural areas could lead to greater levels of impermeable surfaces, thereby resulting in a greater risk of flooding, particularly in local areas.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
5. Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (through an encouragement to uptake public transport and or active travel) could potentially reduce disturbance to habitats and species. Schemes such as the Shields Ferry would also reduce the level of road based transport and reduce the need for bridges or tunnels. However, new park & ride sites or expanded interchanges or new physical links (particularly in rural areas) would likely result in the loss of habitats, though they may provide some opportunities for planting e.g. in landscaping.

Effects would be slight (beneficial and adverse) and experienced at the local scale.



Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure any planting in the development of a transport interchange utilises native species of local provenance.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
6. Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (through an encouragement to uptake public transport and or active travel) could potentially reduce disturbance to sites designated for nature conservation. There would though be potential for adverse effects (direct or indirect) if any new infrastructure such as park & ride sites or new physical links be located in proximity to sites designated for nature conservation.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure new park & ride sites or other infrastructure does not have a direct / indirect effect on sites designated for nature conservation. Undertake project level HRA.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
7. Protect, enhance and promote geodiversity	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

New infrastructure such as park & ride sites or new physical links could lead to the loss of geodiversity, though it is anticipated this would be slight and at a local stage if it were to occur. Opportunities could be taken to avoid sites noted for geodiversity, or could be designed to allow these sites to show local geological features.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure any infrastructure development is located away from sites noted for their geodiversity.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
8. Protect and enhance cultural heritage assets and their settings, and the wider historic environment	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-



Commentary

A general reduction in traffic levels (through an encouragement to uptake public transport and or active travel) could potentially reduce disturbance to cultural heritage assets and their settings. However, development of new infrastructure such as park & ride sites or new physical links could lead to disturbance or destruction of unknown archaeological remains, or a deterioration in settings.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
9. Conserve and enhance the natural beauty the North East’s protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (through an encouragement to uptake public transport and or active travel) could potentially enhance landscapes and townscapes etc. by removing traffic and improving overall visual amenity. However, development of new infrastructure such as interchange hubs and park & ride sites or new physical links could also lead to new development in the landscape, particularly in rural areas, with the potential for adverse effects. These are likely to be at a local scale and likely to be largely mitigable by careful consideration of scheme location and landscaping.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure scheme design includes for appropriate landscaping.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
10. Protect and enhance the water environment	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (through an encouragement to uptake public transport and or active travel) could reduce the potential for pollution incidents from hydrocarbon spillages or reduce the level of polluted runoff of brake and tyre detritus. However, new Park & Ride sites or new physical links could represent new sources of polluted runoff, though careful design and implementation of pollution control measures would reduce this threat.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: Ensure scheme design includes for pollution control.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm



11. Protect soil resources and avoid land contamination

✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-
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Commentary

New infrastructure such as park & ride sites or new physical links could lead to the loss of soil resources, though it is anticipated this would be slight and at a local stage if it were to occur. A reduction in general traffic could help to avoid contamination by reducing the amount of polluted runoff to surrounding areas.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
12. Promote sustainable use of resources and natural assets	✓	Local	LT	Perm	Med	+/-	+/-	+/-	+/-

Commentary

A general reduction in traffic levels (through an encouragement to uptake public transport and or active travel) could reduce the need to use hydrocarbon fuels, though new infrastructure such as physical links of park & ride sites would require use of resources, particularly during construction.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
13. Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	✓	Local	LT	Perm	Med	+	++	++	++

Commentary

These policy areas would make travel more efficient and provide greater connectivity. This will allow easier access to employment or economic opportunities. New opportunities in construction will be provided through infrastructure development, although this would be of limited duration. Connectivity to wider markets will also be enhanced with more coordinated linkages to national or international gateways and linkages.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: No recommendations made.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm



14. Support the wider coordination of land use and energy planning across the North East CA area	✓	Local	LT	Perm	Med	+	+	+	+
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Commentary

The development of a seamless network, coordination of transport hubs etc., will all require wider coordination across different sectors. This will include the energy sector due to the recognised need to provide sufficient EV charging points.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations:

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
15. Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	✓	Reg	LT	Perm	Med	+	++	++	++

Commentary

This policy area is concerned with making seamless journeys across the region possible. This will improve access to employment, health, leisure services and facilities and will be of benefit to all groups.

In addition to improved access to public transport services, it is anticipated that the reach of services will be expanded. Those who are unable to avail fully of public transport, perhaps due to mobility issues (for example some elderly people or those with certain disabilities) would be catered for through a recognition that private cars are still required and a focus on providing adequate drop off and pick up areas and car parks.

A more seamless and efficient transport network would allow for the most efficient journey possible, likely reducing costs. Expanded / greater reach of public services also allows more people a greater choice in journey mode – allowing the most affordable choice to be made. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc. Increased network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost, particularly benefitting those on lower or fixed incomes. Provision of bike parking at interchange hubs means that at least part of the journey can be made for zero cost (after initial outlay of a bicycle).

It is anticipated this Policy area will lead to reduced overall congestion and a more efficient and seamless transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit.

Linking timetables will allow for greater reliability in journey time – this could provide reassurance to people of when journeys will be over – this, along with provision of good pick up / drop off points will be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a hub.

It is recommended that more specific note is made of the need to ensure separation between modes needs to be designed into any interchange hub or new physical link, to reduce the potential for conflict / accidents.

Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through an enhanced and more seamless network, that will likely have a greater number of physical links and greater reach of services.

Connections will be enhanced through an enhanced and more seamless network, that will likely have a greater number of physical links and greater reach of services.

While a general reduction in traffic (through better and more seamless public transport) would reduce air, noise and odour pollution, this Policy area results in new infrastructure (new links, park & ride etc.) that could lead to a deterioration of air quality, increased noise etc in the local area in which the new infrastructure is located. This could potentially affect some groups to a greater degree. For example, it is known that children are particularly prone to the effects of poor air quality, as are those with



certain medical conditions. Some individuals may also experience a greater reaction to increased noise than others, though this would be for the population as a whole, rather than unique to any vulnerable group.

Specific note is made of active travel routes and how these will feed into key stations, mobility hubs and interchanges, with safe and secure bike storage / parking provided. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions. Residents of rural areas will benefit, though this may be of less significance given relative distances to travel.

This policy area will increase access to public transport, with a focus on making this as easy and seamless as possible. Reach of public transport services will also improve. All groups are anticipated to benefit.

Note is made of the need for safe and secure bike parking this will help to improve security of peoples property. Continued facilitation of private cars will also be made e.g. to allow easy drop off / pick ups and this will allow for reassurance of security for more vulnerable users of the network. Similarly, efficient timetabling provides reassurance on journey times – allowing people to be met by friends / family, without having to wait on their own.

It is recommended that note is made in these policy areas to ensure that any new / upgraded transport hub considers security issues in design.

No specific note is made of safety by design in this Policy area.

No direct reference to design is made in the Policy area, but it is anticipated that new / upgraded transport hubs etc. would provide opportunities to develop healthier, safer and more pleasant places, which would be of benefit to all groups.

It is recommended that direct reference be made to the need for all transport hubs to be designed to a high standard – ideally to help create a ‘sense of place’ in local areas and help to become a focal point of local areas.

Expanded and upgraded public transport infrastructure and provision will help communities to access a range of modes to individualise approaches to meeting their transport needs – allowing them to tailor journeys depending upon their personal circumstances. For example, those who are of good mobility can have a choice to access active travel, while those who are less able will still be able to rely on private car. The reach of the public transport provision will also be greater across the region, allowing more choice for those in previously poorly served areas.

A better organised, more efficient and seamless transport network should result in less stressed travellers, thereby reducing the potential for conflict with the transport workforce. This will help to enable them to remain healthy and resilient, with less stress or physical risk.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: It is recommended that more specific note is made of the need to ensure separation between modes needs to be designed into any interchange hub or new physical link, to reduce the potential for conflict / accidents.

It is recommended that note is made in these policy areas to ensure that any new / upgraded transport hub considers security issues in design.

It is recommended that direct reference be made to the need for all transport hubs to be designed to a high standard – ideally to help create a ‘sense of place’ in local areas and help to become a focal point of local areas.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
16. Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)	✓	Reg	LT	Perm	Med	+	++	++	++

Commentary



This policy area is concerned with making seamless journeys across the region possible. This will improve access to services and facilities and will be of benefit to all groups.

In addition to improved access to public transport services, it is anticipated that the reach of services will be expanded. Those who are unable to avail fully of public transport, perhaps due to mobility issues (for example some elderly people or those with certain disabilities) would be catered for through a recognition that private cars are still required and a focus on providing adequate drop off and pick up areas and car parks.

A more seamless and efficient transport network would allow for the most efficient journey possible, likely reducing costs. Expanded / greater reach of public services also allows more people a greater choice in journey mode – allowing the most affordable choice to be made. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc. Increased network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost. Provision of bike parking at interchange hubs means that at least part of the journey can be made for zero cost (after initial outlay of a bicycle), though this may not be suitable for all groups (e.g. the very young, elderly, disabled, those who are heavily pregnant).

It is anticipated this Policy area will lead to reduced overall congestion and a more efficient and seamless transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit.

Linking timetables will allow for greater reliability in journey time – this could provide reassurance to people of when journeys will be over – this, along with provision of good pick up / drop off points will be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a hub.

There is a clear focus in this policy area to improve the provision and reach of public transport across the region and this is set out in detail. Specific note is made of rural areas and the need to link these more effectively to the transport network. More park & ride sites will also be provided for rural areas – it is anticipated this would also include coastal communities. All groups would benefit.

Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through an enhanced and more seamless network, that will likely have a greater number of physical links and greater reach of services.

While a general reduction in traffic (through better and more seamless public transport) would reduce air, noise and odour pollution, this Policy area results in new infrastructure (new links, park & ride etc.) that could lead to a deterioration of air quality, increased noise etc in the local area in which the new infrastructure is located. This could potentially affect some groups to a greater degree. For example, it is known that children are particularly prone to the effects of poor air quality, as are those with certain medical conditions. Note that if such infrastructure is located in more deprived areas, these often already have poorer air quality and are more likely to be inhabited by vulnerable groups – particular care needs to be taken in respect of location and design.

Some individuals may also experience a greater reaction to increased noise than others, though this would be for the population as a whole, rather than unique to any vulnerable group.

Note is made of the need for safe and secure bike parking this will help to improve security of peoples property. Continued facilitation of private cars will also be made e.g. to allow easy drop off / pick ups and this will allow for reassurance of security for more vulnerable users of the network. Similarly, efficient timetabling provides reassurance on journey times – allowing people to be met by friends / family, without having to wait on their own.

Note should also be made of the need to make transport hubs etc. and public transport vehicles as welcoming as possible to all groups – it is known that some groups such as those related to ethnicity, faith or sexual preference can be subject to (or have a perception of) a higher level of anti-social behaviour or risk.

This policy area is focused on providing enhanced transport facilities and infrastructure, with increased service provision and reach and it is anticipated this will benefit all groups.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: It is recommended that more specific note is made of the need to ensure separation between modes needs to be designed into any interchange hub or new physical link, to reduce the potential for conflict / accidents.

It is recommended that note is made in these policy areas to ensure that any new / upgraded transport hub considers security issues in design.



Note should also be made of the need to make transport hubs etc. and public transport vehicles as welcoming as possible to all groups – it is known that some groups such as those related to ethnicity, faith or sexual preference can be subject to (or have a perception of) a higher level of anti-social behaviour or risk.

ISA Objective	Effects					Assessment			
	Mag	Scale	Dur	T/P	Cert	ST	MT	LT	Sm
17. Promote fairness and equity in rural connectivity	✓	Reg	LT	Perm	Med	+	++	++	++

Commentary

Specific note is made of the need to ensure that services from rural areas link to transport interchanges (rail, bus / coach, Metro, taxis, mobility hubs and car parks / cycle storage) to ensure that joined up journeys are possible. Journey times and wait times will be reduced (by coordinating services and timetables etc). This will increase access for all groups within rural areas. Access will also be increased via greater provision of park and ride sites in rural areas, to help link communities to the public transport network – this recognises that private car / van may be the only option for some, though this will be of less use to those in the community with no access to private vehicles or who may not be able to afford taxis.

It is recommended that in addition to rural areas, specific note is made of other areas currently poorly served such as coastal communities.

Economic growth and employment opportunities in rural areas will be enhanced by the greater connectivity this policy area will engender. Connectivity to wider markets will also be enhanced with more coordinated linkages to national or international gateways and linkages. Ultimately, if the economy grows and employment opportunities increased, all groups should benefit.

While a focus of the policy areas is concerned with ensuring rural communities have access to the wider transport network, it will also work in the wider direction, with people in the urban communities ultimately having greater access to rural areas and allow people to better connect with nature. Benefits could be expected across all groups in the community.

Mitigation / Recommendations

Mitigation Measures: N/A

Recommendations: It is recommended that in addition to rural areas, specific note is made of other areas currently poorly served such as coastal communities.



E.1.5.2 Health Impact Assessment Table

HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
1	Improve accessibility to employment opportunities, health and leisure services and facilities and amenities for all	++	++	++	++	++	++	++	++	++	++	<p>This policy area is concerned with making seamless journeys across the region possible. This will improve access to employment, health, leisure services and facilities and will be of benefit to all groups.</p> <p>In addition to improved access to public transport services, it is anticipated that the reach of services will be expanded. Those who are unable to avail fully of public transport, perhaps due to mobility issues (for example some elderly people or those with certain disabilities) would be catered for through a recognition that private cars are still required and a focus on providing adequate drop off and pick up areas and car parks.</p>
2	Improve affordability of transport	++	++	++	++	+++	++	++	++	++	++	<p>A more seamless and efficient transport network would allow for the most efficient journey possible, likely reducing costs. Expanded / greater reach of public services also allows more people a greater choice in journey mode – allowing the most affordable</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												choice to be made. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc. Increased network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost, particularly benefitting those on lower or fixed incomes. Provision of bike parking at interchange hubs means that at least part of the journey can be made for zero cost (after initial outlay of a bicycle).
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	+	+	+	+	+	+	+	+	+	+	<p>It is anticipated this Policy area will lead to reduced overall congestion and a more efficient and seamless transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit.</p> <p>Linking timetables will allow for greater reliability in journey time – this could provide reassurance to people of when journeys will be over – this, along with provision of good</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												<p>pick up / drop off points will be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a hub.</p> <p>It is recommended that more specific note is made of the need to ensure separation between modes needs to be designed into any interchange hub or new physical link, to reduce the potential for conflict / accidents.</p>
4	Reduce severance	+	+	+	+	+	+	+	+	+	+	Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through an enhanced and more seamless network, that will likely have a greater number of physical links and greater reach of services.
5	Improve connections between and within communities	+	+	+	+	+	+	+	+	+	+	Connections will be enhanced through an enhanced and more seamless network, that will likely have a greater number of physical links and greater reach of services.



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement	
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary		
6	Protect health by reducing air, noise, odour and light pollution from transport	+/--	+/--	+/--	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/--	While a general reduction in traffic (through better and more seamless public transport) would reduce air, noise and odour pollution, this Policy area results in new infrastructure (new links, park & ride etc.) that could lead to a deterioration of air quality, increased noise etc in the local area in which the new infrastructure is located. This could potentially affect some groups to a greater degree. For example, it is known that children are particularly prone to the effects of poor air quality, as are those with certain medical conditions. Some individuals may also experience a greater reaction to increased noise than others, though this would be for the population as a whole, rather than unique to any vulnerable group.
7	Improve access to active travel modes	+	+	+	++	+++	+	++	++	++	++	++	Specific note is made of active travel routes and how these will feed into key stations, mobility hubs and interchanges, with safe and secure bike storage / parking provided. Not all groups will benefit to the same degree, with perhaps less benefit for children, the elderly or those with certain disabilities or health conditions. Residents of rural areas will



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												benefit, though this may be of less significance given relative distances to travel.
8	Improve access to public transport	++	++	++	++	++	++	++	++	++	++	This policy area will increase access to public transport, with a focus on making this as easy and seamless as possible. Reach of public transport services will also improve. All groups are anticipated to benefit.
9	Improve actual and perceived safety and security issues	++	++	+	+	++	+	+	+	+	+	<p>Note is made of the need for safe and secure bike parking this will help to improve security of peoples property. Continued facilitation of private cars will also be made e.g. to allow easy drop off / pick ups and this will allow for reassurance of security for more vulnerable users of the network. Similarly, efficient timetabling provides reassurance on journey times – allowing people to be met by friends / family, without having to wait on their own.</p> <p>It is recommended that note is made in these policy areas to ensure that any new / upgraded transport hub considers security issues in design.</p>



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
10	Encourage and promote safety by design	0	0	0	0	0	0	0	0	0	0	No specific note is made of safety by design in this Policy area.
11	Improve the street environment to create healthier, safer and more pleasant places for people to spend time in or travel through	+	+	+	+	+	+	+	+	+	+	<p>No direct reference to design is made in the Policy area, but it is anticipated that new / upgraded transport hubs etc. would provide opportunities to develop healthier, safer and more pleasant places, which would be of benefit to all groups.</p> <p>It is recommended that direct reference be made to the need for all transport hubs to be designed to a high standard – ideally to help create a ‘sense of place’ in local areas and help to become a focal point of local areas.</p>
12	Involve, support and empower communities to identify interventions that address their transport needs	++	++	++	++	++	++	++	++	++	++	Expanded and upgraded public transport infrastructure and provision will help communities to access a range of modes to individualise approaches to meeting their transport needs – allowing them to tailor journeys depending upon their personal circumstances. For example, those who are of good mobility can have a choice to access active travel, while those who are less able



HIA sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Children and adolescents inc. child poverty	Older people	Disabled/other health problems (mental & physical)	Low-income groups	Cyclists, pedestrians, commuters & vulnerable road users	Rural residents with no private vehicle	Those with caring responsibilities	Residents	Employees	Assessment summary	
												will still be able to rely on private car. The reach of the public transport provision will also be greater across the region, allowing more choice for those in previously poorly served areas.
13	Support a healthy and resilient workforce to deliver and operate a reliable public transport system	+	+	+	+	+	+	+	+	+	+	A better organised, more efficient and seamless transport network should result in less stressed travellers, thereby reducing the potential for conflict with the transport workforce. This will help to enable them to remain healthy and resilient, with less stress or physical risk.



E.1.5.3 Equalities Impact Assessment Table

EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
1	Improve accessibility to services, facilities and amenities for all, in particular by active travel modes	++	++	++	++	++	++	++	++	++	<p>This policy area is concerned with making seamless journeys across the region possible. This will improve access to services and facilities and will be of benefit to all groups.</p> <p>In addition to improved access to public transport services, it is anticipated that the reach of services will be expanded. Those who are unable to avail fully of public transport, perhaps due to mobility issues (for example some elderly people or those with certain disabilities) would be catered for through a recognition that private cars are still required and a focus on providing adequate drop off and pick up areas and car parks.</p>
2	Improve affordability of transport	+	+	+	+	+	+	+	+	+	<p>A more seamless and efficient transport network would allow for the most efficient journey possible, likely reducing costs. Expanded / greater reach of public services also allows more people a greater choice in journey mode – allowing the most affordable choice to be made. There would also be greater confidence that journeys will not be wasted if people are aware of potential delays that could mean they miss appointments etc. Increased</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											network efficiency e.g. by removing congestion will result in less wasted fuel and thereby reduce overall journey cost. Provision of bike parking at interchange hubs means that at least part of the journey can be made for zero cost (after initial outlay of a bicycle), though this may not be suitable for all groups (e.g. the very young, elderly, disabled, those who are heavily pregnant).
3	Improve safety of the transport network (including roads) and reduce the number of accidents and other incidents	+	+	+	+	+	+	+	+	+	<p>It is anticipated this Policy area will lead to reduced overall congestion and a more efficient and seamless transport network. This would likely reduce the potential for accidents and will reduce stress in the travelling population – potentially reducing conflict among travellers. All groups are anticipated to benefit.</p> <p>Linking timetables will allow for greater reliability in journey time – this could provide reassurance to people of when journeys will be over – this, along with provision of good pick up / drop off points will be of benefit to lone travellers or vulnerable people, for example children who may be met by a parent as they arrive at a hub.</p> <p>It is recommended that more specific note is made of the need to ensure separation between</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											modes needs to be designed into any interchange hub or new physical link, to reduce the potential for conflict / accidents.
4	Improve provision of public transport in rural areas, coastal communities, or to those areas experiencing constraint in public transport provision	++	++	++	++	++	++	++	++	++	There is a clear focus in this policy area to improve the provision and reach of public transport across the region and this is set out in detail. Specific note is made of rural areas and the need to link these more effectively to the transport network. More park & ride sites will also be provided for rural areas – it is anticipated this would also include coastal communities. All groups would benefit.
5	Reduce severance	+	+	+	+	+	+	+	+	+	Reduced congestion will lead to reduced severance. In addition, connections will be enhanced through an enhanced and more seamless network, that will likely have a greater number of physical links and greater reach of services.
6	Reduce air, noise, odour and light pollution from transport	+/--	+/-	+/--	+/--	+/--	+/-	+/-	+/-	+/--	While a general reduction in traffic (through better and more seamless public transport) would reduce air, noise and odour pollution, this Policy area results in new infrastructure (new links, park & ride etc.) that could lead to a deterioration of air quality, increased noise etc in the local area in which the new infrastructure is located. This could potentially affect some groups to a greater degree. For



EqIA sub-objective	Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
	Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
										<p>example, it is known that children are particularly prone to the effects of poor air quality, as are those with certain medical conditions. Note that if such infrastructure is located in more deprived areas, these often already have poorer air quality and are more likely to be inhabited by vulnerable groups – particular care needs to be taken in respect of location and design.</p> <p>Some individuals may also experience a greater reaction to increased noise than others, though this would be for the population as a whole, rather than unique to any vulnerable group.</p>
7	Improve actual and perceived safety and security issues	++	+	++	+	+	+	+	+	<p>Note is made of the need for safe and secure bike parking this will help to improve security of peoples property. Continued facilitation of private cars will also be made e.g. to allow easy drop off / pick ups and this will allow for reassurance of security for more vulnerable users of the network. Similarly, efficient timetabling provides reassurance on journey times – allowing people to be met by friends / family, without having to wait on their own.</p> <p>It is recommended that note is made in these policy areas to ensure that any new / upgraded</p>



EqIA sub-objective		Scale of Effect									Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
											<p>transport hub considers security issues in design.</p> <p>Note should also be made of the need to make transport hubs etc. and public transport vehicles as welcoming as possible to all groups – it is known that some groups such as those related to ethnicity, faith or sexual preference can be subject to (or have a perception of) a higher level of anti-social behaviour or risk.</p>
8	Provide accessible transport facilities and infrastructure that encourage use by a range of groups	++	++	++	++	++	++	++	++	++	<p>This policy area is focused on providing enhanced transport facilities and infrastructure, with increased service provision and reach and it is anticipated this will benefit all groups.</p>



E.1.5.4 Rural Proofing Assessment Table

Rural Needs sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
1	Increase access via a range of transport modes for rural communities.	++	++	++	+	++	++	++	++	++	++	<p>Specific note is made of the need to ensure that services from rural areas link to transport interchanges (rail, bus / coach, Metro, taxis, mobility hubs and car parks / cycle storage) to ensure that joined up journeys are possible. Journey times and wait times will be reduced (by coordinating services and timetables etc). This will increase access for all groups within rural areas. Access will also be increased via greater provision of park and ride sites in rural areas, to help link communities to the public transport network – this recognises that private car / van may be the only option for some, though this will be of less use to those in the community with no access to private vehicles or who may not be able to afford taxis.</p> <p>It is recommended that in addition to rural areas, specific note is made of other areas currently poorly served such as coastal communities.</p>
2	Enable economic growth, and employment	+	+	+	+	+	+	+	+	+	+	Economic growth and employment opportunities in rural areas will be enhanced by the greater connectivity this policy area will engender.



Rural Needs sub-objective		Scale of Effect										Description of effect/Recommendations for mitigation or enhancement
		Age	Gender	Disability	Those with low income or no access to private vehicle	Ethnicity	Faith	Sexual Orientation and Gender Reassignment	Pregnancy and Maternity	Marriage and Civil Partnerships	Assessment summary	
	diversification in rural areas.											Connectivity to wider markets will also be enhanced with more coordinated linkages to national or international gateways and linkages. Ultimately, if the economy grows and employment opportunities increased, all groups should benefit.
3	Connecting people with nature	+	+	+	+	+	+	+	+	+	+	While a focus of the policy areas is concerned with ensuring rural communities have access to the wider transport network, it will also work in the wider direction, with people in the urban communities ultimately having greater access to rural areas and allow people to better connect with nature. Benefits could be expected across all groups in the community.



E.2 Intervention Type Assessment Tables



ISA Objective 1: Improve Air Quality

Air pollution impacts on public health, the natural environment and the economy. Poor air quality, particularly due to emissions from motor vehicles, presents a significant issue for community health for the population as a whole but particularly for certain vulnerable or protected characteristic groups in the North East CA area including the elderly, children, those with existing health conditions, those who are pregnant and those living in areas of deprivation.

Across the region air quality is generally good with a total of four AQMAs identified within the North East CA area, all of which have been designated for Nitrogen dioxide with neither Northumberland, South Tyneside or Sunderland having any. Each of the local authorities have their own Air Quality Strategy (AQS) aimed at tackling the AQMAs in their areas and improving general air quality in the region (Northumberland and Sunderland are the exception as they are not required to produce AQSs). The UK Government has noted that addressing road transport emissions presents the most significant opportunity to tackle this specific exceedance problem (NO₂ pollution). However, it is important to note that there are other elements which also need to be addressed in addition to road vehicles and this includes reducing emissions from other forms of transport such as rail and aviation.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Air Quality	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude</i></p>	<p>Construction New road, rail, pedestrian and / or active travel infrastructure projects have the potential to give rise adverse effects on air quality during construction. Construction plant and machinery may introduce air pollution and activities give rise to dust emissions. Such effects may disproportionately impact on vulnerable groups such as children and elderly and those who live in more deprived areas, where air quality tends to be worse. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage.</p> <p>Operation Where new infrastructure projects service private vehicles this may lead to adverse effects on air quality during operation. Highway Infrastructure improvements can lead to reduced congestion or a change in traffic patterns, through removal of pinch points, junction improvements etc. This would lead to a decrease in emissions, though this can be offset by an increase in vehicle kilometres as a greater volume of traffic may be attracted to the improved route Infrastructure that acts to encourage a modal shift away from private vehicles and towards public transport and active travel would be anticipated to reduce air quality pressures. It is to be noted that interventions that support uptake of low and zero</p>	<p>Design</p> <ul style="list-style-type: none"> • High Occupancy Lanes and Cycle Lanes • Increase distances between traffic and sensitive receptors • Consideration of the impact of the scheme on Air Quality Management Areas and potential scheme realignment if necessary. • Identify the potential for schemes that may have a beneficial impact on Air Quality Management Areas <p>Construction</p> <ul style="list-style-type: none"> • Consideration of air quality in Construction Environmental Management Plans (CEMPs). • Use of best practice construction techniques to minimise the impact on air quality, e.g. ensuring all plant and machinery are well maintained and not emitting excessive fumes. Use of zero emitting or low emitting vehicles/plant. 	<p>Moderate adverse --</p>	<p>Moderate beneficial ++</p>

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Air Quality	
<i>than a new active travel route or new roundabout.)</i>	emitting vehicles (such as EV charging stations) would also then act to reduce air quality pressures.	<ul style="list-style-type: none"> Consultation with operators of facilities used by vulnerable groups such as schools, hospitals and care homes. Operation <ul style="list-style-type: none"> Management of vehicle speed Encourage use of Low Emission Vehicles 		
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction Interventions of this type are not anticipated to give rise to significant adverse effects on air quality during construction. Interventions are largely centred around policy, pricing and soft measures that have little or no impact on air quality during the construction phase.</p> <p>Operation During operation, improvements to ticketing, fares, public transport vehicles would encourage a modal shift away from private vehicles and towards public transport and active travel would be anticipated to reduce air quality pressures.</p>	Design <ul style="list-style-type: none"> Low or zero emission public transport vehicles Construction <ul style="list-style-type: none"> N/A* Operation <ul style="list-style-type: none"> Stations and facilities to use clean energy <p><i>*Where service improvements also include new/expanded infrastructure such as rail or bus stations/hubs, reference should be made to mitigation under New Infrastructure Projects.</i></p>	Slight adverse -	Moderate beneficial ++
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation It is likely that regulation in relation to both land use and vehicle type will act to support air quality goals. This may be through the prioritisation of low and zero emission vehicles and electrification of network.</p>	Design <ul style="list-style-type: none"> N/A, Construction <ul style="list-style-type: none"> N/A Operation <ul style="list-style-type: none"> Regulation to prioritise air quality improvements 	Neutral 0	Moderate beneficial ++
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation It is considered unlikely that this interventions under this category would lead to significant effects on air quality. Where promotion and information sharing encourages uptake of public transport for example, slight beneficial effects may be anticipated.</p>	Design <ul style="list-style-type: none"> None identified Construction <ul style="list-style-type: none"> None identified Operation <ul style="list-style-type: none"> None identified 	Neutral 0	Slight beneficial +
Innovation development (planning for the	<p>Construction No significant effects identified</p>	Design <ul style="list-style-type: none"> None identified Construction <ul style="list-style-type: none"> None identified 	Neutral 0	Slight beneficial +

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Air Quality	
future, trialling ideas, working with organisations across the North East)	<p>Operation It is likely that this interventions under this category would directly and indirectly improve air quality through improvement on active and public transport.</p>	<ul style="list-style-type: none"> • None identified Operation • None identified 		

ISA Objective 2: Reduce the impact on environmental noise from transportation sources

The most widespread sources of noise pollution and exposure in England are from various forms of transport. Local Authorities are required to create noise maps and produce Noise Action Plans, in line with the Environmental Noise Directive. There are 341 Noise Action Important Areas within the North East CA area, located on the local rail and road networks. Noise Action plans have been identified at specific locations along the A69, A1, A167, A191, A1058, A194, A184, A1018, A19, A690, A690 and the A1(M).

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on emissions from transport	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i></p>	<p>Construction New road, rail, pedestrian and / or active travel infrastructure projects have the potential to give rise to noise pollution during construction. Construction plant and machinery may introduce new noise sources. Such effects may disproportionately impact on vulnerable groups such as children and elderly. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage.</p> <p>Operation Where new infrastructure projects service private vehicles this may lead to adverse effects on noise during operation. Highway Infrastructure improvements can lead to reduced congestion or a change in traffic patterns, through removal of pinch points, junction improvements etc. This would lead to a decrease in noise pollution, though greater volumes of traffic may be attracted to the improved route. Similarly new rail routes would introduce new noise sources but may also reduce noise pollution elsewhere. Infrastructure that acts to encourage a modal shift away from private vehicles and towards active travel would be anticipated to reduce noise pollution.</p>	<p>Design</p> <ul style="list-style-type: none"> • Increase distances between traffic and sensitive receptors • Encourage modal shift toward active travel • Integrate noise suppression/barriers where appropriate <p>Construction</p> <ul style="list-style-type: none"> • Methods to reduce noise during construction, e.g. use of electric vehicle/plant. • Consideration of noise in Construction Environmental Management Plans (CEMPs) • Use of construction noise barriers <p>Operation</p> <ul style="list-style-type: none"> • Management of vehicle speed • Encourage use of Low Emission Vehicles • Development and regular monitoring of KPIs 	<p>Moderate adverse --</p>	<p>Moderate beneficial ++</p>
<p>Service improvements (ticketing and fares, vehicles, stations)</p>	<p>Construction Interventions of this type are not anticipated to give rise to significant adverse effects on the noise environment during construction. Interventions are largely centred around policy, pricing and soft measures that have little or no impact on noise during the construction phase.</p> <p>Operation</p>	<p>Design</p> <ul style="list-style-type: none"> • Low or zero emission public transport vehicles, <p>Construction</p> <ul style="list-style-type: none"> • N/A* <p>Operation</p> <ul style="list-style-type: none"> • Stations and facilities to use clean energy 	<p>Slight adverse -</p>	<p>Slight beneficial +</p>

	<p>During operation, improvements to ticketing, fares and public transport vehicles would encourage a modal shift away from private vehicles and towards public transport and active travel. This may act to reduce noise pollution though effects are not considered significant.</p>	<p><i>*Where service improvements also include new/expanded infrastructure such as rail or bus stations/hubs, reference should be made to mitigation under New Infrastructure Projects.</i></p>		
<p>Regulation (land use, vehicle type, financial, planning policy)</p>	<p>Construction No significant effects identified</p> <p>Operation It is likely that regulation in relation to both land use and vehicle types will indirectly contribute to improvements in noise environment. This may be through the prioritisation of low and zero emission vehicles and electrification of network.</p>	<p>Design</p> <ul style="list-style-type: none"> • N/A, <p>Construction</p> <ul style="list-style-type: none"> • N/A <p>Operation</p> <ul style="list-style-type: none"> • Regulation to consider noise impacts on wider and vulnerable groups 	<p>Neutral 0</p>	<p>Slight beneficial +</p>
<p>Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships</p>	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	<p>Neutral 0</p>	<p>Neutral 0</p>
<p>Innovation development (planning for the future, trialling ideas, working with organisations across the North East)</p>	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on noise. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	<p>Neutral 0</p>	<p>Neutral 0</p>

ISA Objective 3: Reduce carbon emissions from transport and contribute to meeting the UKs and East’s net zero carbon targets by 2050

All of the local authority areas within the North East CA area have a combined territorial CO₂ emissions estimate of 7,455.6 kt CO₂e in 2022. Transport is the largest contributing sector with an estimate of 2,955.2 kt CO₂e in 2022. The region has collaborated with local business, education, public sectors and civil society to create ‘Net Zero North East England’ which commits to decarbonizing the economy and creating a net zero region. Utilizing 15 indicators that provide insights into the extent and nature of progress towards Net Zero the partnership board supported though the Combined Authority aims to ensure decarbonisation is cleaner, greener and fairer. In the North East region, transport takes up the largest percentage of emissions at 30%, which is a higher proportion than in the UK as a whole (where transport makes up 26%). In their North East Zero Emissions Vehicle (ZEV) Strategy, the region acknowledges the impact that vehicles have on emissions and aim to promote a switch to ZEVs by those currently making journeys by private cars and vans. As of 2023, ZEVs made up just less than 1% of registered vehicles with access to 850 publicly accessible charging points across the region.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Air Quality	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active</i></p>	<p>Construction New road, rail, pedestrian and / or active travel infrastructure projects have the potential to give rise to carbon emissions during construction. Construction plant and machinery as well as embodied carbon in construction materials are associated with adverse effects and it is likely that at least a subset of new infrastructure projects will give rise to significant carbon emissions.</p> <p>Operation Where new infrastructure projects service private vehicles this may lead to adverse effects on carbon emissions during operation. Highway Infrastructure improvements can lead to reduced congestion or a change in traffic patterns, through removal of pinch points, junction improvements etc. This would lead to a decrease in emissions, though this can be offset by an increase in vehicle kilometres as a greater volume of traffic may be attracted to the improved route. Effects would however reduce as adoption of EV and low emitting vehicles continues. Infrastructure that acts to encourage a modal shift away from private vehicles and towards public transport and active travel would be anticipated to reduce emissions.</p> <p>The Operational Carbon Assessment notes that new rail stations, new rail corridors (e.g. Leamside Line) and metro extensions will increase populations that can access high quality public transport, helping to deliver mode shift and reduce car dependency.</p>	<p>Design</p> <ul style="list-style-type: none"> • Encourage shift towards active travel • Consideration of carbon emissions, including embodied carbon in design. • Design for reuse where possible <p>Construction</p> <ul style="list-style-type: none"> • Consideration of carbon emissions in Construction Environmental Management Plans (CEMPs). • Use of best practice construction techniques to minimise carbon emissions. Use of zero emitting or low emitting vehicles/plant. • Use of local sources for materials <p>Operation</p> <ul style="list-style-type: none"> • Encourage use of Low Emission Vehicles 	<p>Moderate adverse --</p>	<p>Moderate beneficial ++</p>

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Air Quality	
<i>travel route or new roundabout.)</i>	Improvements to bus stations and bus priority will improve attractiveness of bus services (easing interchange and improving service reliability). Walking and cycling will help deliver mode shift from shorter journeys and/or support multi-modal journeys. Highway capacity enhancements and new roads have the potential to result in induced demand, which will act against carbon reduction objectives.			
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation The Operational Carbon Assessment notes that easier ticketing, cheaper fares, improved vehicles and stations will all improve the attractiveness of public transport options, although these will be focused in areas where services already exist. This will help deliver mode shift and reduce car traffic in these areas.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Moderate beneficial ++
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation The Operational Carbon Assessment notes that effective land use policy will promote strategic growth close to existing settlements with good travel choices, helping to reduce car dependency in new development. Impact will however be modest when compared to existing challenges. Potential support for zero emission buses and trains (although these are a small component of transport emissions). Encouraging shift to ZEV cars and freight through traffic management and demand management policies. Parking and other policies to balance-up the costs of driving versus more sustainable travel options.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Moderate beneficial ++
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the	<p>Construction No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p>	Neutral 0	Slight beneficial +

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Air Quality	
future, trialling ideas, working with organisations across the North East)	<p>Operation</p> <p>It is likely that interventions under this category would directly and indirectly contribute towards net zero carbon targets given UK targets place responsibility on a wide range of organisations. A coordinated approach and working with organisations across the North East would be expected to help realise benefits in respect of reaching net zero targets.</p> <p>The Operational Carbon Assessment notes that the potential exploration of new ideas to improve the attractiveness of alternatives to owning a car and driving. However, activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts at scale. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 		

ISA Objective 4: Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding

The North East Evidence Hub¹²⁶ states that 3% of the North East area is at high risk of flooding. The EA currently maintain £733 million of assets protecting the North East from fluvial flooding and coastal erosion. Flood risk presents a significant planning issue in the development of major infrastructure projects, both in terms of potential direct impacts on the project itself and indirect impacts associated with works (such as increased run-off). In relation to transport infrastructure, there is a direct flood risk to the infrastructure itself, e.g. roads, rail lines, or development of other transport infrastructure can aggravate existing flood risk in a wide range of ways, for example by requiring land take from flood plains, or by changing the drainage regime, etc.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on flood risk and resilience to climate change effects	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i></p>	<p>Construction New road, rail, pedestrian and / or active travel infrastructure projects would lead to an increase in impermeable area during construction and therefore may contribute to increased flood risk by increasing runoff to nearby watercourses. The route of the schemes may also be located within flood zones and therefore would be liable to flooding.</p> <p>Operation New road, rail, pedestrian and / or active travel infrastructure projects would lead to an increase in impermeable area and therefore may contribute to increased flood risk by increasing runoff to nearby watercourses. However, new infrastructure projects would be expected to integrate adaptation and resilience measures and therefore be at reduced risk of flooding.</p>	<p>Design</p> <ul style="list-style-type: none"> Careful route selection – avoid flood areas if possible Design to consider flood protection measures, flow routes and flood storage capacity <p>Construction</p> <ul style="list-style-type: none"> Consideration of storm water runoff and dewatering operations in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the impact on flooding, e.g. use of temporary SuDs features to control site runoff <p>Operation</p> <ul style="list-style-type: none"> Use of SuDS (sized to allow for a changing climate) 	<p>Moderate adverse --</p>	<p>Moderate beneficial ++</p>

¹²⁶ Net Zero North East England (2024) *Adapting to change*. Available: [Adapting to change \(netzeronortheastengland.co.uk\)](https://netzeronortheastengland.co.uk)

Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation Effective land use and planning policy is expected to include consideration of climate change and flood risk. This should then ensure that transport interventions arising are tested against risks associated with climate change.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation It is likely that planning for the future would take adequate consideration of climate change risks and hazards. A coordinated approach and working with organisations across the North East would be expected to then improve resilience. However, activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts at scale. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +

ISA Objective 5: Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network

Key pressures and risks in respect of biodiversity and nature conservation that are particularly relevant have been identified from air pollution and climate change, which can change distribution of species and habitats. There are three Local Nature Recovery (LNR) strategies being developed across the region by Durham County Council, by the North of Tyne Combined Authority and by the South of Tyne and Wear. The LNRs are aimed at prioritising the nature emergency on a local and focused level.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on biodiversity	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i></p>	<p>Construction During construction, new road, rail, pedestrian and / or active travel infrastructure projects may result in direct loss of or encroachment onto habitat or the severance / fragmentation of green infrastructure, priority habitat or sites designated for biodiversity conservation. Indirect effects can also be experienced via construction noise and vibration.</p> <p>Operation New infrastructure during operation may introduce pressures on ecologically sensitive sites such as air, noise, vibration issues and pollutant deposition. Operation of road, rail and other new infrastructure projects may increase risk of road kill etc / train strikes. Conversely new infrastructure projects that support a modal shift towards active travel may reduce pressures arising from private vehicles. New projects may incorporate biodiversity enhancements and active travel schemes promote engagement with nature.</p>	<p>Design</p> <ul style="list-style-type: none"> • Avoidance of designated sites • Consideration of the potential for ecological enhancement / Design to achieve Biodiversity Net Gain • Compensatory green infrastructure, including development of 'Green Streets' • Screening with native species • Development of wildflower meadows along route alignment or at junction islands, etc. • Animal under / over passes • Installation of bird / bat boxes • Scheme realignment, particularly if designated areas may be affected <p>Construction</p> <ul style="list-style-type: none"> • Consideration of the timing of construction works in relation to ecological windows and legislative requirements • Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs) • Appropriate management of invasive species where applicable <p>Operation</p>	<p>Moderate adverse --</p>	<p>Moderate beneficial ++</p>

		<ul style="list-style-type: none"> Scheduled control of invasive species where necessary Maintenance of BNG areas. 		
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> None identified <p>Construction</p> <ul style="list-style-type: none"> None identified <p>Operation</p> <ul style="list-style-type: none"> None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation Effective land use and planning policy is expected to include consideration of biodiversity and cognisant of new legislation in respect of Biodiversity Net Gain. As such land use regulation is expected to contribute to biodiversity. Vehicle type regulation is expected to promote use of low and zero emitting vehicles, active travel and public transport. Consequent benefits in respect of reduced pressures on biodiversity are then anticipated.</p>	<p>Design</p> <ul style="list-style-type: none"> None identified <p>Construction</p> <ul style="list-style-type: none"> None identified <p>Operation</p> <ul style="list-style-type: none"> None identified 	Neutral 0	Moderate beneficial ++
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> None identified <p>Construction</p> <ul style="list-style-type: none"> None identified <p>Operation</p> <ul style="list-style-type: none"> None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on biodiversity at scale. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> None identified <p>Construction</p> <ul style="list-style-type: none"> None identified <p>Operation</p> <ul style="list-style-type: none"> None identified 	Neutral 0	Slight beneficial +

ISA Objective 6: Protect and enhance sites designated for their international importance for nature conservation purposes

There are a wide range of sites designated for nature conservation within the North East CA area. There are five Ramsar sites; 'Holbourn Lake and Moss' designated for its wet mire habitat and the associated bird interest, 'Lindisfarne' designated due to its coastal habitat supporting internationally important numbers of wintering waterfowl, 'Teesmouth and Cleveland Coast' designated due to its habitat supporting internationally important numbers of waterbirds, 'Northumbria Coast' designated due to its coastal habitats supporting a range of nationally important species, and 'Irthinghead Mires' designated due to its composition of five high quality blanket mires.

There are eight Special Protect Areas (SPAs) within the North East CA area classified for their presence of protected bird species – 'Coquet Island' SPA which was classified for four breeds of birds, 'Farne Islands' SPA for five species of birds, 'Holburn Lake & Moss' SPA for one species of bird, 'Lindisfarne' SPA for 18 breeds of birds, 'North Penine Moors' SPA for four breeds of birds, 'Northumberland Marine' SPA for seven breeds of birds, 'Northumbria Coast' SPA for four breeds of birds, and 'Teesmouth and Cleveland Coast' SPA for seven breeds of birds. There are 18 SACs which include Berwickshire & North Northumberland Coast SAC, Border Mires, Kielder-Butterburn SAC, Castle Eden Dene SAC, Durham Coast SAC, Ford Moss SAC, Harbottle Moors SAC, Moor House-Upper Teesdale SAC, Newham Fen SAC, North Northumberland Dunes SAC, North Pennine Dales Meadows SAC, North Peninne Moors SAC, River Eden SAC, River Tweed SAC, Roman Wall Loughs SAC, Simonside Hills SAC, Thislington SAC, Tweed Estuary SAC, and Tyne & Allen River Gravels SAC. 233 Sites of Special Scientific Interest (SSSIs) are distributed across the North East CA area. Some of these are designated for their biological interest and some for their geological interest. The region has a large ancient tree resource with approximately 1,222 areas (approximately 9,975 ha) of Ancient Woodland. There are 15 NNRs mainly concentrated in County Durham and Northumberland. In addition, there are a range of sites designated at the local level including 97 Local Nature Reserves (LNRs) predominantly found along the southwestern boundary of the region.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on biodiversity	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features</i></p>	<p>Construction During construction, new road, rail, pedestrian and / or active travel infrastructure projects may result in direct loss of or encroachment onto habitat or the severance / fragmentation of internationally designated sites. Indirect effects can also be experienced via construction noise and vibration.</p> <p>Operation New infrastructure during operation may introduce pressures on ecologically sensitive sites such as air, noise, vibration issues and pollutant deposition. Operation of road, rail and other new infrastructure projects may increase risk of road kill etc / train strikes. Conversely new infrastructure projects that support a modal shift towards active travel may reduce pressures arising from private</p>	<p>Design</p> <ul style="list-style-type: none"> • Avoidance of designated sites • Consideration of the potential for ecological enhancement / Design to achieve Biodiversity Net Gain • Compensatory green infrastructure, including development of 'Green Streets' • Screening with native species • Development of wildflower meadows along route alignment or at junction islands, etc. • Animal under / over passes • Installation of bird / bat boxes • Scheme realignment, particularly if designated areas may be affected 	<p>Moderate adverse --</p>	<p>Moderate beneficial ++</p>

<p><i>and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i></p>	<p>vehicles. New projects may incorporate biodiversity enhancements and active travel schemes promote engagement with nature.</p>	<p>Construction</p> <ul style="list-style-type: none"> • Consideration of the timing of construction works in relation to ecological windows and legislative requirements • Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs) • Appropriate management of invasive species where applicable <p>Operation</p> <ul style="list-style-type: none"> • Scheduled control of invasive species where necessary • Maintenance of BNG areas. 		
<p>Service improvements (ticketing and fares, vehicles, stations)</p>	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	<p>Neutral 0</p>	<p>Neutral 0</p>
<p>Regulation (land use, vehicle type, financial, planning policy)</p>	<p>Construction No significant effects identified</p> <p>Operation Effective land use and planning policy is expected to include consideration of biodiversity and cognisant of new legislation in respect of Biodiversity Net Gain. As such land use regulation is expected to contribute to biodiversity and therefore either directly or indirectly support sites designated at an international level. Vehicle type regulation is expected to promote use of low and zero emitting vehicles, active travel and public transport. Consequent benefits in respect of reduced pressures on biodiversity are then anticipated.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	<p>Neutral 0</p>	<p>Moderate beneficial ++</p>
<p>Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships</p>	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	<p>Neutral 0</p>	<p>Neutral 0</p>
<p>Innovation development</p>	<p>Construction No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified 	<p>Neutral 0</p>	<p>Neutral 0</p>

(planning for the future, trialling ideas, working with organisations across the North East)

Operation

Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on sites designated at an international level. Interventions would be more likely to be mainstreamed through the other intervention types.

- Construction
 - None identified
- Operation
 - None identified

ISA Objective 7: Protect, enhance and promote geodiversity

The geology of North East CA is dominated by mudstone, sandstone and limestone of the Carboniferous period but also hosts a number of outcrops. This includes andesite and granite bedrock forming Cheviot hills in Northumberland. To the south of the region coal formations overlies the repetitive the mudstone and sandstone. 233 Sites of Special Scientific Interest (SSSIs) are distributed across the North East CA area. Some of these are designated for their biological interest and some for their geological interest. There are currently three geoparks in England, one of which is located within the North East CA area; the Noth Pennines between Cumbria and Northumberland¹²⁷.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on geodiversity	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i></p>	<p>Construction</p> <p>New infrastructure projects can lead to direct loss of or encroachment onto geodiversity sites. Indirect effects can also be experienced via noise, pollutant deposition etc.</p> <p>Operation</p> <p>While effects are unlikely to be significant during operation, indirect effects can be experienced via noise, pollutant deposition etc.</p>	<p>Design</p> <ul style="list-style-type: none"> Avoidance of designated geodiversity sites Consideration of the potential for geodiversity enhancement <p>Construction</p> <ul style="list-style-type: none"> Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs) <p>Operation</p> <ul style="list-style-type: none"> None identified 	<p>Moderate adverse</p> <p>--</p>	<p>Neutral</p> <p>0</p>

¹²⁷ United Kingdom National Commission for UNESCO (2017) *Global Geoparks*. Available: <http://www.unesco.org.uk/designation/geoparks/>

Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <p>None identified</p>	Neutral 0	Neutral 0
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on geodiversity. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0

ISA Objective 8: Conserve and enhance the significance cultural heritage assets and their settings, and the wider historic environment

There are two World Heritage sites within the region: Hadrian's Wall and Durham Cathedral. Both landmarks are legally protection by an international convention administered by UNESCO for their cultural and historical significance. Hadrian's Wall is 118km long and is one of the most well-known Roman Empire frontiers while Durham Cathedral is the largest example of Norman architecture in England.

There are a wide range of other historic and cultural heritage features located across the region and which span the full range of human settlement, from the prehistoric to the present. These include Scheduled Monuments, Registered Parks and Gardens and Listed Buildings. Numbers of sites are as follows:

- Listed Buildings – 10,184
- Registered Parks and Gardens – 46
- Scheduled Monuments – 1,288
- Registered Battlefields – 6
- Buildings listed on Heritage at Risk – 236
- Protected Wrecks – 57

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effects on heritage	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different</i></p>	<p>Construction New infrastructure projects may have a detrimental effect on the character and setting of heritage assets and therefore impact on their quality and distinctiveness. Construction of infrastructure also has the potential for previously unknown heritage features to be disturbed or damaged. There is always a potential for unknown heritage features to be discovered or damaged during construction</p> <p>Operation New infrastructure projects may have a detrimental effect on the character and setting of heritage assets and therefore impact on their quality and distinctiveness. However, junction improvements, removal of pinch points etc may also provide an opportunity for improvement – particularly in relation to heritage features located in the townscape, where congestion may be reduced and to railway heritage features.</p>	<p>Design</p> <ul style="list-style-type: none"> • Consideration of character, setting, level of protection and potential need for conservation during planning and design • Consideration of opportunities for enhancement of known features of industrial and cultural heritage significance <p>Construction</p> <ul style="list-style-type: none"> • Precautions for unexpected heritage discovery during construction • Potential need for archaeological watching brief during construction, particularly in areas not previously developed • Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs) <p>Operation</p> <ul style="list-style-type: none"> • None identified 	<p>Moderate adverse --</p>	<p>Slight beneficial +</p>

<i>magnitude than a new active travel route or new roundabout.)</i>				
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on the historic environment. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0

ISA Objective 9: Conserve and enhance the natural beauty the North East’s protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity.

North East CA covers a large area containing a wide variety of landscapes ranging from the remote hills and forests to an extensive coastline forming its eastern border. To the northwest is the Northumberland National park which is the most remote and least populated park in England and is known for the breathtaking beauty of the remote uplands of the Cheviot Hills and the fine historical landscapes of the border valleys. To the west is the North Pennines National Landscape characterised by open moors, attractive meadows and woods. The eastern coastline plays host to two heritage coasts (Durham and Northumberland) known for their dramatic views and varies between long sand beaches to high black basalt headlands. Also found, throughout the region, are a series of woods and rivers stretching through rural and urban areas. There are also a range of settlement types, from the smallest hamlet and isolated farmstead in rural areas, to larger conurbations centred on towns and cities such as Newcastle Sunderland, or Durham. There are 14 National Character Areas within and intersecting North East CA.

There are a range of pressures on landscape, many of which are altering landscapes in a direction which could be regarded as inconsistent with the traditional landscape vernacular of the area. These changes are a reflection of the fact that the landscape of the UK has changed over many years due to a range of issues such as urbanisation, changes to agriculture, reduced tranquillity, loss of habitats and forests, etc. The Plan Area is intersected by two National Landscapes; North Pennines and the Northumberland Coast. There are 217 Conservation Areas in the region mainly concentrated in the east, southeast and south of the plan area.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effects on landscape	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to</i></p>	<p>Construction New infrastructure (particularly new linear projects) can have a detrimental effect if located in designated areas, or areas of open space such as rural areas. Effects would be reduced in already developed, more urban areas, though here new infrastructure can encroach on areas identified as open space / recreation. It is considered that a majority of new infrastructure projects have the potential to cause significant adverse effects on landscape and visual amenity during construction.</p> <p>Operation In some circumstances there may be an opportunity for enhancement of landscape and visual e.g., as part of wider regeneration and where landscape enhancement forms part of scheme design. New active travel links afford potential to enhance visual amenity and reduce pressures on landscape by encouraging a modal shift away from private cars.</p>	<p>Design</p> <ul style="list-style-type: none"> Careful route selection, especially in rural areas. Particular protection to nationally designated areas required, with avoidance if possible Consideration during planning / design to landscaping and screening, with care taken in choice of materials and species used Consideration of potential opportunities for landscape enhancement <p>Construction</p> <ul style="list-style-type: none"> Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes 	<p>Moderate adverse --</p>	<p>Slight beneficial +</p>

<i>different effects and effects of different magnitude than a new active travel route or new roundabout.)</i>		are maintained as far as practicable during construction Operation • None		
Service improvements (ticketing and fares, vehicles, stations)	Construction No significant effects identified Operation No significant effects identified	Design • None identified Construction • None identified Operation • None identified	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	Construction No significant effects identified Operation No significant effects identified	Design • None identified Construction • None identified Operation • None identified	Neutral 0	Neutral 0
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	Construction No significant effects identified Operation No significant effects identified	Design • None identified Construction • None identified Operation • None identified	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	Construction No significant effects identified Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on landscape. Interventions would be more likely to be mainstreamed through the other intervention types.	Design • None identified Construction • None identified Operation • None identified	Neutral 0	Neutral 0

ISA Objective 10: Protect and enhance the water environment

The three RBDs of relevance to the LTP are the Northumbria, Humber and Solway Tweed RBDs. As with most water bodies in England, there are a range of significant water management issues manifested in these RBDs. Pollution from towns, cities and transport is a key challenge noted for each RBD with a number of reasons for not achieving good (RNAG) identified for each RBD (487 for Humber, 5 for Solway Tweed and 114 for Northumbria). Transport continues to be a polluter for each of these basins but is not a main polluter for any with 'physical modifications' and rural areas being greater influences in all cases. Water runoff from roads, containing pollutants such as oil, is identified as being a key contributor to water quality issues. 18% of water body failures in England are caused by road water runoff, as per the WFD, with 1 million instances in the UK where water from roads meets watercourses (outfalls)¹²⁸.

Across the North East CA area there are four Drinking Water Safeguard Zones for Surface Water: Cumwhinton and Castle Carrock, Acomb Landing and Moor Monkton, Whittle Dene and Warkworth. There is also one Drinking Water Safeguard Zone located in North Northumbria.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effects on water environment
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different</i></p>	<p>Construction New infrastructure projects would likely result in an increase in impermeable areas, potentially leading to increased contaminated surface water runoff. Pollution incidents may also occur during construction</p> <p>Operation New infrastructure projects would likely result in an increase in impermeable areas, potentially leading to increased contaminated surface water runoff. Pollution incidents may occur during operation as a result of accidents on new road infrastructure. New active travel infrastructure projects would not be expected to result in deterioration of the water environment and may reduce pressures by encouraging a modal shift away from private cars.</p>	<p>Design</p> <ul style="list-style-type: none"> • Explore opportunities for use of SuDS <p>Construction</p> <ul style="list-style-type: none"> • Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs) • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring <p>Operation</p> <ul style="list-style-type: none"> • Use of SuDS and / or conventional pollution control techniques such as petrol interceptors 	<p>Moderate adverse --</p> <p>Slight beneficial +</p>

¹²⁸ New Civil Engineer (2024) Road runoff pollution causing 'catastrophic damage' to UK's waterways. Available: [Road runoff pollution causing 'catastrophic damage' to UK's waterways | New Civil Engineer](#)

<i>magnitude than a new active travel route or new roundabout.)</i>				
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on the water environment. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0

ISA Objective 11: Protect soil resources and avoid land contamination

Land within the North East CA region is predominantly Grade 3, Grade 4 and Grade 5¹²⁹. Within the North East CA area, there is a high proportion of land (Grade 2 and 3) considered the best and most versatile. Each of the seven local authorities has land designated as Green Belt, covering a total area of 98,550.6 ha as of 2023¹³⁰. Additionally, there are approximately 5,069 Open Green spaces within the North East CA area. Soils in England are already, and continue to be, degraded by human activity including intensive agriculture, historic levels of industrial pollution and urban development (including transportation networks), making them vulnerable to erosion (by wind and water), compaction and loss of organic matter. As of 2024, there are 54 special sites of contaminated land in England. Two of these sites are within the Northumberland, Durham and Tees region. These are sites that due to specific land uses, past activities or water pollution are passed from the local council to the Environment Agency to regulate.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on soil, agricultural resources
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different</i></p>	<p>Construction New infrastructure projects could potentially be located within moderate to good agricultural lands, or greenfields, hence leading to a decrease in quality soils. There is also a potential that new areas could become contaminated e.g. following accidental pollution / road runoff etc. Other schemes may provide an opportunity to remediate contaminated land.</p> <p>Operation There is also a potential that new areas could become contaminated e.g. following accidental pollution infrastructure projects could introduce new sources of contamination e.g. through road runoff and pollution incidents.</p>	<p>Design</p> <ul style="list-style-type: none"> Avoidance of best and most versatile agricultural land Remediation of land contamination if in existence <p>Construction</p> <ul style="list-style-type: none"> Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs) Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring <p>Operation</p> <ul style="list-style-type: none"> Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution 	<p>Moderate adverse --</p> <p>Slight beneficial +</p>

¹²⁹ Natural England (2024) *Provisional Agricultural Land Classification (ALC)*. Available: [Guide to assessing development proposals on agricultural land - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/guide-to-assessing-development-proposals-on-agricultural-land)

¹³⁰ MHCLG (2023) *English local authority Green Belt dataset*. Available: [English local authority Green Belt dataset - data.gov.uk](https://data.gov.uk/dataset/english-local-authority-green-belt-dataset)

<i>magnitude than a new active travel route or new roundabout.)</i>				
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • Prioritise regeneration of previously developed land <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on the soil resources. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0

ISA Objective 12: Promote sustainable use of resources and natural assets

The transport sector can impact on and interact with a wide range of resources such as through energy (fuel) use, use of construction materials (aggregate, concrete, etc.), waste generation and disposal, etc. In the North East CA area 100,000 tonnes of waste (7.6% of total waste collected) went to landfill in 2021/2022. This figure is lower than the English average of 8.1%. There are 934 historic landfill sites, 70 permitted waste sites and 39 Household Recycling and Waste Centres (HRC) in the North East CA area.

Construction output is forecast to fall by 2.1% this year due to falls in private housing new build and repair, maintenance and improvement. The CPA forecasts that construction output will rise by 2.0% in 2025 in line with falling interest rates and a general economic recovery¹³¹. In the North East of England, 2,154 thousand tonnes of sand and gravel were sold in 2022¹³².

For the North East Region the installed capacity for renewable electricity generation was 1,175 MW in 2022 (1.2% higher than 2021) and it generated 3,954 gigawatt hours of electricity from renewable sources, mostly generated by onshore wind¹³³. As of 2023, ZEVs made up just less than 1% of registered vehicles with access to 850 publicly accessible ZEV charging points across the North East region.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on natural resources and waste
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the</i></p>	<p>Construction Construction of new transport infrastructure would likely result in a requirement for significant additional resources and increased waste production. There may be opportunities for the use of recycled materials in construction.</p> <p>Operation Where new infrastructure projects encourage uptake of public and sustainable transport modes, beneficial effects on resources and natural assets would be anticipated.</p>	<p>Design</p> <ul style="list-style-type: none"> Sustainable design measures <p>Construction</p> <ul style="list-style-type: none"> Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP) <p>Operation</p> <ul style="list-style-type: none"> Encourage the use of electric vehicles 	<p>Moderate adverse --</p> <p>Slight beneficial +</p>

¹³¹ CPA (2024) *Construction Hit by House Building Recession*. Available: [Construction Hit By House Building Recession \(constructionproducts.org.uk\)](https://www.constructionproducts.org.uk/).

¹³² Department for Business and Trade (2023) *Building materials and components statistics: December 2023*. Available: [Building materials and components statistics: December 2023 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/building-materials-and-components-statistics-december-2023)

¹³³ North East CA (2022) *Renewable electricity generation*. Available: [Report: Renewable electricity generation - North East Evidence Hub \(northeast-ca.gov.uk\)](https://www.northeast-ca.gov.uk/renewable-electricity-generation)

<i>location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i>				
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • Prioritise regeneration of previously developed land <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on the sustainable use of resources. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0

ISA Objective 13 Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all

North East CAs economy is worth around £54 Billion and includes over 830,000 jobs. Some of the key employers within North East CA include the public sector alongside a growing education and health sector. Alongside this retail and hospitality also provide many entry level job opportunities. Manufacturing remains above the national average as an employer within the North East although jobs have been falling in recent years. North East CA's economy in 2022 had a GDP (at current market prices) worth £54 Billion, making up 2.5% of England's total GDP. The gross annual pay across the region is £25,000 which is 18% below the national average of England excluding London. This GDP gap has continued to increase since the 2008 recession and is mainly due to weak productivity growth across the region. The North East's Gross Value Added (GVA) per hour worked (as a proportion of England excluding London) remains lower than the rest of the country, currently sitting at 89%, 11% lower than the national average (excluding London). Between April 2023 and March 2024 72.6% of the population across the North East of England were economically active. In 2023, 4.6% of the population of working age were unemployed, which is higher than the national rate (3.8%). The majority of the forecast population growth is anticipated in the 65+ age group which is estimated to grow by 23% between 2020 and 2043. In contrast, the working age population is expected to decrease by 2%.

Some of the most significant challenges facing North East CA is reminiscent of other rural areas across the country, these include an ageing population alongside challenges around accessing services and meeting housing demand. The impact of Covid-19 and an increase in working from home, along with greater online commerce, will likely require a greater digital connectivity, which will help to reduce transport need.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on jobs, access and connectivity	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and</i></p>	<p>Construction New infrastructure projects will require staff to construct and therefore maintain / improve employment in the construction industry.</p> <p>Operation New infrastructure projects may improve accessibility to existing employment areas as well as accessibility to development land widening the range of potentially accessible employment opportunities. New active travel infrastructure can also contribute towards improving tourism in the area</p>	<p>Design</p> <ul style="list-style-type: none"> Consideration of economic growth at route option selection stage <p>Construction</p> <ul style="list-style-type: none"> Provide employment opportunities to unskilled / apprentices at construction stage <p>Operation</p> <ul style="list-style-type: none"> Implement a plan of maintenance and improvement to ensure that the connectivity to commercial / economic centres is maintained 	Neutral 0	Moderate beneficial ++

<i>effects of different magnitude than a new active travel route or new roundabout.)</i>				
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation Improvements in ticketing, fares, vehicles, stations should improve accessibility of public transport to all, and therefore open up opportunities for employment and economic growth.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Moderate beneficial ++
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation It is anticipated that effective land use policy and regulation should afford greater connectivity and access to jobs and promote economic growth.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Moderate beneficial ++
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation Interventions that aim to promote sharing of information may support or increase accessibility of public transport and therefore open up opportunities for employment and economic growth. Data sharing and workplace engagement are considered positive steps that support economic growth and job creation.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Moderate beneficial ++
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on economic growth and job creation. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +

ISA Objective 14: Support the wider coordination of land use and energy planning across the North East CA area

Overall North East CA is a largely rural area with an approximate density of 250 people/km² which is slightly lower than the UK density of 276 people/km². The density across North East CA ranges across the local authorities with the more rural regions like Northumberland at a density of only 65 people/km² while one of the major cities in the area, Newcastle, has a density of 2,711 people/km². The North East CA region covers around 6% of the total area of England and is over 7,700km². It is predominantly rural with farming contributing 48% of the total area.

Strategic connections such as the electrified East Coast Rail connect Newcastle to Edinburgh and York and place it on a primary route between London and Edinburgh. Similarly the A1 runs through the region, forming another strategic link between the English and Scottish capitals. Its location along the coast provides easy access to ports namely Port of Sunderland, Port of Tyne (including international ferry terminal) and Port of Blyth. North East CA also hosts the Newcastle international Airport providing a strategic international connection. Car usage has risen in the region with the percentage of households with one or more car or van raising from 69 to 72% from 2011 to 2021. The 2021 census also indicates that 45% of those working travel less than 10km to work yet less than 20% of those who do walk or cycle to work while 67% use private vehicles. In addition, according to a North East CA area breakdown of the Department for Transport (DfT) 2022 National Travel Survey, car and van journeys made up 58% of all journeys made in 2022.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on land use and energy planning	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel</i></p>	<p>Construction No significant effects identified</p> <p>Operation A coordinated approach to the delivery of new infrastructure projects should support and create opportunities for wider land use planning across the North East CA area. This includes providing sustainable connectivity and transport options at land zoned for development.</p>	<p>Design</p> <ul style="list-style-type: none"> Consideration of economic growth at route option selection stage <p>Construction</p> <ul style="list-style-type: none"> Provide employment opportunities to unskilled / apprentices at construction stage <p>Operation</p> <ul style="list-style-type: none"> Implement a plan of maintenance and improvement to ensure that the connectivity to commercial / economic centres is maintained 	Neutral 0	Moderate beneficial ++

<i>route or new roundabout.)</i>				
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation It is anticipated that effective land use policy and regulation in the transport sector should support wider coordination of land use.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Moderate beneficial ++
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation Interventions that aim to promote sharing of information data and encourage workplace engagement are considered positive steps that support the wider coordination of land use and energy planning across the North East CA area</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Moderate beneficial ++
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on land use and energy planning. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +

ISA Objective 15: Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)

The total population across North East CA is 1,994,084 people with the largest settlements being Sunderland, Newcastle and Durham. Life expectancy in the North East CA is lower than the national average for both men and women. The average life expectancy at birth in 2020 was 77.18 years for males (compared to the national average of 79.3 years for males) and 81.4 years for females (compared to the national average of 83.0 years for females). The healthy life expectancy, which is 59 for women and 58 for men, is also less than the national average at 62). Both life expectancy and healthy life expectancy have decreased in the last 10 years.

In the North East CA area, 3.8% of the working age population (16-64) were claiming Job Seeker’s allowance in 2024 which is a slightly lower rate than England. The proportion of people with a long-term illness or disability, categorised under the Equality Act, averages 21% across the region which is greater than England (17.3%). From 2018 in 2022, the proportion of the population reported to have a long term Musculoskeletal (MSK) problem reduced from 24.4% to 22.1%. This is still the highest MSK reporting rates in the country and 4.5% higher the country’s average. Across the plan area 9.2% of the population has diabetes which is on par with the national average. North East CA has a lower mortality rate from cancer in under 75-year olds compared to the national average. The under 75 mortality rate from cancer (2022/2023) is 137.2 per 100,000 people. The under 75 mortality rate from cardiovascular diseases (2022/2023) in the county is 90.8 per 100,000 people, also lower than England. The region has a higher rate of adult smokers at an average of 15% than England at 13%. Also, 1 in 4 adults (25.1%) in the North East CA area are physically inactive (undertaking less than 30 minutes of physical activity per week). The North East is also the region with the highest proportion of obese adults at 32.4% which is significantly higher than the 26.2% average for the country.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on health and wellbeing	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is</i></p>	<p>Construction Construction of new infrastructure projects affords employment opportunities however may lead to severance and accessibility issues, which may also disproportionately impact on those without access to private cars.</p> <p>Operation New road schemes will primarily benefit those in ownership of cars, though some benefit will likely be experienced by bus passengers and users of taxis. While new rail links will be available to all to avail of, ticket cost will be a key consideration. New bus infrastructure projects would typically promote greater health and wellbeing for all citizens, as they would provide better, more comfortable facilities. Access may also be increased to employment opportunities and public services / recreational facilities which has consequent benefits in respect of health and wellbeing. New active travel schemes</p>	<p>Design</p> <ul style="list-style-type: none"> • Consider opportunities to improve access • Introduction of footpaths and cycle lanes (if nature of carriageway allows) • Consider potential for severance from key public services, or opportunities to improve access <p>Construction</p> <ul style="list-style-type: none"> • Ensure consideration of access to key public services is maintained <p>Operation</p> <ul style="list-style-type: none"> • Implement a plan of maintenance and improvement to ensure that footpaths and cycle lanes remain an attractive option • Regular reviews of ticket pricing / consideration of affordability 	<p>Slight adverse</p> <p>-</p>	<p>Moderate beneficial</p> <p>+++</p>

<i>likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i>	may benefit disadvantaged groups in society by providing free pedestrian and cycleway access and enjoyment.			
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation Interventions that realise service and fare improvements are expected to reduce pressures on health and wellbeing by improving accessibility and connectivity for deprived and / or vulnerable groups (including low income, disabled and elderly groups).</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • Interventions should include consideration of vulnerable groups such as those on low income, disabled and elderly groups. 	Neutral 0	Moderate beneficial ++
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation A coordinated approach to regulation in respect of land use planning and financial planning policy should afford opportunities to reduce inequalities in respect of health and wellbeing. For example, land use and vehicle type planning may improve accessibility and the provision of public transport for deprived communities or those on low income groups. Conversely regulation in respect of vehicle types within deprived communities or for those on low income may place additional pressures on access to recreational and other services and facilities that support health and wellbeing.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • Careful consideration of impacts on vulnerable groups, those on low income and deprived communities in respect of vehicle type regulations in urban areas. 	Slight adverse -	Moderate beneficial ++
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation Interventions that aim to promote sharing of information data and encourage workplace engagement are considered positive steps in respect of reducing inequalities in respect of health and wellbeing.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +
Innovation development (planning for the	<p>Construction No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p>	Neutral 0	Neutral 0

future, trialling ideas, working with organisations across the North East)

Operation

Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on health and wellbeing. Interventions would be more likely to be mainstreamed through the other intervention types.

- None identified
- Operation
- None identified

ISA Objective 16: Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)

In North East CA under 16 year olds make up approximately 18.5% of the population, whilst 16 to 64 year olds make up approximately 62.2%. Older people (those aged 65 years and over), make up 20.7% of the county's population. In the region, 51% of the population are female, and the remaining 49% are male. In the UK, 86% of women aged 18-24 and 71% of women of all ages have experienced sexual harassment in public spaces, including public transport. The gendered division of domestic and caring responsibilities also means women make more frequent, short journeys throughout the day, whereas men make fewer but longer journeys during peak hours.

In 2021, 3.5% of the region's residents identified their ethnic group within the "Asian, Asian British or Asian Welsh" category. This is lower than the English average of 9.6%. 93.4% of people in North East CA identified their ethnic group within the "White" while 1.23% identified their ethnic group within the "Mixed or Multiple" category. The proportion identifying as "Black, Black British, Black Welsh, Caribbean or African" was 0.97%. In the 2021 census, 93.24% of North East CA residents in this region stated they were born in the UK. Outside of the UK, the most represented area was the Middle East and Asia with 2.66% of the population. 40.32% of North East CA residents reported having "no religion", while the largest supported religious group was Christianity at 50.78% of people.

Deprivation is dispersed across England. 61% of local authority districts contain at least one of the most deprived neighbourhoods in England. The North East has the highest percentage of households deprived in one or more dimension, at 54.4%.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on equality of opportunity	
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme</i></p>	<p>Construction</p> <p>Construction of new infrastructure projects affords employment opportunities however may lead to severance and accessibility issues, which may also disproportionately impact on those without access to private cars.</p> <p>Operation</p> <p>New road schemes will primarily benefit those in ownership of cars, though some benefit will likely be experienced by bus passengers and users of taxis. While new rail links will be available to all to avail of, ticket cost will be a key consideration. New bus infrastructure projects would typically promote greater equality of opportunity for all citizens, as they would provide better, more comfortable facilities. Access may also be increased to employment opportunities and public</p>	<p>Design</p> <ul style="list-style-type: none"> Consider opportunities to improve access Introduction of footpaths and cycle lanes (if nature of carriageway allows) Consider potential for severance from key public services, or opportunities to improve access <p>Construction</p> <ul style="list-style-type: none"> Ensure consideration of access to key public services is maintained <p>Operation</p> <ul style="list-style-type: none"> Implement a plan of maintenance and improvement to ensure that footpaths and cycle lanes remain an attractive option Regular reviews of ticket pricing / consideration of affordability 	Slight adverse	Moderate beneficial +++

<i>(i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel route or new roundabout.)</i>	services / recreational facilities. New active travel schemes may benefit disadvantaged groups in society by providing free pedestrian and cycleway access and enjoyment.			
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant effects identified</p> <p>Operation Interventions that realise service and fare improvements are expected to reduce inequalities in health by improving accessibility and connectivity for deprived and / or vulnerable groups (including low income, disabled and elderly groups).</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • Interventions should include consideration of vulnerable groups such as those on low income, disabled and elderly groups. 	Neutral 0	Moderate beneficial ++
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation A coordinated approach to regulation in respect of land use planning and financial planning policy should afford opportunities to reduce inequalities. For example, land use and vehicle type planning may improve accessibility and the provision of public transport for deprived communities or those on low income groups. Conversely regulation in respect of vehicle types within deprived communities or for those on low income may place additional pressures on equalities.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • Careful consideration of impacts on vulnerable groups, those on low income and deprived communities in respect of vehicle type regulations in urban areas. 	Slight adverse -	Moderate beneficial ++
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation Interventions that aim to promote sharing of information data and encourage workplace engagement are considered positive steps in respect of reducing inequalities.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +
Innovation development (planning for the future, trialling ideas, working with	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0

organisations across
the North East)

on opportunity of all citizens. Interventions would be more
likely to be mainstreamed through the other intervention types.

ISA Objective 17: Promote fairness and equity in rural connectivity

Northumberland shows the highest proportion of land area which is classified as ‘rural’, ‘sparse’ and ‘less sparse village hamlet’ and ‘isolated dwellings’, as well as ‘sparse town and fringe’ comprising the majority of the county. County Durham shows the next highest proportion of rurality, and with the highest proportion of ‘less sparse town and fringe’ settlements. Sunderland, with the exception of a small area of less sparse town and fringe, is entirely covered by land classed as urban. South Tyneside is classed as entirely urban, while the majority of North Tyneside is also urban with small areas of town and fringe. Newcastle upon Tyne and Gateshead are composed predominantly of urban areas with smaller areas classed as less sparse town and fringe, and less sparse village hamlets and isolated dwellings.

More residents in rural areas work from home than in urban areas. The largest proportions of these are found in County Durham, Northumberland and Gateshead. Car usage is also higher across rural council areas than those in urban areas. A higher proportion of residents are generally found to travel on foot or by bicycle in urban areas than rural ones – which may be a reflection of shorter travel times and distances. With the exception of North Tyneside, bus travel is also lower in rural areas. With the exception of South Tyneside, a slightly higher proportion of residents living in rural areas feel that their day-to-day activities are limited a lot by disability when compared to those living in urban areas.

Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effects on rural connectivity
<p>New Infrastructure Projects</p> <p><i>Note that significance of effect for this intervention type is expected to vary significantly depending on the nature of the new infrastructure projects and a wide range of variables including the location, proximity to sensitive features and nature of scheme (i.e. a new highway is likely to give rise to different effects and effects of different magnitude than a new active travel</i></p>	<p>Construction No significant impacts identified</p> <p>Operation New infrastructure projects give significant potential to improve connectivity within and between rural communities. New rail, bus stations or other infrastructure in rural communities may have significant benefits. However, infrastructure projects that act to expand and refurbish existing transport infrastructure will not contribute to rural connectivity goals.</p>	<p>Design</p> <ul style="list-style-type: none"> • Opportunities to improve connectivity with rural communities should be integrated in design <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	<p>Neutral 0</p> <p>Moderate beneficial ++</p>

<i>route or new roundabout.)</i>				
Service improvements (ticketing and fares, vehicles, stations)	<p>Construction No significant impacts identified</p> <p>Operation Potential for slight beneficial effects where service improvements seek to improve rural offering and connectivity.</p>	<p>Design</p> <ul style="list-style-type: none"> • Opportunities to improve connectivity with rural communities should be integrated in design <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • Promote fairness and equity in rural communities through targeting ticketing campaigns 	Neutral 0	Slight beneficial +
Regulation (land use, vehicle type, financial, planning policy)	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • Measures to improve equality of opportunity with respect to rural communities should be incorporated. This may be reflected in financial planning and implementation spatially sensitive regulation 	Neutral 0	Neutral 0
Promotion and sharing information (marketing, data sharing, workplace engagement) and Creation of Partnerships	<p>Construction No significant effects identified</p> <p>Operation No significant effects identified</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Neutral 0
Innovation development (planning for the future, trialling ideas, working with organisations across the North East)	<p>Construction No significant effects identified</p> <p>Operation Activity is likely to be focused on research and development, planning, and small-scale trials, which will have limited impacts on rural connectivity. Interventions would be more likely to be mainstreamed through the other intervention types.</p>	<p>Design</p> <ul style="list-style-type: none"> • None identified <p>Construction</p> <ul style="list-style-type: none"> • None identified <p>Operation</p> <ul style="list-style-type: none"> • None identified 	Neutral 0	Slight beneficial +

E.3 Option Assessment Tables

E.3.1 Blyth Relief Road

New Scheme No.		NO02						
Scheme Name		Delivering improved all user connections to Blyth to reduce congestion, improving bus journey time reliability, and creating the space for high quality segregated cycle corridors						
Scheme Description		<p>Delivery of a relief road for Blyth which will create additional radial capacity for Blyth, reducing congestion, improving bus journey time reliability, and creating the space for high quality segregated cycle corridors identified through the Local Cycling and Walking Infrastructure Plan for the town.</p> <p>The scheme requires the upgrading of the existing A1061 Laverock Hall Road to provide a new 4.5km dual carriageway connection between the A189 Three Horseshoes roundabout to the A193/A1061 roundabout at South Beach. The scheme will also include a single carriageway connection between Chase Farm Drive and Ogle Drive to ensure benefits to the A193 Cowpen Road are maximised¹³⁴.</p> <p>Note further environmental work is being carried out in support of the planning application and as part of the Outline Business Case refresh. GIS boundaries used were generated using provided design drawings in the absence of linear GIS data.</p>						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. Reduced congestion caused by the new and improved road links and more reliable bus times will likely improve air quality in the local area during operation. The scheme will provide a segregated cycle route, improving accessibility and safety and therefore encouraging a shift towards active travel with consequent benefits in respect of emissions associated with conventional travel. However, where new roads have been constructed, residents and / or businesses in close proximity may be adversely affected.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
	Local	Local	Local	Local	Scale			
	ST	ST	LT	LT	Duration			
	Temp	Temp	Perm	Perm	Permanence			
Med	Med	Med	Med	Certainty				
Air Quality & Pollution	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is approximately 0.3km from the scheme. It is anticipated that there will be negative effects on noise during the construction phase. Reduced congestion caused by the new and improved road links and more reliable bus times will likely promote the use of public transport and improve noise in the local area during operation. The scheme will provide a segregated cycle route, improving accessibility and safety and therefore encouraging a shift towards active travel with consequent benefits in respect of noise associated with conventional travel. However where new roads have been constructed, residents and / or businesses in close proximity may be adversely effected.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
	Local	Local	Local	Local	Scale			
	ST	ST	LT	LT	Duration			
	Temp	Temp	Perm	Perm	Permanence			
Med	Med	Med	Med	Certainty				
Climate	Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050	Construction activities will result in CO2 emissions. During operation the use of vehicles will continue, and CO2 emissions will remain but are likely to be reduced due to reduced congestion, more reliable bus times and option to cycle. The scheme will provide a segregated cycle route, improving accessibility and safety and therefore encouraging a shift towards active travel with consequent benefits in respect of emissions associated with conventional travel.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
	Local	Local	Local	Local	Scale			
	ST	ST	LT	LT	Duration			
	Temp	Temp	Perm	Perm	Permanence			
Med	Med	Med	Med	Certainty				

¹³⁴ Northumberland County Council (2023) *Blyth Relief Road – Public Consultation*. Available: [Blyth Relief Road - Public Consultation - Have Your Say Northumberland - Citizen Space](#)

	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3, the closest area is approximately 20m from the A1061. There may be an increase in impermeable surface where new road is introduced which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest SSSI (Northumberland Shore) is within 0.3km east of the A1061 section of the scheme. Blyth estuary which is part of Northumberland Shore SSSI identified in proximity to the scheme provides wintering grounds for shore birds. Blyth Pier and the estuarine areas of the site are regularly supporting over 250 bird species including international and national significant redshank and golden plover ¹³⁵ . The nearest LNR is Blyth to Seaton Sluice Dunes located approximately 0.3km south east and there are no NNRs within 36km of the scheme. There is an area of Deciduous Woodland Priority Habitat intersected by a section of new route on the A1061 section and some adjacent to the Chalk Farm/Ogle Drive section. There are no Ancient Woodland areas within 0.9km west of the scheme. The closest RSPB Reserve is over 23km north. There is a MCZ (Coquet to St Marys) 0.3km east of the scheme. During construction, loss of priority habitat is anticipated in the A1061 section and may be affected where works are adjacent in other sections. During operation, the project is not anticipated to have significant effects on any of the designated sites noted, however indirect effects may be possible. It is to be noted that any shift towards active travel encouraged by this scheme would reduce pressures on habitat and species associated with conventional travel (air, noise and light pollution).	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	Northumberland Marine SPA is located 0.3km east and Northumbria Coast Ramsar is located 1.3km north east from the scheme. There are no SACs within 14km south of the scheme. During construction, the potential for significant adverse effects on designated sites in proximity to the scheme cannot be ruled out with the information available for this assessment. Therefore, further investigation may be required through a HRA. During operation the project is not anticipated to have significant effects on any of the designated sites noted, though may reduce pressures as a result of any reduced traffic (e.g. through noise, light and air emissions).	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Further investigation may be required through a HRA.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs)	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude

¹³⁵ Northumberland County Council (2017) *Feasibility Report – Blyth Relief Road*. Available: [Blyth-Relief-Road-Options-Appraisal-Report.pdf](#)

		The scheme has the potential to affect geodiversity during construction, however as it is mostly within a developed area effects are expected to be limited.	Consideration of the potential for geodiversity enhancement	Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	<p>The nearest listed building is 'Gate Pier at Entrance to Link House Farm' (Grade II) located 100m east. The closest Scheduled Monument is 'Coastal Artillery Battery on Blyth Links' located 0.2km east. Seaton Delaval Registered Park and Garden is located 2.6km south of the scheme. The scheme is located 0.3km west from the Blyth Bondicar Terrace Conservation Area and 0.3km north of the Seaton Delaval Conservation Area. The closest World Heritage Site is Frontiers of the Roman Empire (Hadrian's Wall) located over 12km south. There is a Heritage at Risk site (Blyth Central) 1.1km north east of the scheme.</p> <p>There is unlikely to be significant adverse effects on designated heritage during construction or operation of the scheme. There is the potential for indirect effects on setting and from noise and vibration on the listed buildings in close proximity during construction, however this expected to minimal during operation as it is already in proximity to roads.</p>	<p>Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP.</p> <p>Precautions for unexpected heritage discovery during construction.</p> <p>Potential need for archaeological watching brief during construction, particularly in areas not previously developed.</p> <p>Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).</p>	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
				0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local	Local	Local	Local	Scale				
ST	ST	LT	LT	Duration				
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				
Landscape and Visual	Conserve and enhance the natural beauty the North East's protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	<p>The option falls within South East Northumberland Coastal Plain National character area. The scheme is over 23km north from Northumberland Coast National Landscape and partially intersects Tyne and Wear greenbelt. There are no National Parks within 27km. The closest heritage coast (North Northumberland) is approximately 12km north of the scheme and the closest national trail is over 12km south.</p> <p>No significant effects are anticipated during construction or operation as the scheme is within an already developed area. However, adverse effects are likely from the removal of deciduous woodland priority habitat.</p>	<p>Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction.</p> <p>Consideration during planning / design to landscaping and screening, with care taken in choice of materials and species used.</p> <p>Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.</p>	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
				0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local	Local	Local	Local	Scale				
ST	ST	LT	LT	Duration				
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				
Water	Protect and enhance the water environment	<p>The scheme is 1.5km east of 'Blyth from Pont to Tidal Limit' WFD River. The closest lake is located 7km south west and is approximately 6km south east of the closest SPZ. The closest DWSZ for surface water is over 16km north west and DWSZ for groundwater over 70km north. There is a bathing water quality site 0.4km east of the scheme.</p> <p>Construction is unlikely to have any significant adverse effects on water. There may be reduced risk for pollution to the water environment during operation where the intervention encourages a modal shift away from private vehicles.</p>	<p>Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs).</p> <p>Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.</p>	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
				0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local	Local	Local	Local	Scale				
ST	ST	LT	LT	Duration				
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				

Soil	Protect soil resources and avoid land contamination	<p>The closest areas of Open Mosaic Previously Developed Land are approximately 0.7km from the scheme. Newsham Reservoir East Historic Landfill is located 0.2km north of the scheme. The Chalk Farm / Ogle Drive section of the scheme partially falls within Urban and Grade 3 agricultural land classification, and the A1061 section of the scheme is completely within Grade 3 agricultural land classification.</p> <p>During construction, Grade 3 land is intersected which is considered best and most versatile although significant adverse effects are not anticipated as part of the works are on existing carriageway. There may be potential to remediate contaminated land although any effects are likely to be minor. No significant effects are anticipated during operation.</p>	<p>Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs).</p> <p>Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.</p> <p>Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.</p> <p>Remediation of land contamination if in existence.</p>	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	<p>The nearest permitted waste site (Suez Recycling and Recovery UK Ltd) is located 4.1km south of the scheme. Construction will require resources for the new and improved road works. The construction of the segregated cycle lanes is unlikely to require significant resources and the option would encourage sustainable forms of transport during operation.</p>	<p>Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).</p>	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	<p>Construction activities will provide employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills through the segregated cycle route, as well as reducing congestion in the local area and supporting opportunities for future growth.</p>	<p>Provide employment opportunities to unskilled / apprentices at construction stage.</p>	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Support the wider coordination of land use and energy planning across the North East CA area	<p>The option is predominantly in areas classed as a built up area. The scheme encourages a shift to a sustainable mode of transport by improving public transport and the local cycle network. The scheme may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.</p>	None identified.	0	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	<p>Improve health and well-being for all citizens and reduce inequalities in health (<i>HIA specific objective</i>)</p>	<p>There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. This may also temporarily effects users of both adjacent public parks including South Newsham Pavilion. However, wider and vulnerable groups in the residential areas where congestion will be reduced would be benefitted during operation of this intervention.</p>	<p>Consideration of air quality in Construction Environmental Management Plans (CEMPs).</p> <p>Adherence to all relevant health and safety measures.</p>	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude

		The provision of dedicated and segregated cycle routes will make this mode of transport more accessible and safer for wider and vulnerable groups. It will also promote access to the nearby open greenspace. However, some groups including disabled, elderly and pregnant women may not benefit from the intervention.		Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. New infrastructure may promote greater equality of opportunity as they would allow for increased reliability and better journey times. Access may be increased to employment opportunities and public services / recreational facilities. Improved active travel provisions will make this mode of transport more accessible and safer for wider and vulnerable groups. However some groups including disabled, elderly and pregnant women may not benefit from the intervention.	Consideration of air quality in Construction Environmental Management Plans (CEMPs). Adherence to all relevant health and safety measures.	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity	The scheme is anticipated to improve active travel in the area by providing a safe area for cycling along the new and improved roads, and promote the use of public transport, improving connectivity.	None identified.	0	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

E.3.2 Bowburn Relief Road

New Scheme No.		DU22						
Scheme Name		Bowburn Relief Road						
Scheme Description		Lack of Capacity: J61 of the A1(M) is operating at capacity following the junction upgrades in 2020. Given the additional demand to be generated by Integra 61 Phase 1, this is due to increase in the future situation. There is no additional capacity on the network for future development, with transport issues preventing economic growth through restricted access to employment opportunities that could otherwise come forward locally. A GIS boundary for the scheme was generated using provided design drawings in the absence of linear GIS data.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Pollution	Protect and improve air quality	There are no AQMAs within 4km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. Reduced congestion caused by the new road link along the A177 will likely improve air quality in the local area during operation. However, where the new relief road has been constructed, residents and / or businesses in close proximity may be adversely affected.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	-	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
	Temp	Temp	Perm	Perm	Permanence			
	Med	Med	Med	Med	Certainty			
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is approximately 0.7km south east from the scheme. It is anticipated that there will be negative effects on noise during the construction phase. Reduced congestion caused by the new road link along the A177 will likely improve noise in the local area during operation. However, where the new relief road has been constructed, residents and / or businesses in close proximity may be adversely affected.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	-	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local				Local	Local	Local	Scale	
ST				ST	LT	LT	Duration	
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				
Climate	Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050	Construction activities will result in CO2 emissions. During operation the use of vehicles will continue, and CO2 emissions will remain but are likely to be reduced due to reduced congestion.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
	Temp	Temp	Perm	Perm	Permanence			
	Med	Med	Med	Med	Certainty			
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme partially intersects Flood Zones 2 and 3 in its southern section. The option may contribute to an increased risk of flooding during construction and operation as it results in an increase in impermeable surface, although further investigation and detail regarding scheme design would be required to determine significance of effects.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local				Local	Local	Local	Scale	
ST				ST	LT	LT	Duration	
Temp	Temp	Perm	Perm	Permanence				

				Med	Med	Med	Med	Certainty	
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest SSSI (Cassop Vale) is 1.9km east of scheme. The nearest LNR is Crow Trees located approximately 2.2km south east and the nearest NNR is Cassop 2.2km east of the scheme. There are two areas of Deciduous Woodland Priority Habitat intersected by the scheme. There are no Ancient Woodland areas within 0.9km of the scheme. The closest RSPB Reserve is over 21km south east. There closest MCZ is over 33km north east. During construction, loss of priority habitat is anticipated. During operation, the project is not anticipated to have significant effects on any of the designated sites noted, however indirect effects may be possible.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	--	0	-		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
	Temp	Temp	Perm	Perm	Permanence				
	Med	Med	Med	Med	Certainty				
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	Teesmouth and Cleveland Coast SPA is located over 16km east and Northumbria Coast Ramsar is located over 16km east from the scheme. The closest SAC (Thrislington) is 4.4km south of the scheme. During construction, the potential for significant adverse effects on designated sites in proximity to the scheme cannot be ruled out with the information available for this assessment. Therefore, further investigation may be required through a HRA. During operation the project is not anticipated to have significant effects on any of the designated sites noted, though may reduce pressures as a result of any reduced traffic (e.g. through noise, light and air emissions).	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Further investigation may be required through a HRA.	0	--	+	-		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
Local				Local	Local	Local	Scale		
ST				ST	LT	LT	Duration		
Temp	Temp	Perm	Perm	Permanence					
Med	Med	Med	Med	Certainty					
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme has the potential to affect geodiversity during construction, however as it is mostly within a developed area effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs) Consideration of the potential for geodiversity enhancement	0	-	0	0		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
Med	Med	Med	Med	Certainty					
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 'The Old Railway Station' (Grade II) located 0.4km north west. The closest Scheduled Monument is 'Moated site at Low Butterby Fam' located 2.4km north west. Croxdale Hall Registered Park and Garden is located 1.3km west of the scheme. The scheme is located 0.6km west from the Bowburn Conservation Area. The closest World Heritage Site is Durham Castle and Cathedral located 4km north west. There is a heritage at Risk Site (Croxdale Hall) located 1.4km west of the scheme. There is unlikely to be significant adverse effects on designated heritage during construction or operation of the scheme.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	-		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
Med	Med	Med	Med	Certainty					

Landscape and Visual	Conserve and enhance the natural beauty the North East's protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	<p>The option falls within Tyne and Wear Lowlands National character area. The scheme is over 19km north from North Pennines National Landscape and is adjacent to Tyne and Wear greenbelt. There are no National Parks within 35km. The closest heritage coast (Durham) is approximately 14km east of the scheme and the closest national trail is over 24km north.</p> <p>No significant effects are anticipated during construction or operation as the scheme although adverse effects are likely from the removal of deciduous woodland priority habitat.</p>	<p>Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction.</p> <p>Consideration during planning / design to landscaping and screening, with care taken in choice of materials and species used.</p> <p>Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.</p>	0	-	0	-	<p>Characterisation of effects</p> <p>✓ ✓ ✓ ✓</p> <p>Local Local Local Local</p> <p>ST ST LT LT</p> <p>Temp Temp Perm Perm</p> <p>Med Med Med Med</p> <p>Magnitude</p> <p>Scale</p> <p>Duration</p> <p>Permanence</p> <p>Certainty</p>
				Characterisation of effects				
Water	Protect and enhance the water environment	<p>The scheme intersects the 'Croxdale Beck from Source to Wear' WFD River. The closest lake is located 2.3km west and the scheme is 1.7km west of the closest SPZ. The closest DWSZ for surface water is approximately 30km south and DWSZ for groundwater over 78km west.</p> <p>Construction has the potential to have adverse effects on the intersected WFD River. There may be an increased risk for pollution to the water environment during operation and it is likely that a WFD assessment would be required to fully understand risks through construction and operational activities.</p>	<p>Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs).</p> <p>Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.</p>	0	-	0	-	<p>Characterisation of effects</p> <p>✓ ✓ ✓ ✓</p> <p>Local Local Local Local</p> <p>ST ST LT LT</p> <p>Temp Temp Perm Perm</p> <p>Med Med Med Med</p> <p>Magnitude</p> <p>Scale</p> <p>Duration</p> <p>Permanence</p> <p>Certainty</p>
				Characterisation of effects				
Soil	Protect soil resources and avoid land contamination	<p>The closest areas of Open Mosaic Previously Developed Land are approximately 0.3km east of the scheme. Hill Top Farm Historic Landfill is located 3.3km east of the scheme. The falls entirely within Grade 3 agricultural land classification.</p> <p>During construction, Grade 3 land is intersected which is considered best and most versatile. There may be potential to remediate contaminated land although any effects are likely to be minor.</p> <p>No significant effects are anticipated during operation.</p>	<p>Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs).</p> <p>Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.</p> <p>Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.</p> <p>Remediation of land contamination if encountered.</p>	0	-	0	0	<p>Characterisation of effects</p> <p>✓ ✓ ✓ ✓</p> <p>Local Local Local Local</p> <p>ST ST LT LT</p> <p>Temp Temp Perm Perm</p> <p>Med Med Med Med</p> <p>Magnitude</p> <p>Scale</p> <p>Duration</p> <p>Permanence</p> <p>Certainty</p>
				Characterisation of effects				
Natural Resources	Promote sustainable use of resources and natural assets	<p>The nearest permitted waste site (Durham County Council) is located 2.2km south east of the scheme.</p> <p>Construction will require resources for the new road.</p>	<p>Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).</p>	0	-	0	0	<p>Characterisation of effects</p> <p>✓ ✓ ✓ ✓</p> <p>Local Local Local Local</p> <p>ST ST LT LT</p> <p>Temp Temp Perm Perm</p> <p>Med Med Med Med</p> <p>Magnitude</p> <p>Scale</p> <p>Duration</p> <p>Permanence</p> <p>Certainty</p>
				Characterisation of effects				
Economic	Promote economic growth and job creation, and improve access and	Construction activities will provide employment opportunities.		+	0	++	0	<p>Characterisation of effects</p>
				Characterisation of effects				

	connectivity to jobs and skills for all	The scheme may also improve accessibility and connectivity to jobs and skills by reducing congestion and improving road capacity in the local area, supporting opportunities for future growth.	Provide employment opportunities to unskilled / apprentices at construction stage.	✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Support the wider coordination of land use and energy planning across the North East CA area	The option is partially within an area classed as a built up area. The relief road will be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health (<i>HIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. This will also temporarily effects uses of footpaths and greenspace adjacent to the scheme. However, wider and vulnerable groups in the residential areas where congestion will be reduced would be benefitted during operation of this intervention.	Consideration of air quality in Construction Environmental Management Plans (CEMPs). Adherence to all relevant health and safety measures.	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. New infrastructure may promote greater equality of opportunity as this would allow for reduced congestion and increased access to employment opportunities and public services / recreational facilities.	Consideration of air quality in Construction Environmental Management Plans (CEMPs). Adherence to all relevant health and safety measures.	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity	None identified.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

E.3.3 North Shields Ferry Landing

New Scheme No.		NX05						
Scheme Name		North Shields Ferry Landing						
Scheme Description		Relocation of the Ferry landing on the north bank of the Tyne to tie in with the regeneration of the fish quay area. The scheme includes ¹³⁶ : <ul style="list-style-type: none"> new ferry landing at North Shields Fish Quay; pedestrian and cycle links between the ferry landing and nearby connecting bus links, and improved infrastructure for fishing boats that will also provide wave protection for the ferry operation. <p>Note in the absence of linear GIS data, the site location point data was used.</p>						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Pollution	Protect and improve air quality	The closest AQMA is 'AQMA No. 1b (City Centre)' approximately 9.3km west of the scheme. It is anticipated that there will be negative effects on air quality during the construction and operational phase as ferry and road traffic is redirected to the new location however, this is not expected to significantly increase given the new location is 1km from the previous location on the same stretch of road.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
	Temp	Temp	Perm	Perm	Permanence			
	Med	Med	Med	Med	Certainty			
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is located 0.2km north west of the scheme. It is anticipated that there will be negative effects on noise during the construction phase and to the local area during operation. This is not expected to significantly increase given the new location is 1km from the previous location on the same stretch of road.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local				Local	Local	Local	Scale	
ST				ST	LT	LT	Duration	
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				
Climate	Reduce carbon emissions from transport and contribute to meeting the UKs and Transport North East's net zero carbon targets by 2050	Construction activities will result in CO2 emissions. During operation the use of vehicles will continue, and traffic will likely not be affected, therefore there will not be a significant reduction in CO2 emissions. A Carbon Management Plan has been included in the Outline Business Case.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
	Temp	Temp	Perm	Perm	Permanence			
	Med	Med	Med	Med	Certainty			
	Maximise adaptation and resilience of the transport network to the effects of a	The scheme falls within Flood Zone 2 and works may fall within Flood Zone 3.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's).	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local				Local	Local	Local	Scale	
ST				ST	LT	LT	Duration	
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				

¹³⁶ Neexus (2023) North Shields Ferry Landing Replacement Outline Business Case.

	changing climate, including through reducing the risk of flooding	It is unlikely to contribute to a significant increase in risk of flooding during construction or operation as it is within a developed area and will not result in a significant increase in impermeable surface.	Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring	✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	Northumberland Shore SSSI is located 0.6km north east of the scheme. The nearest LNR is Marden Quarry located 3.1km north and the nearest NNR is Durham Coast approximately 27km south east of the scheme. There is an area of Deciduous Woodland Priority Habitat 0.6km north east and an area of Ancient Woodland 7km north west of the scheme. The closest RSPB Reserve is approximately 37km north. There is a MCZ (Coquet to St Marys) 4.1km north of the scheme. During construction and operation, the project is not anticipated to have significant effects on any of the designated sites noted, however indirect effects may be possible.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
	Temp	Temp	Perm	Perm	Permanence			
	Med	Med	Med	Med	Certainty			
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	Northumbria Coast SPA and Ramsar is located 1km north east and Durham Coast SAC is 2.8km south east of the scheme. The scheme works are hydrologically connected to this SAC by the sea. During construction, the potential for significant adverse effects on designated sites in proximity to the scheme cannot be ruled out with the information available for this assessment. Therefore, further investigation may be required through a HRA. During operation, the project is not anticipated to have significant effects on any of the designated sites noted, however indirect effects may be possible.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Further investigation may be required through a HRA.	0	--	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local				Local	Local	Local	Scale	
ST				ST	LT	LT	Duration	
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				
Geodiversity	Protect, enhance and promote geodiversity	Durham Coast SSSI which is located 1.4km south east and Tynemouth to Seaton Sluice SSSI which is located 1.9km north east are both designated partly due to their geological significant features. The scheme has the potential to affect geodiversity during construction, however as it is within a developed area effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Consideration of the potential for geodiversity enhancement.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 1 Howard Street (Grade II) located 100m north west. There are five others within 0.2km west of the scheme. The closest Scheduled Monument is Clifford's Fort located 0.5km north east. North and South Marine Parks and Bents Park Registered Park and Garden is located 0.7km south east of the scheme. The scheme is located within the Fish Quay Conservation Area and within 100m of Northumberland Square Conservation Area. The closest World Heritage Site is Frontiers of the Roman Empire (Hadrian's Wall) located 0.4km south east. Direct effects on the intersected conservation area are anticipated during construction and operation. There is the potential for indirect effects on setting and from noise and	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed.	0	--	0	--	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude

		vibration on the listed buildings, Scheduled Monument, World Heritage Site and other conservation area in close proximity during construction, however this expected to be minimal during operation as they are already in proximity to the existing roads.	Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty the North East's protected landscapes, seascapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The scheme is within South East Northumberland Coastal Plain National Character Area and is located 4.6km south from Tyne and Wear greenbelt. The closest National Landscape is over 33km south west (North Pennines) and there are no National Parks within 40km. The closest heritage coast (Durham) is approximately 15km south east of the scheme and the closest national trail is 6km south west. No significant effects are anticipated during construction or operation as the scheme is within an already developed area.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Consideration during planning / design to landscaping and screening, with care taken in choice of materials and species used. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	-	0	-	
Characterisation of effects								
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	The scheme is 4.1km north east of 'Don from Source to Tidal Limit' WFD River and 4.4km north east of Wallsend Burn WFD River. The location of the scheme is adjacent to the River Tyne. The closest lake is located 9.8km north west and is 5.4km north of the closest SPZ. The closest DWSZ for surface water is over 27km west and DWSZ for groundwater approximately 90km south west. Construction has the potential to have significant adverse effects on the River Tyne. There may be an increased risk for pollution to the new location's water environment during operation and it is likely that a WFD assessment would be required to fully understand risks through construction and operational activities.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	--	0	-	
Characterisation of effects								
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is approximately 0.5km north east from an area of Open Mosaic Previously Deveoped Land and 0.5km north of a Historic Landfill Site (Brigham and Cowans). It falls in close proximity to Urban agricultural land classification. During construction there may be potential to remediate contaminated land although any effects are likely to be minor. No significant effects are anticipated during operation.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution. Remediation of land contamination if in existence.	+	-	0	0	
Characterisation of effects								
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (North Tyneside Council – transport and engineering) is located 4.5km north west of the scheme. Construction will require resources for the ferry landing infrastructure. No significant effects are anticipated during operation.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	
Characterisation of effects								
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills through the pedestrian and cycle links to nearby bus links, supporting opportunities for economic growth.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
	Med	Med	Med	Med	Certainty			
	Support the wider coordination of land use and energy planning across the North East CA area	The option is within an area classed as a built up area. The scheme will improve accessibility and connectivity to the local area although this is unlikely to be significant given the previous location of the ferry landing was within approximately 1km. The scheme encourages a shift to public and sustainable modes of transport. The scheme may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local				Local	Local	Local	Scale	
ST				ST	LT	LT	Duration	
Temp				Temp	Perm	Perm	Permanence	
Med	Med	Med	Med	Certainty				
Social	Improve health and well-being for all citizens and reduce inequalities in health (<i>HIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. Wider and vulnerable groups using the ferry may be benefitted during operation of this intervention due to it being located closer to Open Greenspace e.g., Laurel Park is located 200m north east of the scheme. The provision of pedestrian and cycle links to the bus network make this mode of transport more accessible and safer for wider and vulnerable groups. However, some groups including disabled, elderly and pregnant women may not benefit from this.	Consideration of air quality in Construction Environmental Management Plans (CEMPs). Adherence to all relevant health and safety measures.	0	-	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
	Med	Med	Med	Med	Certainty			
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. Access may be increased to employment opportunities, housing and public services / recreational facilities in the new location. Improved sustainable and public travel will make this mode of transport more accessible and safer for wider and vulnerable groups. However some groups including disabled, elderly and pregnant women may not benefit from the intervention.	Consideration of air quality in Construction Environmental Management Plans (CEMPs). Adherence to all relevant health and safety measures.	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
Local				Local	Local	Local	Scale	
ST				ST	LT	LT	Duration	
Temp				Temp	Perm	Perm	Permanence	
Med	Med	Med	Med	Certainty				
Rural	Promote fairness and equity in rural connectivity	The scheme is anticipated to improve public transport and access to the public transport network, improving connectivity.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
Med	Med	Med	Med	Certainty				

Appendix F. Options Figures



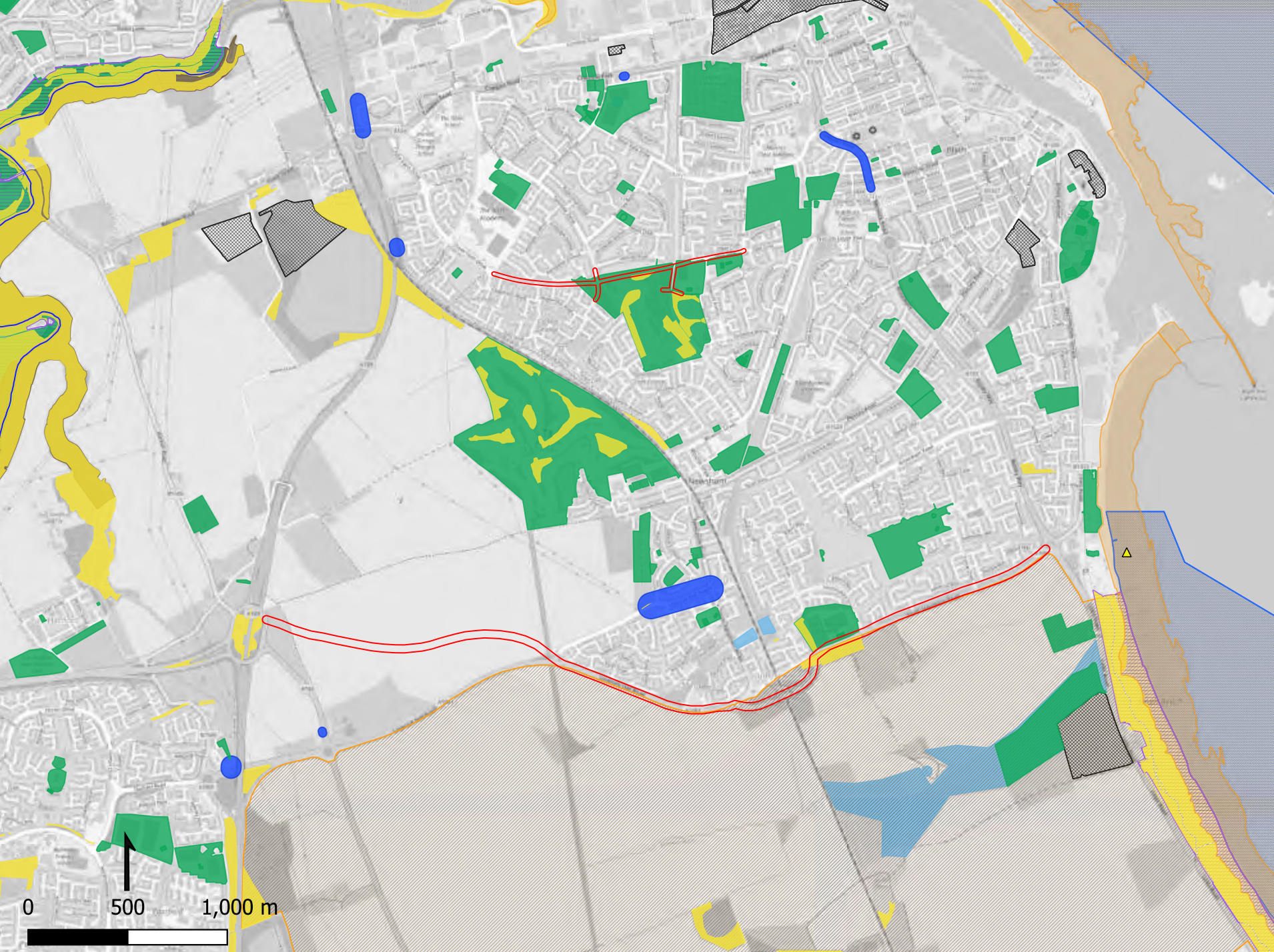
GENERAL NOTES
 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

2. ONLY WRITTEN DIMENSIONS SHOULD BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS.

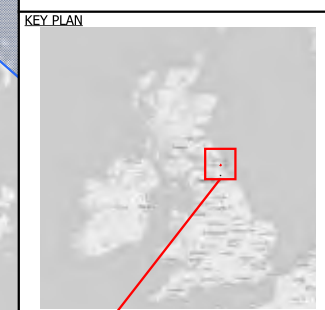


SCHEME LOCATION
Legend
 [Red Outline] Site boundary

<p>© UK OPEN GOVERNMENT LICENCE</p> <p>ATKINSREALIS NOT TO BE HELD LIABLE FOR THE USE OF THIS DATA ON ANY PROJECT OTHER THAN THE NORTH EAST COMBINED AUTHORITY LOCAL TRANSPORT PLAN</p> <p>BASE MAP AND DATA: OpenStreetMap and OpenStreetMap Foundation (CC-BY-SA), © https://www.openstreetmap.org and contributors.</p>	<p>North East Combined Authority</p>	<p>AtkinsRéalis</p> <p>5th Floor, The Heritage, 32-36 Great Victoria Street, Belfast, BT2 7BA</p>	<p>Client North East CA</p>	<p>Project North East Local Transport Plan</p>	<p>Purpose ISA REPORT</p>	<p>Title Blyth Relief Road Location</p>	<table border="1"> <tr> <th>Des/Drawn</th> <th>Checked</th> <th>Authorised</th> </tr> <tr> <td>JC</td> <td>CA</td> <td>AJ</td> </tr> <tr> <td>Date</td> <td>Date</td> <td>Date</td> </tr> <tr> <td>21/10/2024</td> <td>21/10/2024</td> <td>21/10/2024</td> </tr> </table>	Des/Drawn	Checked	Authorised	JC	CA	AJ	Date	Date	Date	21/10/2024	21/10/2024	21/10/2024	<table border="1"> <tr> <th>Status</th> <th>Drawing Number</th> <th>Rev</th> </tr> <tr> <td>For Issue</td> <td>1</td> <td>0</td> </tr> </table>	Status	Drawing Number	Rev	For Issue	1	0
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GENERAL NOTES
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 2. ONLY WRITTEN DIMENSIONS SHOULD BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS.



SCHEME LOCATION

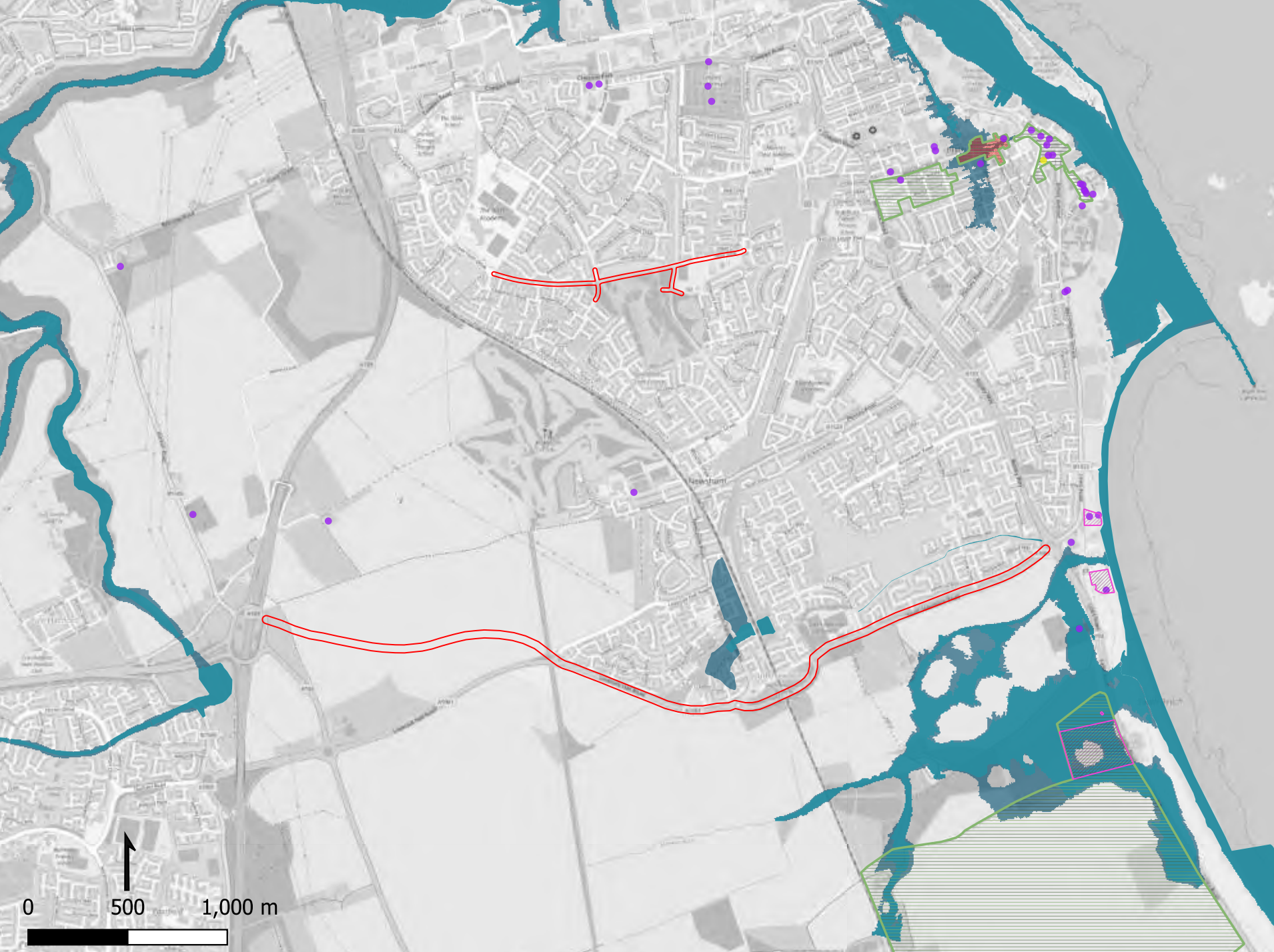
Legend

- Site Boundary
- Water**
- WFD River
- Biodiversity**
- ▲ Bathing Water Quality Sites
- Sites of Special Scientific Interest
- Priority Habitat
- Ancient Woodland
- Local Nature Reserves
- Marine Conservation Zones
- Landscape**
- Open Greenspace
- Green Belt
- Air Quality**
- Noise Action Important Area
- Soil**
- Open Mosaic Habitat
- Historic Landfill Sites



*Note European sites (SAC, SPA and Ramsar) are presented in Figure 4

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			<p>Project</p> <p>North East Local Transport Plan</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Des/Drawn</th> <th>Checked</th> <th>Authorised</th> </tr> <tr> <td>JC</td> <td>CA</td> <td>AJ</td> </tr> <tr> <td>Date</td> <td>Date</td> <td>Date</td> </tr> <tr> <td>21/10/2024</td> <td>21/10/2024</td> <td>21/10/2024</td> </tr> </table>	Des/Drawn	Checked	Authorised	JC	CA	AJ	Date	Date	Date	21/10/2024	21/10/2024	21/10/2024
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			<p>Status</p> <p>For Issue</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Drawing Number</th> <th>Rev</th> </tr> <tr> <td>1</td> <td>0</td> </tr> </table>	Drawing Number	Rev	1	0								
Drawing Number	Rev															
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GENERAL NOTES
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SCHEME LOCATION

Legend

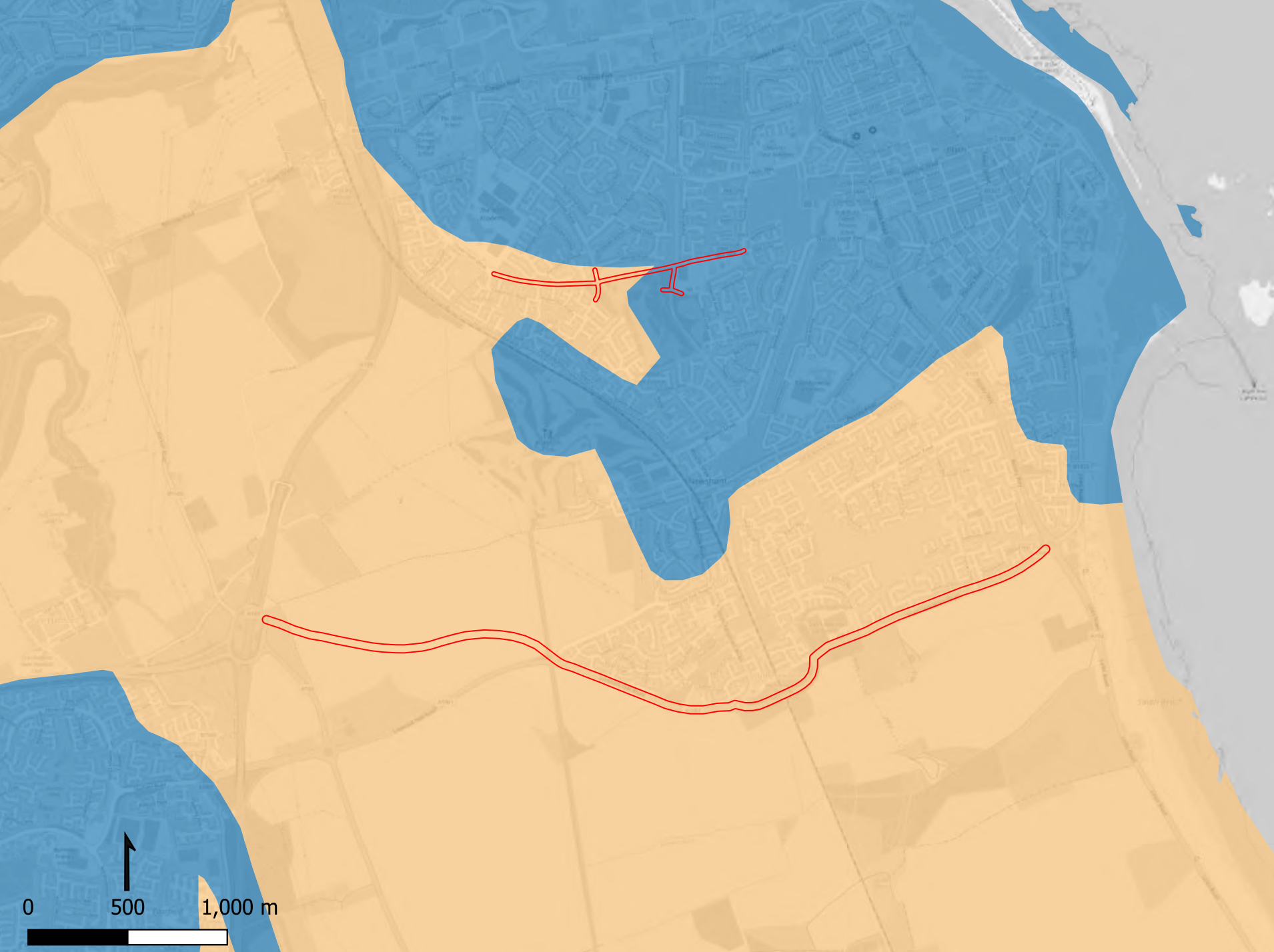
- Site Boundary

- Historic Environment**
- Scheduled Monuments

- Listed Building**
- Grade II
- Grade II*
- Conservation Areas
- Heritage at Risk

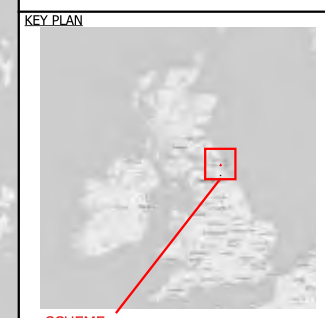
- Flood Risk**
- Flood Zone 2
- Flood Zone 3

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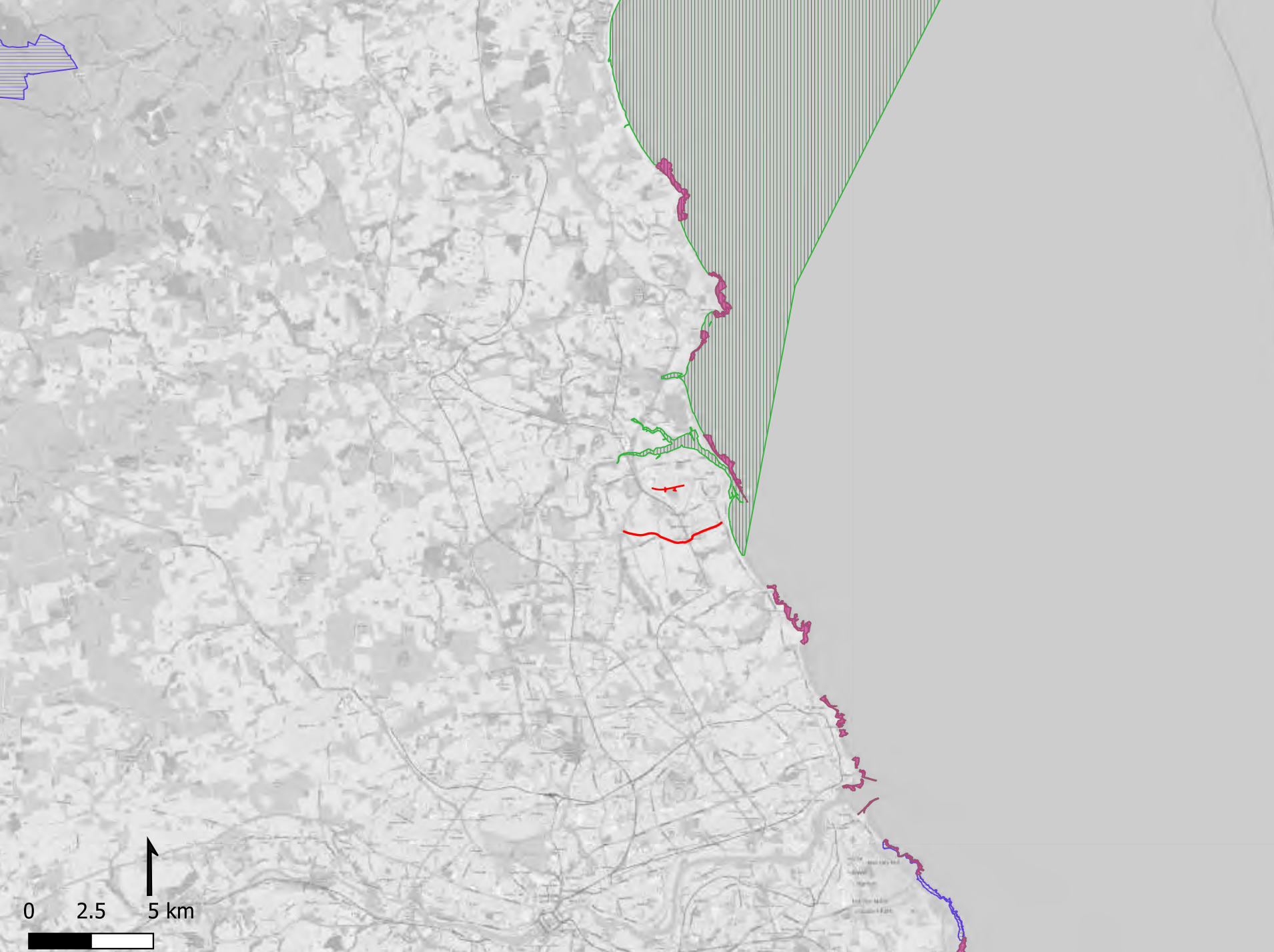
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Site Boundary

Soil

Agricultural Land Classification

Grade 3
 Urban



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KEY PLAN



SCHEME LOCATION

Legend

- Site Boundary
- Biodiversity**
- Ramsar Sites
- Special Protection Area
- Special Areas of Conservation

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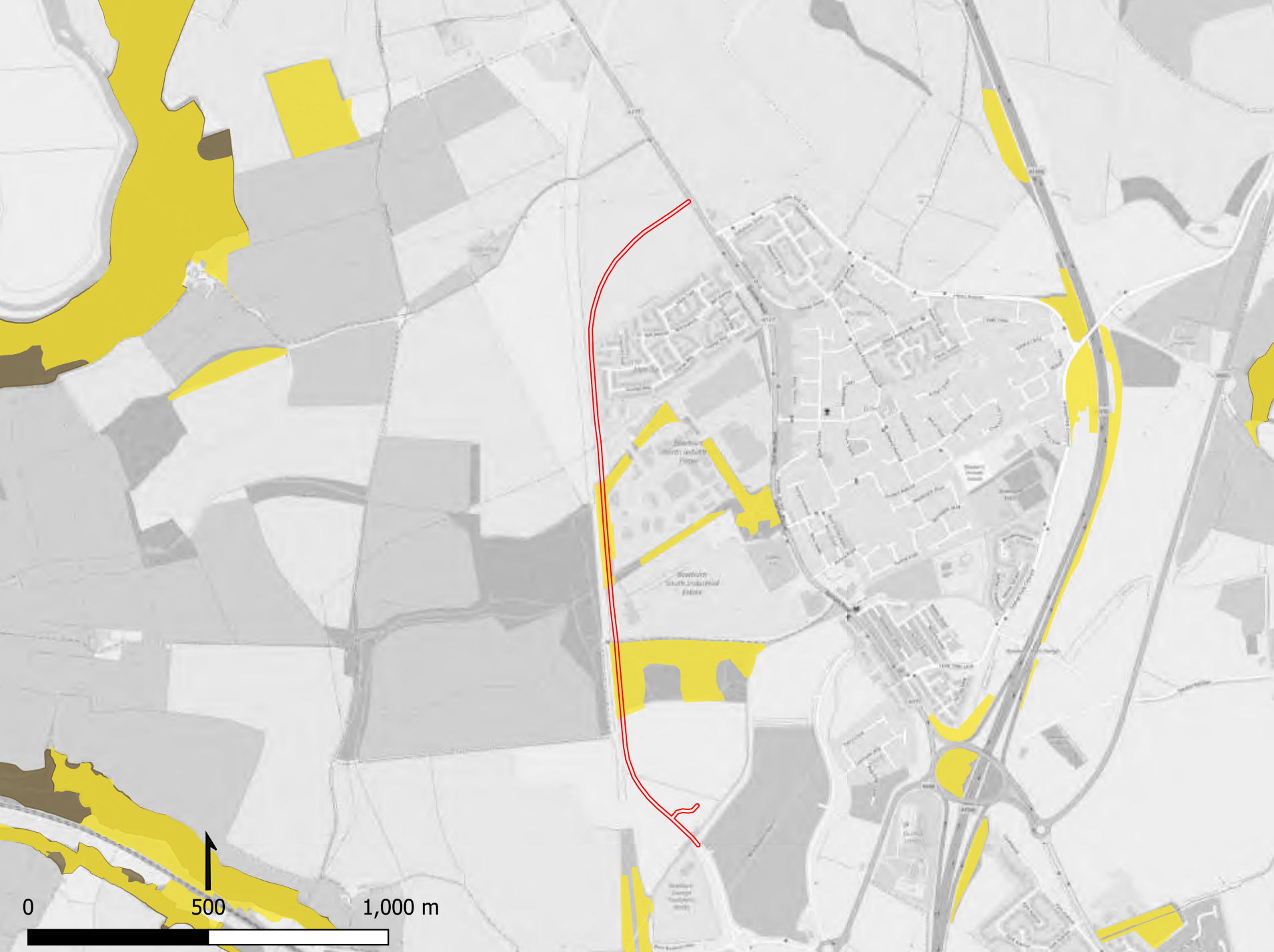
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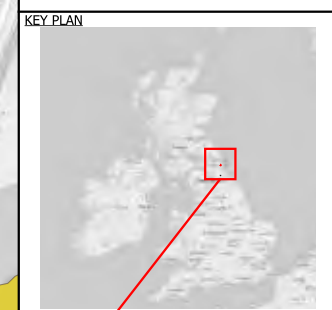
SCHEME LOCATION

Legend

Site Boundary



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Legend

Biodiversity

- Priority Habitat
- Ancient Woodland

*Note European sites (SAC, SPA and Ramsar) are presented in Figure 4

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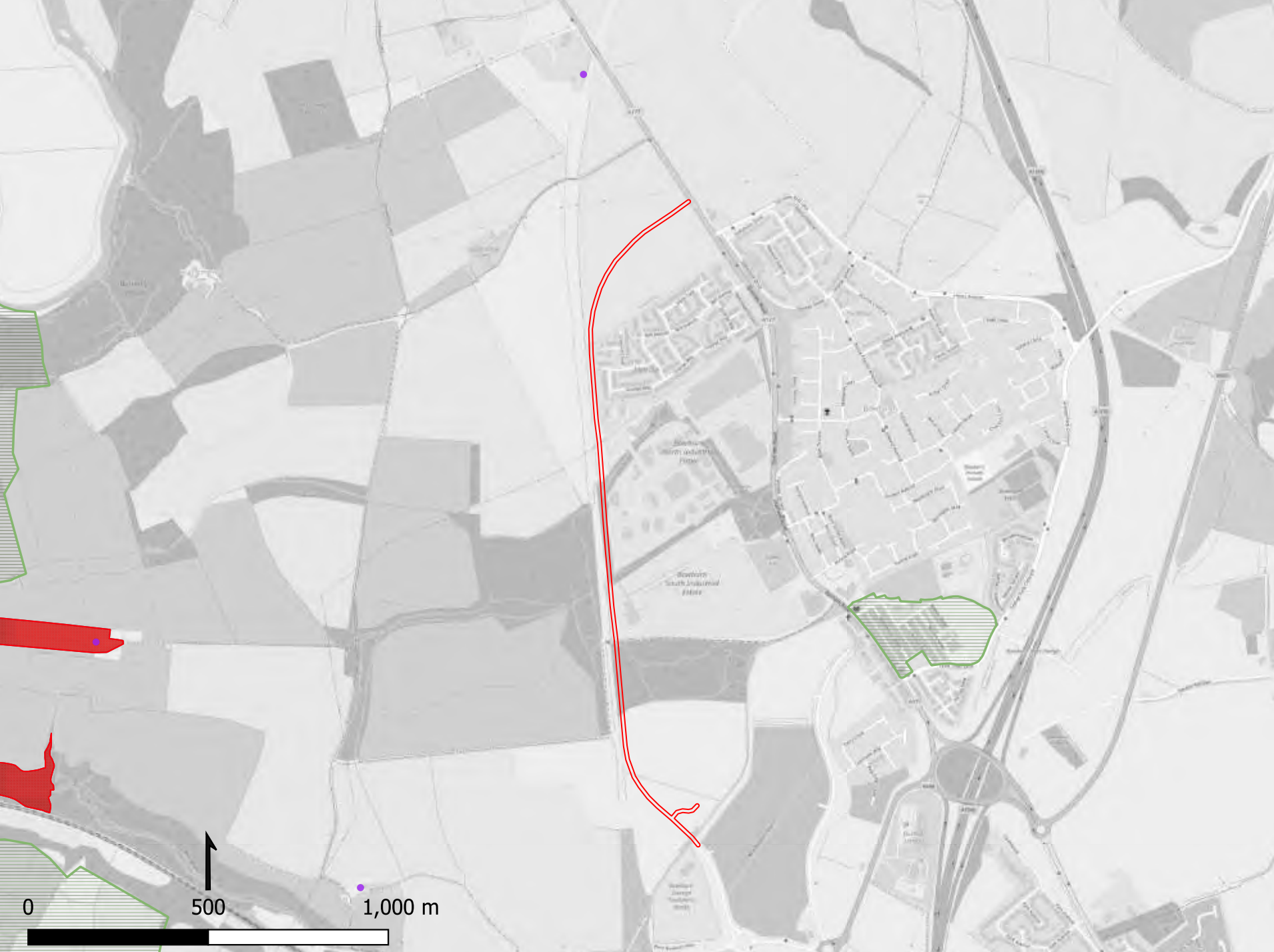
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Project
 North East Local Transport Plan

Purpose
ISA REPORT

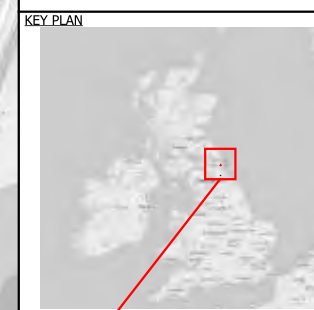
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SCHEME LOCATION

- Legend**
- Site Boundary
 - Historic Environment**
 - Heritage at Risk
 - Conservation Areas
 - Listed Building**
 - Grade II
 - Registered Parks and Gardens

Purpose **ISA REPORT**

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KEY PLAN



SCHEME LOCATION




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Priority Schemes

 Site Boundary

Soil

Agricultural Land Classification

-  Grade 2
-  Grade 3
-  Grade 4



ISA REPORT

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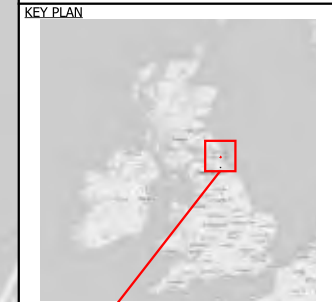
SCHEME LOCATION
Legend

- Biodiversity**
-  Special Areas of Conservation
 -  Special Protection Area
 -  Ramsar Sites

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SCHEME LOCATION
Legend
 ● Site location

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Purpose **ISA REPORT**

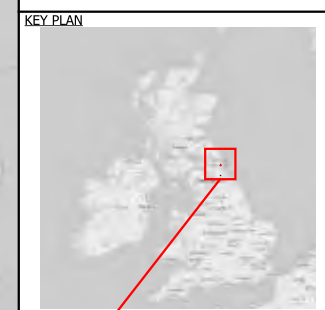
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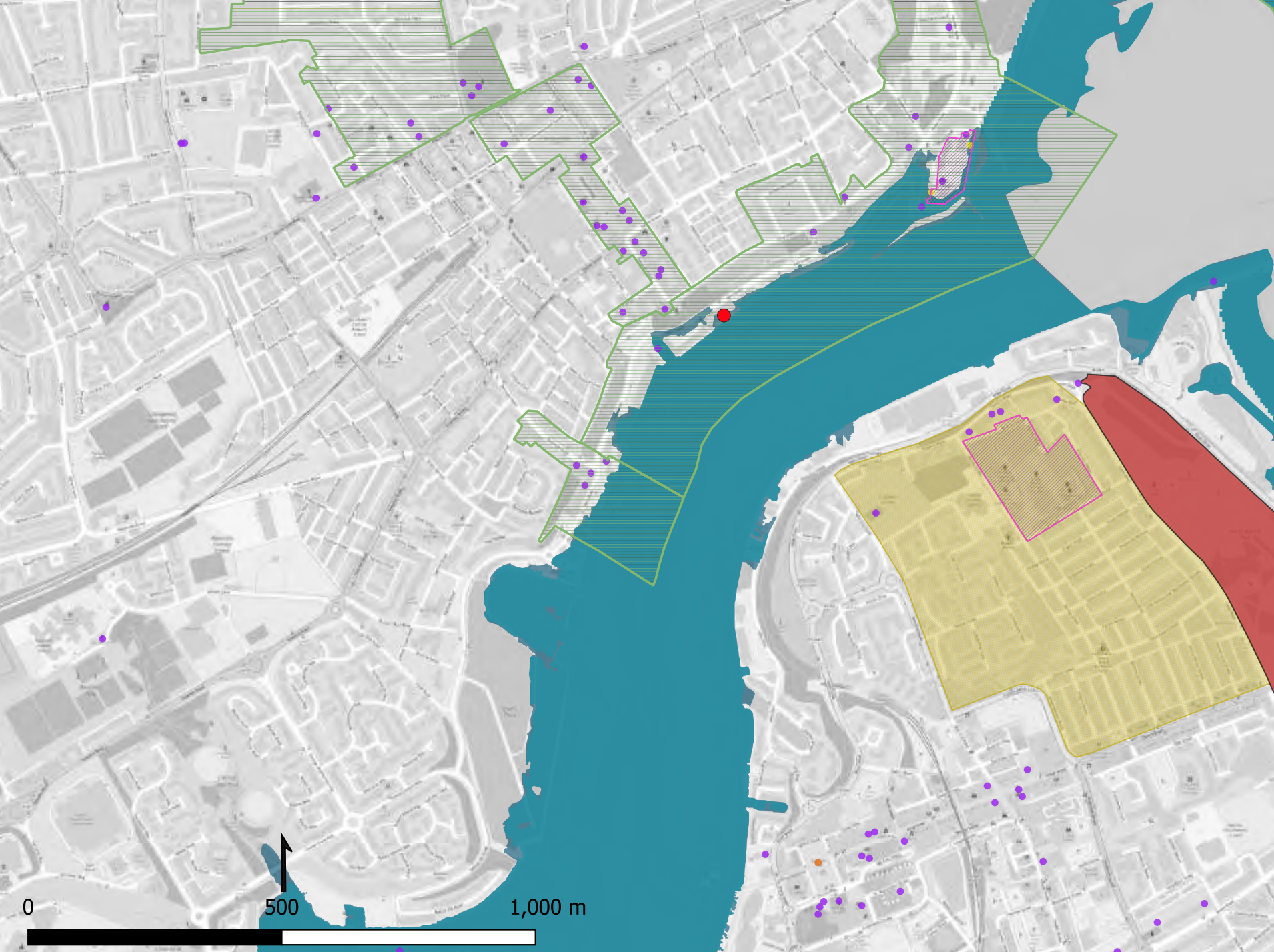


SCHEME LOCATION
Legend

- Site location
- Biodiversity**
- Sites of Special Scientific Interest
- Priority Habitat
- Landscape**
- Open Greenspace
- Air Quality**
- Noise Action Important Area
- Soil**
- Open Mosaic Habitat
- Historic Landfill Sites

*Note European sites (SAC, SPA and Ramsar) are presented in Figure 4

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SCHEME LOCATION

- Legend**
- Site Location
 - Historic Environment**
 - Scheduled Monuments
 - Conservation Areas
 - Listed Building**
 - Grade I
 - Grade II
 - Grade II*
 - Registered Parks and Gardens
 - World Heritage Sites
 - Flood Risk**
 - Flood Zone 2
 - Flood Zone 3

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SCHEME LOCATION

Legend

- Site Location

Soil

Agricultural Land Classification

- Urban



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- SCHEME LOCATION**
- Legend**
- Site location
- Biodiversity**
- Special Areas of Conservation
 - Special Protection Area
 - Ramsar Sites

Purpose **ISA REPORT**

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Appendix G. Carbon Assessment

AtkinsRéalis



ISA Carbon Assessment Report

North East Combined Authority

November 2024

5231282

NORTH EAST LOCAL TRANSPORT PLAN

Notice

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This document has 36 pages including the cover.

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Document reference: 5231282

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2.0	Final version for issue	JFC	SC, TM	DMcL	AJ	01.11.24

Client signoff

Client	North East Combined Authority
Project	NORTH EAST LOCAL TRANSPORT PLAN
Job number	5231282

Client
signature/date



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Abbreviations

CAP	Carbon Assessment Playbook
CCC	Climate Change Committee
CO ₂	Carbon Dioxide
CREDS	Centre for Research in Energy and Demand Solutions
DfT	Department for Transport
EV	Electric vehicle
GHG	Greenhouse gases
HGV	Heavy Goods Vehicle
ISA	Integrated Sustainability Appraisal
LTP	Local Transport Plan
North East CA	North East Combined Authority
QCR	Quantified Carbon Reduction
STB	Sub-National Transport Body
SUV	Sports Utility Vehicle
TfN	Transport for the North
TDP	Transport Decarbonisation Plan
ZEV	Zero Emissions Vehicle

1. Introduction

1.1 Purpose of this document

This report describes the initial carbon assessment of the North East Local Transport Plan (LTP). This forms an appendix to the Integrated Sustainability Appraisal (ISA), which has been prepared by AtkinsRéalis Limited on behalf of North East Combined Authority (North East CA).

The North East CA has requested a preliminary carbon assessment of the LTP, to inform the ISA and to help identify components of the LTP delivery programme that are likely to have the most beneficial impacts on carbon emissions. This assessment focuses exclusively on impacts on transport user emissions, i.e. tailpipe emissions from vehicles.

It does not include assessment of the 'embodied' carbon of the capital infrastructure programme, nor does it include maintenance activities or operational emissions from infrastructure estates (e.g. energy use in bus stations). It will be important to take a whole lifecycle approach to considering carbon impacts as the programme progresses, particularly for any infrastructure schemes.

1.2 Background to transport carbon assessment

The Department for Transport (DfT) published, in 2021, its *Transport Decarbonisation Plan (TDP)*¹, which set out the (previous) Government's ambitions for decarbonising the transport system. This included a commitment to enabling local authorities to develop place-based strategies, which reflect their own distinct challenges. It also committed to providing new guidance for the production of LTPs, which would include technical guidance on the assessment of carbon impacts.

The DfT was previously in the process of producing new LTP Guidance, and supporting guidance on the assessment of carbon impacts, termed 'Quantified Carbon Reduction' (QCR) guidance. However, this process paused under the previous Government, and it is unclear if or how this will be resumed.

Nevertheless, early drafts of the QCR Guidance² provided a clear approach to the carbon assessment process, as summarised in Figure 1-1 on the next page. This shows four key steps:

- Step 1: Understand current and future emissions in the area, including understanding the sources of these emissions (types of trips, geographic hotspots etc) and potential forecasts under business-as-usual and accelerated EV adoptions scenarios;
- Step 2: Develop a local 'pathway' for the reduction of carbon, which is consistent with national carbon budgets, identify the gap between forecast emissions (from Step 1) and this pathway, and then identify the types of emissions reductions that will be needed to bridge this gap;
- Step 3: Consider carbon in the generation and appraisal of options, using a light-touch appraisal of whole-life carbon impacts to sift options that are unlikely to meet objectives;
- Step 4: For the sifted programme of measures, estimate the overall carbon impact of the LTP programme using a quantified assessment methodology.

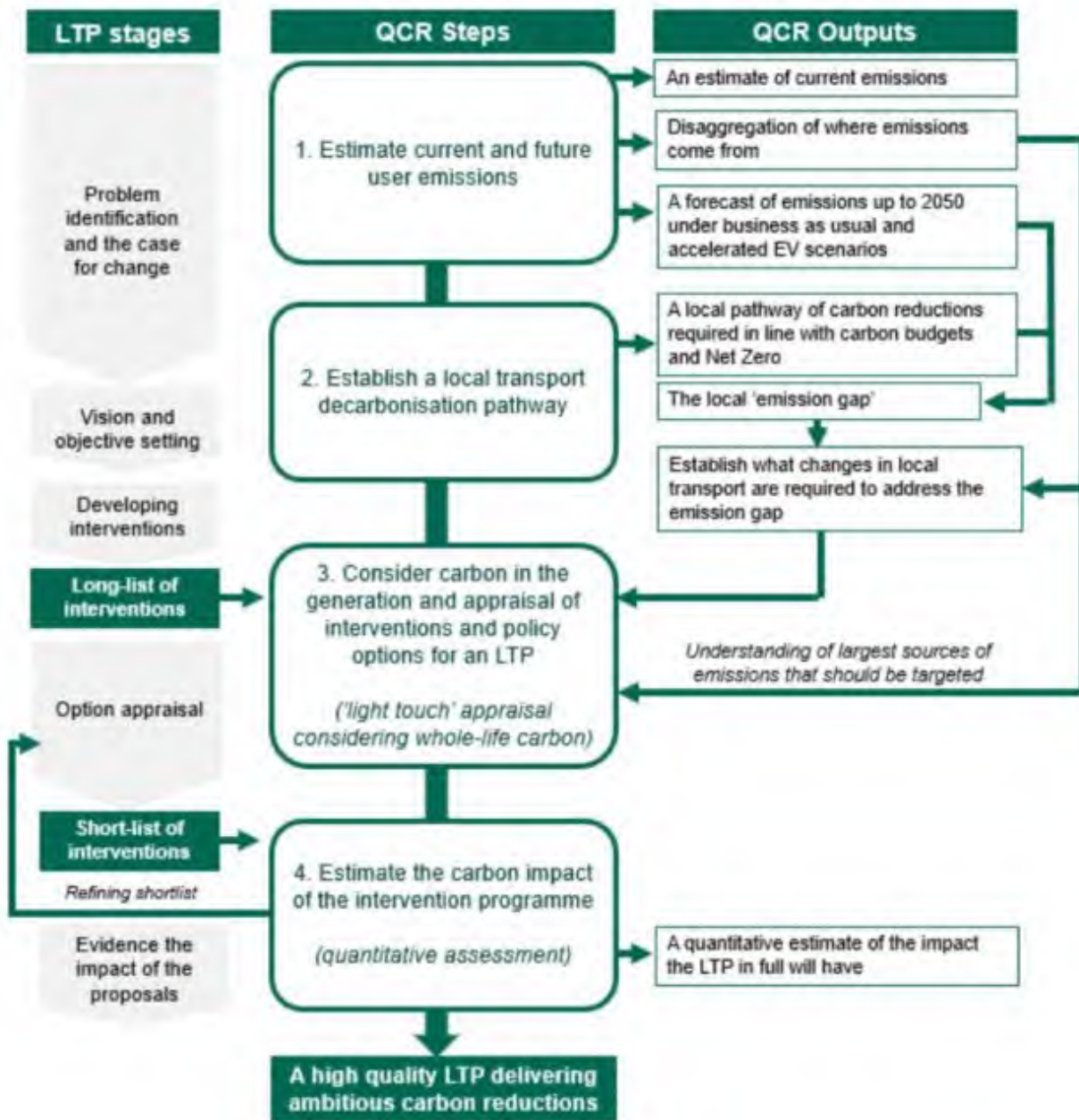
¹ [Transport decarbonisation plan - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/transport-decarbonisation-plan)

² [qcrguidancedraft.pdf](#)

The Sub-National Transport Bodies (STBs) have been working together over the last three years to develop tools to support this process. This has included development of baseline dashboards of carbon emissions for each local authority, together with a new 'Carbon Assessment Playbook' to support the high-level assessment of potential carbon impacts of different types of intervention that are typically included in LTPs.

Figure 1-1 QCR Process

Quantifiable Carbon Reductions Process Outline



The North East CA's LTP was developed before publication of this guidance, and before the above tools were made available. It has not, therefore, followed this four-step process. However, this report provides an initial assessment of the potential carbon impacts of the LTP programme to help to inform the ISA.

1.3 Structure of this report

This report is structured as follows:

- Chapter 2 provides more detailed context to this assessment;
- Chapter 3 provides an initial overall assessment of the policy themes in the LTP;
- Chapter 4 provides an initial estimate of the potential scale of user emissions impact of the Delivery Programme; and
- Chapter 5 presents recommendations on how the programme could be enhanced to deliver further carbon reductions.

The term 'carbon' is used throughout this report to refer to greenhouse gas emissions more generally. This is in line with the terminology used by the DfT and others (for instance in their QCR guidance) and reflects the fact that Carbon Dioxide (CO₂) accounts for 99% of transport greenhouse gas emissions.

2. Context to the carbon assessment

2.1 Introduction

The carbon assessment has been undertaken as part of the ISA, which provides the opportunity for an objective assessment of the economic, social and environmental impacts of the LTP, both policies and programmes. This assessment has provided insights to directly inform the carbon objective in the ISA, and can also be used to inform future carbon management across the LTP strategy and portfolio.

As highlighted in Chapter 1, the LTP has not followed the process set out in the (as yet unpublished) QCR Guidance, but this assessment has provided the opportunity to assess both policies and interventions in the LTP, and to identify strengths and areas where the Plan could be enhanced.

This assessment has focused on the impacts on transport user emissions, i.e. emissions from vehicles using the transport network. It has not included any assessment of the 'embodied' carbon associated with the construction of new infrastructure, nor maintenance activities, nor emissions associated with the operation of transport assets, for example energy used for heating and lighting in bus and train stations. At this early stage in the development of the LTP, such assessments are not considered proportionate, but it is recommended that these are considered as programmes in the LTP are progressed.

2.2 The importance of reducing transport emissions

Land-based transport is the largest source of carbon emissions in the UK, and private road transport is by far the largest contributor (over 85% of emissions in 2019, according to the TDP). In comparison, buses and trains contribute a much smaller proportion of emissions (less than 5% of emissions). Whilst it will be important to tackle emissions from buses (through transition to an electric bus fleet) and trains (through electrification, battery and hydrogen traction), the key decarbonisation challenge will be to tackle the emissions from road traffic, including cars, vans and lorries.

It is also important to recognise that every tonne of carbon generated by transport will stay in the atmosphere for a long time. These will contribute to the total amount of greenhouse gases in the atmosphere that are driving climate change. More greenhouse gases in the atmosphere will drive more warming and more climate change. There is a recognised limit to the total greenhouse gases that can be accommodated before different global temperature thresholds are breached.

For this reason, the UK's Climate Change Committee (CCC) sets a series of five-yearly carbon budgets, which set out the maximum amount of carbon dioxide (CO₂) and other greenhouse gases that can be released nationally over each period. The government has made legal commitments to meet the budgets set up until 2037. The budgets are becoming progressively smaller over each five year period, and are more important than the UK's 2050 Net Zero target. These budgets have informed the CCC's 'pathways' for reducing carbon emissions across different sectors of the UK economy, including surface transport.

The (previous) UK Government also set out a series of pathways for different sectors, including through the *Transport Decarbonisation Plan* (TDP), which was used to inform its Net Zero Strategy. This sets out a different perspective on the required rate of reduction in emissions from the transport sector, based on the (previous) Government's perspective of opportunities for decarbonisation of the transport sector.

Despite some differences in the pathways, it is evident that rapid reductions in emissions are required to meet the UK's carbon budgets (as shown in Section 2.3 that follows). This needs to take place both nationally and locally, with a critical role for both national and local action.

2.3 Framework for reducing transport emissions

There are two primary means of reducing transport carbon emissions:

- Reducing total vehicle traffic, expressed as total vehicle mileage on the network (because emissions are directly related to total traffic); and
- Reducing emissions per vehicle mile travelled, through accelerating uptake of zero emissions vehicles, and through improving fuel efficiency in the current fleet of petrol and diesel vehicles.

Although fuel efficiency of engines has improved over the last two decades, there has also been a shift towards larger vehicles, including Sports Utility Vehicles (SUVs), which has largely offset these efficiency gains. It is recognised that there must now be an accelerated shift towards zero emissions vehicles. This is reflected in the ban on the sales of petrol and diesel cars and vans from 2035, and the 'zero emissions vehicle mandate', which requires a progressive increase in the proportions of zero emissions vehicles (primarily EVs) in new car and van sales over the next decade.

In the case of heavy goods vehicles, it is recognised that there will be greater challenges, with continuing debate over the most appropriate zero emissions technologies for different use cases. However, given the importance of road freight to the national economy, this will be critical to the success of decarbonisation of the UK's transport system. This is reflected in the government's pledge in 2021 to ban sale of diesel HGVs by 2040 (with an earlier date of 2035 for some smaller vehicle types).

It is widely acknowledged that relying solely on vehicle technologies will not achieve decarbonisation at the scale and pace needed to meet future carbon budgets. There are practical limits to the pace at which new vehicles can be produced and incorporated into the fleet and they bring their own challenges; including embodied carbon and other environmental impacts of production, cost (with associated impacts for social equity) and the fact that they do not solve other traffic-related problems such as safety and congestion.

Forecasts show that travel demand will continue to grow, in response to increasing population, economic growth and people's propensity to travel. These forecasts are inherently uncertain, depending on these underlying drivers, but it is evident that growing traffic demand will increase the challenge of decarbonising the transport system.

During recent years, policymakers across the UK and Europe have adopted the 'Avoid-Shift-Improve Framework'³ for transport decarbonisation. This has three policy pillars:

- Avoid or reduce the need to travel (through effective spatial planning so that homes, jobs and shops are closer together, and through enabling more online activity);
- Shift from more polluting modes (cars) towards more environmentally-friendly active travel and public transport; and
- Improve vehicle efficiency through vehicle technologies, including improving fuel efficiency and accelerating the uptake of zero emissions vehicles.

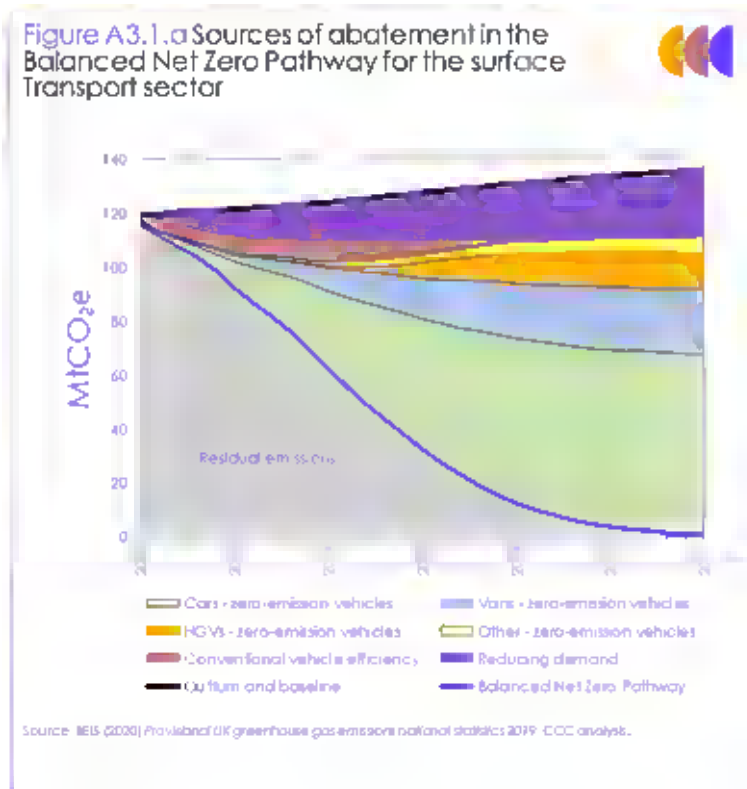
³ An example is here: [Avoid-Shift Improve Framework](#)

The 'avoid' and 'shift' components are both central to reducing traffic demand, whilst the 'improve' component is used to reduce emissions per vehicle mile travelled. This approach has been used to inform the assessment of the measures within the North East CA LTP.

2.4 National perspectives on reducing emissions

Both the Climate Change Committee (CCC) and DfT have recognised that reducing traffic demand will play a crucial role in decarbonising transport. The CCC's *Sixth Carbon Budget*⁴ report, published in 2020, included a pathway for the transport sector. Figure 2-1 illustrates this pathway, sourced from the Surface Transport Report.

Figure 2-1 CCC pathway for the transport sector



The required pathway is shown by the blue line, bounding the grey shading in the graph. The black line shows the forecast baseline, in the absence of any action to decarbonise transport. This shows that demand is forecast to grow, which will result in increases in emissions if action is not taken.

The coloured blocks show the actions that will be required to successfully decarbonise transport at the pace required to meet the pathway shown in blue. This includes the critical roles for accelerating uptake of zero emissions vehicles within the car and van fleets, and then a progressively important role for zero emissions lorries from 2030 onwards. The other vehicles shown in the yellow block include buses and trains. During the 2020s, there is a role for improving vehicle efficiency of conventional petrol and diesel vehicles, but also a crucial role for reducing vehicle demand. The CCC's Surface Transport Report estimated that there would be scope to reduce 9% of car miles by 2035 and 17% by 2050 (through reducing the need to travel and mode shift to lower-carbon modes).

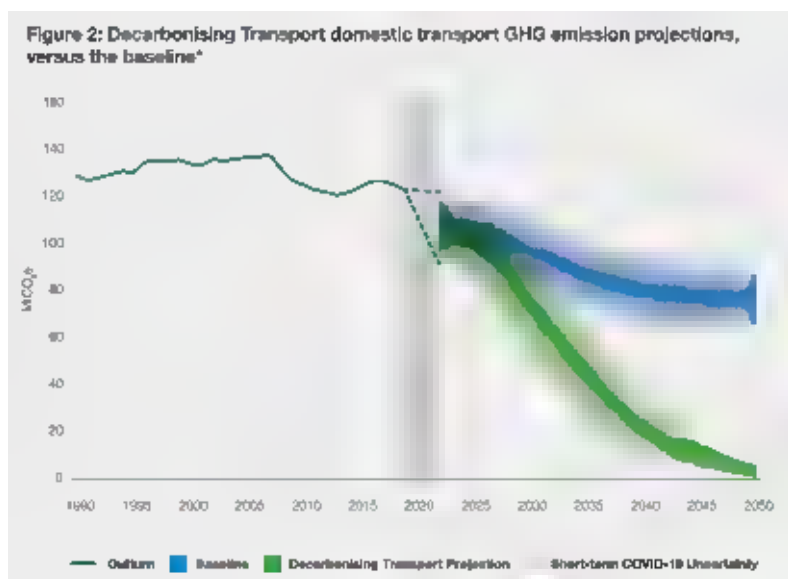
⁴ [Sixth Carbon Budget - Climate Change Committee \(theccc.org.uk\)](https://www.theccc.org.uk/reports/sixth-carbon-budget/)

The chart also shows that significant reductions in surface transport emissions were required from 2020. Given that we are now already at the end of 2024, insufficient action has been taken to address these priorities, and as a nation, we are failing to reduce transport emissions at the pace that is required.

The DfT's *Transport Decarbonisation Plan (TDP)*⁵, published in 2021, set out the (previous) Government's perspective on the options available to decarbonise the transport system. This was published during the latter period of the COVID-19 pandemic, when it was clear that there had been a major disruption in travel patterns, which resulted in increased uncertainty in future travel trends. This included proposals for increasing walking and cycling, zero emissions buses and coaches, decarbonising the railway, and zero emissions cars and vans, as well as accelerating decarbonisation in the maritime and aviation sectors.

Figure 2-2 shows the projections of future emissions, sourced from the TDP.

Figure 2-2 Projections in the Transport Decarbonisation Plan



The short-term uncertainties caused by the COVID-19 pandemic are shown in grey, and are then reflected in longer-term uncertainties in future travel demands. The blue shading shows the baseline: emissions are forecast to fall due to uptake of zero emissions vehicles, but very slowly overall, due to rising travel demand. The green shading shows the projection associated with implementing the policies contained in the TDP. In contrast with the CCC's Sixth Budget Report, this forecasts only modest reductions to 2025, but then steep reductions from the late 2020s.

A third potential carbon reduction pathway can also be considered. The *Tyndall Centre for Climate Change Research*⁶ has identified potential pathways for individual local authorities, taking into account the specifics of local populations. These pathways cover the whole economy and do not provide specific pathways for the transport sector. These show much deeper reductions in emissions, particularly during the 2020s, based on the Tyndall Centre's perspective on the maximum carbon budget for the UK to be consistent with a 1.5 degree warming scenario.

There are, therefore, different potential pathways that can be used as the basis for the development of transport decarbonisation strategies. The 'most ambitious', in terms of the proposed pace of reduction in

⁵ [Transport decarbonisation plan - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

⁶ [Tyndall Carbon Budget Reports \(manchester.ac.uk\)](https://manchester.ac.uk)

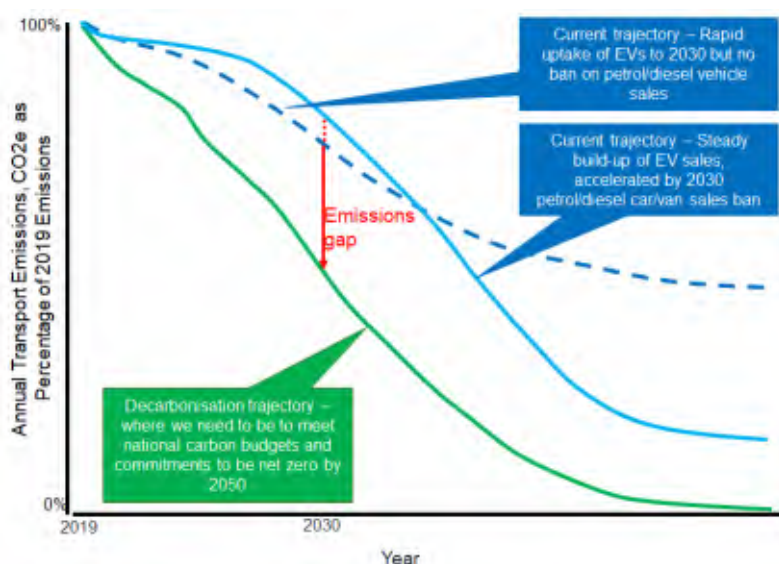
emissions, is set by the Tyndall Centre. However, this is set from a baseline of 2019, and it is now unlikely that the proposed scale of reduction will be achievable. The 'least ambitious' is set out in the Transport Decarbonisation Plan, and the CCC pathway lies between the two but is fairly close to the more ambitious end of the TDP range.

2.5 Regional perspective on reducing emissions

The North East CA has not set a pathway for the reduction of transport emissions in its area. It is strongly recommended that work is undertaken to determine an ambitious but achievable pathway for the region, which will help to inform future decarbonisation policies and priorities. This will be important in reflecting the distinctive economic, social and environmental challenges of the North East. The TDP highlighted the importance of 'place-based' strategies, in which local authorities identify the specific challenges in their areas, and develop tailored approaches to address these challenges.

A more specific pathway for the North East will also be required to meet the second step of the QCR Guidance, as described in Figure 1-1. This will be important in enabling a comparison between future 'business as usual' emissions and the pathway, and the resultant 'emissions gaps' over the period to 2050. Figure 2-3 presents an illustrative pathway and resultant emissions gap.

Figure 2-3 Potential decarbonisation pathway, business-as-usual and emissions gap

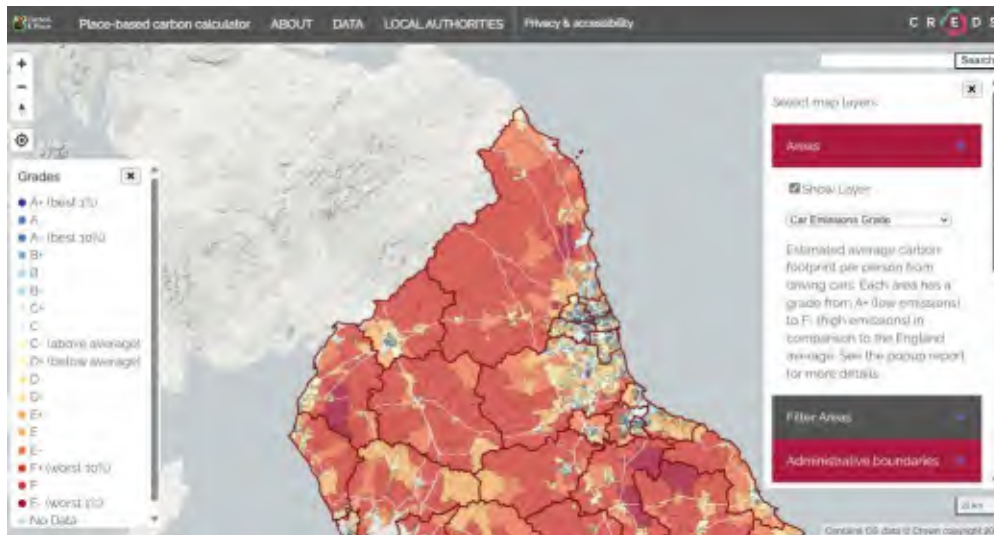


The green line illustrates the potential pathway based on the CCC surface transport pathway, and the blue lines show potential forecasts of future emissions, based on one view of future traffic growth, with the two lines reflecting uncertainties about take-up of zero emissions vehicles. The red arrow illustrates the scale of the gap, which is forecast to become very large by 2030. Concerted action will therefore be required, across the North East, to reduce emissions, both through enabling accelerating uptake of zero emissions vehicles and through reducing traffic demand.

The North East has a very distinctive geography, which presents particular challenges to decarbonising transport. Tyne and Wear is a high-density metropolitan area, with extensive transport choices (including the metro), County Durham has a mix of larger urban areas, smaller towns and remote rural areas, and Northumberland includes some of the most sparsely populated parts of the UK.

The CREDS carbon and place tools⁷ provide evidence to illustrate these issues. The place-based carbon calculator illustrates spatial variations in emissions, car use and accessibility, with differences between urban and rural parts of the region. Figure 2-4 show the variations in car-based carbon per head of population.

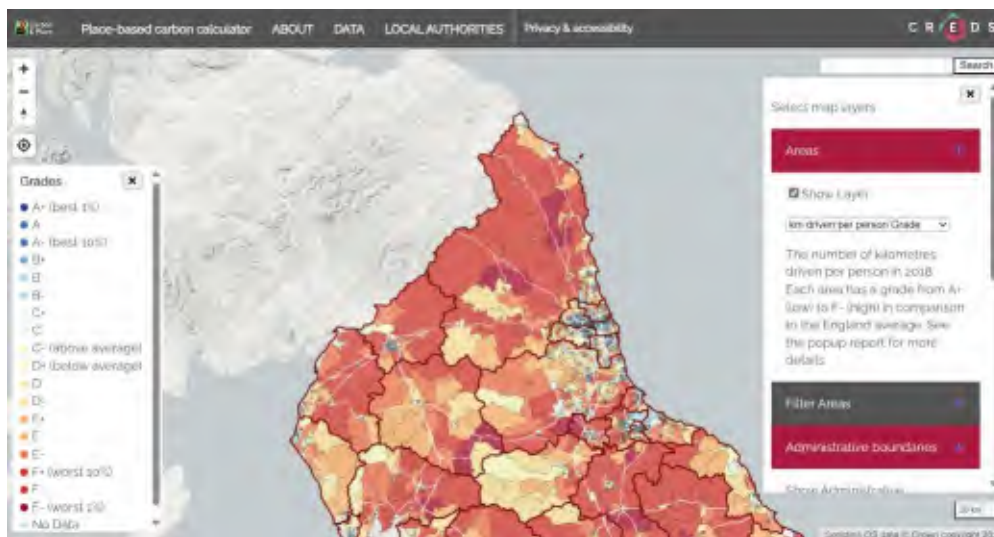
Figure 2-4 Car-based carbon emissions per capita⁸



The places shaded in blue (including inner areas of Newcastle-upon-Tyne) generate the lowest emissions per capita from car travel, and those in red (including western parts of County Durham and much of Northumberland) generate the highest emissions per capita.

Figure 2-5 shows the distances driven by car per person across the region.

Figure 2-5 Distances travelled per person



This shows similar geographic patterns, with people in urban areas driving the shortest distances, due to closer proximity to jobs, shops and services, and a much wider range of travel choices. People living in rural areas tend to drive much further, because jobs and services are further away from where people

⁷ [Carbon & Place](#)

⁸ [Place-based carbon calculator](#)

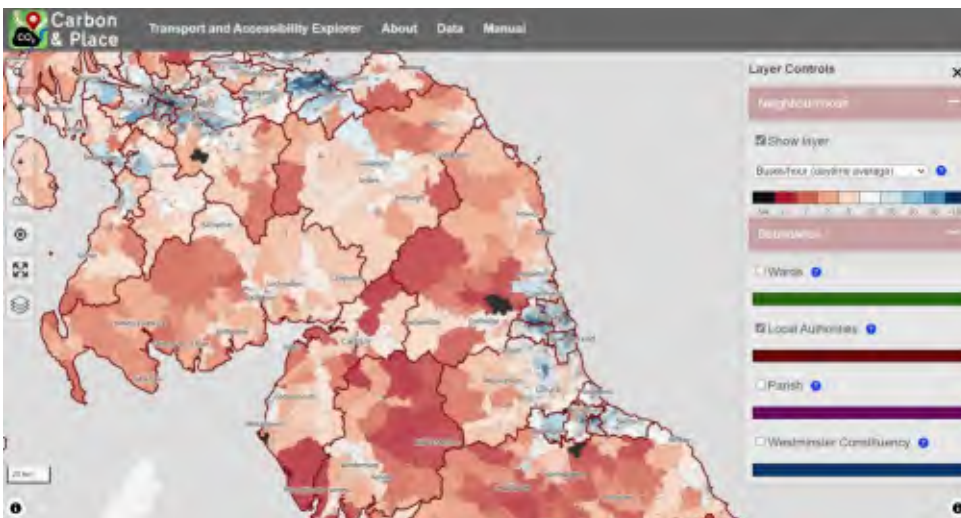
live, and people are much more car dependent. This is also reflected in car dependency, with higher numbers of cars per person in the rural areas.

Large parts of the North East region have very low accessibility to public transport services. Figure 2-6 shows access to rail services and Figure 2-7 shows access to bus services, sourced from the Carbon & Place Transport and Accessibility Explorer⁹.

Figure 2-6 Train services in the North East



Figure 2-7 Bus services in the North East



Large parts of the North East have no access to train services (including much of the west of Northumberland and County Durham), and services are very infrequent in most places where these exist. Tyne and Wear is a notable exception, with frequent metro services. In the case of buses, there are more frequent services in the urban areas, but services are very infrequent in most of the rural areas. There have also been significant changes in bus services since 2008, with very large reductions in some areas, particularly in Northumberland.

⁹ [Transport and Accessibility Explorer \(carbon.place\)](https://carbon.place)

The future approach to transport decarbonisation in the North East should therefore reflect these challenges, including identifying the right balance between reducing traffic demand and accelerating EV adoption in different parts of the region.

This report does not provide a detailed assessment of baseline emissions, and the root causes of travel demands. It also does not propose a Transport Decarbonisation Strategy; it instead provides a commentary on the potential impacts of the LTP on future transport emissions in the North East region.



3. Impacts of policies

3.1 Approach to assessment

The first step was to undertake an initial assessment of the policy themes in the LTP, as follows:

- Planning journeys, informing users, and supporting customers;
- Ticketing and fares;
- Safety, especially of women and girls, and other improvements in service quality;
- Reach and resilience of infrastructure; and
- Connections between different transport types.

Key policies and objectives under each theme were reviewed, and a qualitative assessment was undertaken of the potential impacts on transport user emissions.

In addition, an initial assessment was undertaken of the different intervention types identified in the LTP:

- New infrastructure projects;
- Service improvements (ticketing, fares, vehicles, stations);
- Regulation (including land use, vehicle types, financial instruments, land use policies);
- Promotion and sharing information (marketing, data sharing and workplace engagement) and partnerships; and
- Innovation (planning for the future, trialling ideas, working together).

3.2 Assessment of LTP policy themes

Table 3-1 (overleaf) summarises the assessment of the LTP policy themes. This shows that all of the policy themes have the potential to make a positive contribution towards reducing transport emissions across the North East.

The largest contribution is likely to be from measures that improve travel choices, enable mode shift and help to enable traffic reduction in parts of the region where travel choices are currently poor. Measures to support journey planning, ticketing and fares interventions, and measures to improve service quality will have the greatest impacts in places where there are already viable alternatives to the car. There could be challenges with some of the highways interventions (under 'Reach and resilience of infrastructure') if these induce additional traffic demand, and this will require further review.

3.3 Assessment of LTP intervention types

Table 3-2 (which follows Table 3-1) summarises the assessment of different LTP intervention types.

Table 3-1 Assessment of LTP policy themes

Policy theme	Strength of support	Driver of change	Narrative
Planning journeys, informing users, and supporting customers.	Minor positive (+)	Mode shift to active travel and public transport, reducing car-miles travelled	<p>Will help encourage existing users of sustainable travel options to continue their sustainable choices.</p> <p>In areas where viable public transport options are already available, measures could help encourage some car users to shift mode.</p> <p>This is only likely to have an impact where viable public transport options are already in place.</p> <p>This will have no impact in areas where public transport options are currently poor, and where car dependency is high.</p>
Ticketing and fares.	Minor positive (+)	Mode shift to active travel and public transport, reducing car-miles travelled	<p>Will help encourage existing users of sustainable travel options to continue their sustainable choices.</p> <p>In areas where viable public transport options are already available, measures could help encourage some car users to shift mode.</p> <p>This is only likely to have an impact where viable public transport options are already in place.</p> <p>This will have no impact in areas where public transport options are currently poor, and where car dependency is high.</p>
Safety, especially of women and girls, and other improvements in service quality.	Minor positive (+) to moderate positive (++)	Mode shift to active travel and public transport, reducing car-miles travelled	<p>Will help encourage existing users of sustainable travel options to continue their sustainable choices.</p> <p>Will help address barriers to using public transport amongst particular groups, particularly women and girls.</p> <p>In areas where viable public transport options already available, this could help encourage some car users to shift mode.</p> <p>New and improved bus services have the potential to enable mode shift from car journeys, particularly in areas where services are currently poor.</p>
Reach and resilience of infrastructure.	Large positive (+++) to moderate negative (--)	Mode shift to active travel and public transport, reducing car-miles travelled AND accelerating EV uptake.	<p>Evidence shows that the existing integrated transport network is good across most of Tyne & Wear, but poor in most parts of Northumberland and much of County Durham. Car dependency and distance travelled is high.</p> <p>This policy theme has the potential to deliver mode shift and reduce car dependency, in parts of the region where travel choices are currently poor. The scale of impact will depend on tackling impacts of longer journeys, including improved rail options.</p> <p>Potential risk of induced demand from increased highway capacity and new road schemes: this will require further review.</p> <p>Roll-out of charging infrastructure will help to address the needs of zero emissions vehicles.</p> <p>In the case of new infrastructure, it will be important to minimise whole-life carbon impacts, through consideration of scope, design options and materials choices.</p>
Connections between different transport types.	Moderate positive (++)	Mode shift to active travel and public transport, reducing car-miles travelled	<p>Well-coordinated timetables will make journeys faster and more attractive, retaining existing users and enabling mode shift from car.</p> <p>Park & Ride and mobility hubs will enable easier mode shift from car, potentially closer to points of origin, reducing distances travelled by car.</p> <p>Overall ease of travel by alternatives will help to encourage mode shift from car, including for journeys from more remote rural areas.</p>



Table 3-2 Assessment of LTP intervention types

Intervention type	Strength of support	Driver of change	Narrative
New infrastructure projects	Large positive (+++) to moderate negative (-)	Mode shift to active travel and public transport, reducing car miles travelled (+ve impact). Induced traffic demand (-ve impact)	New rail stations, new rail corridors (e.g. Leamside Line) and metro extensions will increase populations that can access high quality public transport, helping to deliver mode shift and reduce car dependency. Improvements to bus stations and bus priority will improve attractiveness of bus services (easing interchange and improving service reliability). Walking and cycling will help deliver mode shift for shorter journeys and/or support multi-modal journeys. Highway capacity enhancements and new roads have the potential to result in induced demand, which will act against our carbon reduction objective. It will be important to apply whole life carbon management principles (through PAS 2080) in the planning and design of new infrastructure, to minimise embodied carbon from construction, and to maximise mode shift potential.
Service improvements (ticketing, fares, vehicles, stations)	Moderate positive (++)	Mode shift to active travel and public transport, reducing car miles travelled	Easier ticketing, cheaper fares, improved vehicles and stations will all improve the attractiveness of public transport options, although these will be focused in areas where services already exist. This will help deliver mode shift and reduce car traffic in these areas. New and improved bus services have the potential to encourage mode shift from car trips, particularly in areas where travel choices are currently poor.
Regulation (land use, vehicle types, financial, planning policy)	Moderate positive (++)	Mode shift to active travel and public transport, reducing car miles travelled AND accelerating EV uptake	Effective land use policy will promote strategic growth close to existing settlements with good travel choices, helping to reduce car dependency in new development. Impact will however be modest vs the existing challenges. Potential support for zero emissions buses and trains (although these are a small component of transport emissions). Encourage shift to ZEV cars and freight through traffic management and demand management policies. Parking and other policies to balance-up the costs of driving vs more sustainable travel options.
Promotion and sharing information (marketing, data sharing, workplace engagement) and partnerships	Minor positive (+) to Moderate positive (++)	Mode shift to active travel and public transport, reducing car miles travelled AND accelerating EV uptake	Marketing and behaviour change programmes will support modal shift, through engaging with transport users, understanding the factors influencing people's travel choices, improving provision of information on travel options, and providing motivations for people to shift to more sustainable travel choices. Partnership working will help build common intelligence of key challenges and shared intent between transport providers, to create a strong foundation for change programmes.
Innovation (planning for the future, trialling ideas, working together)	Minor positive (+)	Mode shift to active travel and public transport, reducing car miles travelled AND accelerating EV uptake	Potential exploration of new ideas to improve the attractiveness of alternatives to owning a car and driving. However, activity is likely to be focused on R&D, planning, and small-scale trials, which will have limited impacts at scale. Interventions would be more likely to be mainstreamed through the other four intervention types.



Most intervention types are likely to have a positive contribution towards reducing transport emissions across the North East. Innovation measures are likely to have a more minor impact, because these are likely to be focused on Research and Development and relatively small scale trials, which are unlikely to directly impact on the quality of travel choices for large numbers of transport users.

Regulation measures have the potential to deliver a moderate positive impact, through encouraging effective spatial planning, reducing car dependency, and supporting zero emissions buses and trains. There is also potentially an important role for measures to more proactively reduce travel demand and motivate people to shift from cars to other modes, such as parking policies. However, there is a relatively limited focus on demand management measures in the Plan.

Service improvements could also deliver a moderate positive impact, by improving the attractiveness of bus, metro and train services, enabling mode shift and traffic reduction. However, these will be focused in areas where public transport services already exist. There are widespread areas of the North East with a lack of bus and train services (see Figures 2-6 and 2-7 in the previous chapter), so these improvements would be largely focused on areas where services already exist.

New bus services have the potential to improve the reach of the public transport network, with minimal new infrastructure requirements, which has the potential to significantly improve travel choices, and encourage mode shift from cars in areas where travel choices are currently poor. Improved rail services, for example more stopping services to intermediate local stations, also have the potential to significantly increase the reach of the public transport network and encourage mode shift from longer car journeys.

In affected areas and over longer time frames, the largest impacts are likely to be delivered by new infrastructure projects, particularly those projects that significantly improve travel choices where these are currently limited. Potentially transformational impacts could be delivered through new rail stations, rail corridors and metro extensions. Improvements to bus stations and bus stations could help to improve the attractiveness of travelling by bus (although note that bus services still need to be available to potential users). Improved walking and cycling infrastructure could help encourage more people to walk or cycle for shorter journeys, and/or for multi-modal journeys.

As highlighted in the table, it will be critical to apply robust whole life carbon management to the planning and design of new and enhanced infrastructure, using the PAS 2080 approach¹⁰. This should use the 'avoid/switch/improve' approach to design, through early challenge of the scope of potential solutions (integrated with robust options scoping and assessment), switch to lower-carbon materials, and application of carbon reduction methods during construction. Wherever possible, consideration should be given to repurposing and making better use of existing infrastructure, before planning new infrastructure.

The LTP identifies a number of major road improvements across the region, including schemes promoted by both local authorities and National Highways. There is evidence that new road infrastructure can result in new road journeys being made, through unlocking new economic activity, but also risking a shift from other more sustainable modes of travel. This phenomenon is termed 'induced demand' and poses a considerable risk of resulting in more motorised trips and increasing carbon emissions, which would work against carbon reduction objectives. For this reason, there is a potential moderate negative impact from these interventions.

¹⁰ [PAS 2080:2023 Carbon Management in Infrastructure | BSI](#)

4. Assessment of Delivery Plan

This chapter provides further assessment of the potential broad scale of the emissions reduction impacts of applicable interventions in the LTP Delivery Plan. It first provides an overview of the assessment methodology, before providing a narrative on the forecast impacts.

4.1 Approach to assessment

Further assessment was undertaken based on the 317 interventions listed in the LTP Delivery Programme. This process was as follows:

- **Step 1: initial sifting.**

Based on whether an intervention is likely to have a direct impact on transport emissions.

1: potential positive impact in reducing user emissions.

0: no direct impact on user emissions.

-1: potential negative impact, through increasing traffic through 'induced demand' effects. This is a health warning: schemes would need to be scrutinised further.

Only interventions scored with a +1 proceeded to further assessment. A total of 55 schemes were graded as 0, with no direct impact on user emissions, and 32 schemes were graded as -1, with a potential negative impact on emissions. 230 schemes were graded as having a positive impact, and were taken forward for more detailed assessment.

- **Step 2: for sifted interventions, identification of how these could impact on emissions.**

This addresses whether the 230 sifted interventions will impact on emissions through reducing total traffic demand, or through enabling acceleration of uptake of zero emissions vehicles.

- **Step 3: Initial qualitative assessment of potential scale of impact.**

The potential impact of each intervention was assessed as follows:

3: Large

2: Moderate

1: Minor

This judgement took account of the proposed scale of investment and typologies of interventions. This assisted in focusing Step 4 on those interventions that are likely to have the greatest impacts on emissions. A total of 90 interventions were scored 1 (minor), 122 were scored 2 (moderate), and 18 were scored 3 (large).

- **Step 4: Identification of priorities for assessment.**

Priorities for interventions to consider in more detail to inform the estimate of emissions impact were identified on the basis of ensuring a good sample of types of interventions and areas of coverage. More than 50 interventions were identified for assessment, with the outcomes from these assessments providing an understanding of the potential scale of impact for different types of interventions.



- **Step 5: Assessment.**

This was a structured process, which focused primarily on interventions that will support mode shift and reducing traffic demand. This drew upon the 'Carbon Assessment Playbook' (CAP)¹¹, a suite of tools that have been developed by the Sub-National Transport Bodies to support assessment of the impacts of a range of different policies on emissions. This provides benchmark estimates of the typical scale of impact of different policies in different place types, recognising that the impacts of many policies tend to be higher in cities than rural areas.

The CAP provides a basis for developing high-level indications of the scale of emissions impact that different types of interventions could deliver. It does not provide a detailed assessment of the impact of specific interventions in specific locations: this would require detailed information on the characteristics and extent of each intervention and the existing travel patterns and conditions in the area in which it was being implemented.

The CAP instead draws on a summary of available evidence on the typical scale of impact that could be expected from a range of intervention types, focussing on their impact on identified 'in-scope trips'. The estimated impacts reflect variations in impact by place type (reflecting different characteristics) but do not reflect varying conditions where schemes are implemented such as different approaches to parking management or characteristics of the existing public transport system. The estimated impacts should, therefore, be considered as illustrative of typical levels of potential emissions reduction rather than location-specific estimates.

The assessment process focused on interventions that will reduce traffic demand, because the CAP provides more evidence on these impacts. For each of these interventions, this process used the following steps:

- Identification of place types impacted by the intervention;
- For the place type(s), identification of benchmark impacts from the Playbook;
- Application of an intensity factor, to adjust the central CAP impact estimates to reflect the nature of the intervention, and balance of types of trips that will be impacted;
- Assessment of a potential 'in-scope' factor, to estimate the proportion of total traffic in the local authority area that could be impacted by the intervention;
 - The estimated scale of impact depends heavily on this assumption of the number of vehicle kilometres considered to be in scope to be affected by each intervention. Identification of this input would ideally involve detailed analysis of local travel patterns. This was not possible (nor proportionate) for this assessment, and simple, high-level assumptions were therefore made on the basis of variables such as assumed catchment of a station and the population within it as a proportion of population in the local authority. These input assumptions involve considerable uncertainty and, along with the factors outlined above, mean that the CAP should be used to provide an indicative range of potential impact rather than detailed estimates.
- Application to the baseline traffic demand in the local authority area, to estimate the overall reduction in traffic demand (expressed as vehicle-kilometres travelled in the area).

The outputs from the example interventions assessed were then used to estimate the potential scale of reductions in vehicle-kilometres travelled for other similar interventions that had not been directly

¹¹ [Carbon Assessment Playbook](#)

assessed. The impacts of those interventions that had been directly assessed were reviewed, and indicative values were assigned to the remaining interventions based on the proposed scale of investment.

There is less evidence to assess the potential impacts of interventions to enable acceleration of EV uptake. The calculation method in the CAP assumes that campaigns to encourage people to switch to EVs could enable acceleration by up to one year (for those groups of people targeted by the campaigns), and EV charging infrastructure could enable acceleration by up to two years (for those areas that benefit from improved charging infrastructure) relative to the baseline scenario.

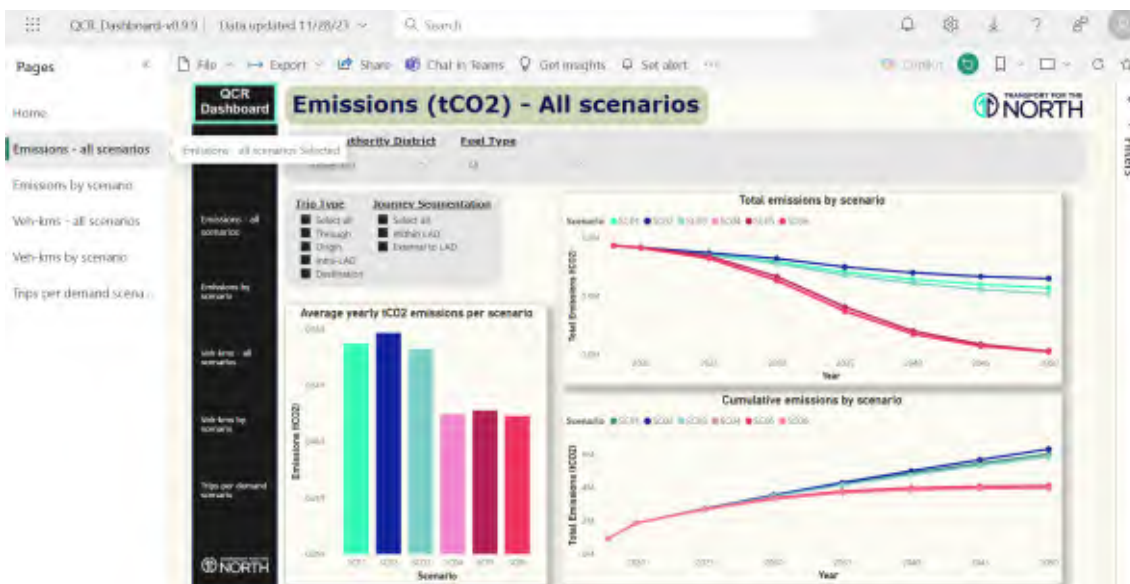
The remainder of this chapter focuses on the inputs used to inform the estimates of scale of emissions impact made using the CAP.

4.2 Baseline traffic and emissions

In order to estimate the quantified carbon impacts of the LTP, it is important to obtain estimates of baseline traffic and emissions in the North East. Transport for the North (TfN) has developed a ‘QCR Dashboard’, which provides this data, for a base year and for five-year intervals to 2050. It provides forecasts for traffic demand and emissions for different scenarios, reflecting future uncertainties about economic growth and rates of uptake of EVs.

Figure 4-1 illustrates the dashboard, showing forecast emissions scenarios for Sunderland. These different scenarios account for uncertainties about future economic growth and uptake of EVs. Scenarios SC01-SC03 reflect a ‘business as usual’ case, and SC04-SC06 reflect an ‘accelerated EV case’. Scenarios SC01 and SC04 reflect central estimates of economic growth, whilst SC02 and SC05 reflect high growth, and SC03 and SC06 reflect low growth.

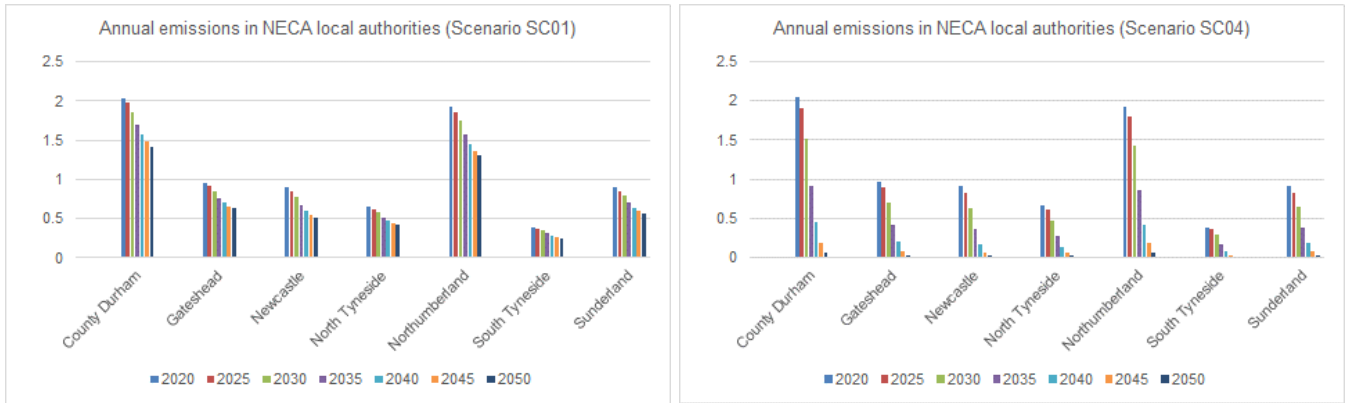
Figure 4-1 QCR Dashboard: emissions scenarios in Sunderland



The scenarios assuming core levels of traffic growth are scenarios **SC01** (Business as Usual, core growth) and **SC04** (Accelerated ZEV uptake, core growth – which assumes a much more ambitious ZEV uptake than under the Business as Usual). Figure 4-1 shows that emissions would reduce significantly faster under the accelerated EV scenario than under the business as usual.

Figure 4-2 shows the forecast reductions in emissions for all the authorities in the North East.

Figure 4-2 Forecast emissions in the North East (MtCO₂ per annum)

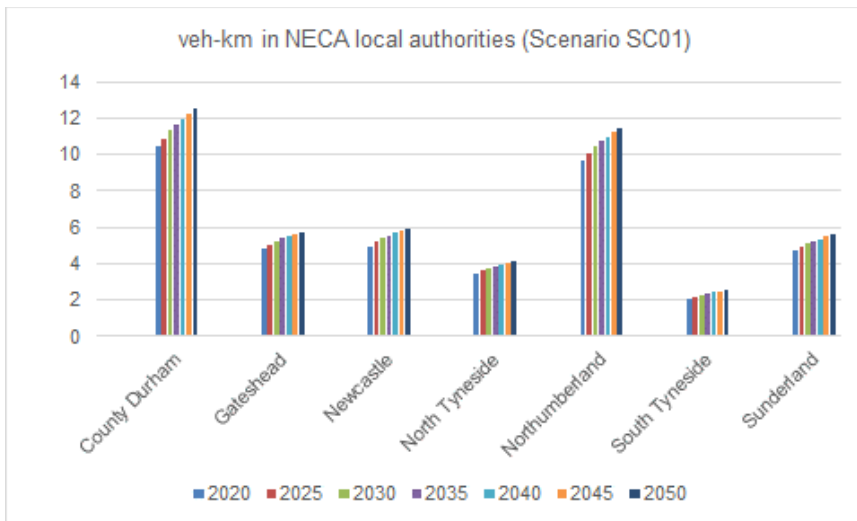


Source: TfN QCR Dashboard, totals of all trip types included. These are the sum of forecasts for different approaches to forecasting emissions and the graphs are intended to illustrate **scale of change** in emissions, not absolute figures.

These forecasts of emissions are based on future growth in traffic demand and uptake of EVs in the vehicle fleet. Figure 4-2 shows that there will be a much faster reduction in emissions under Scenario SC04 (accelerated EV uptake) than SC01 (business as usual) for local authorities in the North East.

Figure 4-3 shows the forecast growth in traffic demand across the region for scenarios SC01 and SC04. This includes all trips in the region: trips within local authorities and through traffic, and across all road vehicle types (cars, light goods vehicles and heavy goods vehicles), but excludes buses and coaches.

Figure 4-3 Forecast growth in traffic demand in the North East (billion vehicle-km per annum)



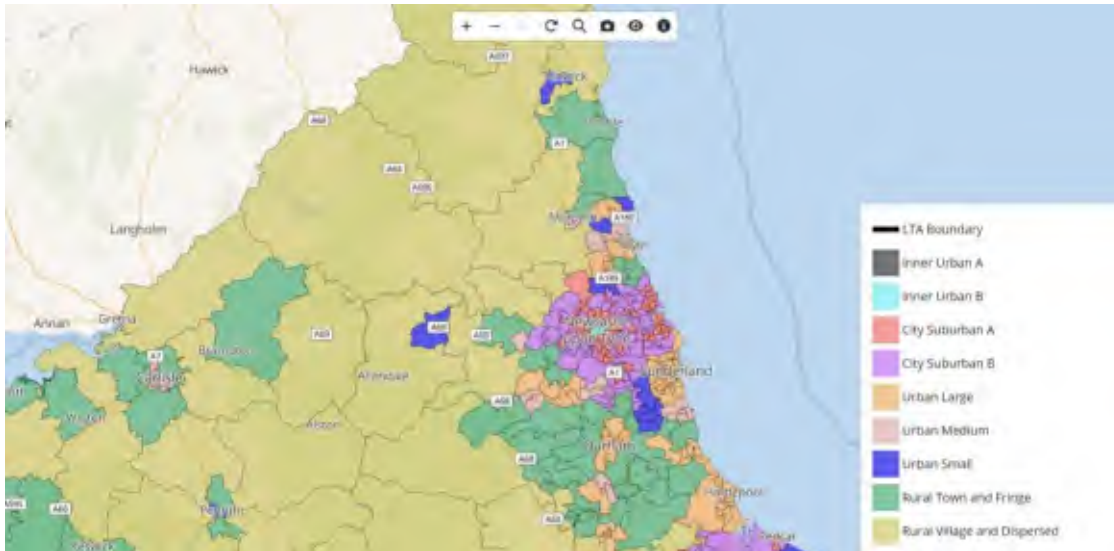
Source: TfN QCR Dashboard, totals of all trip types included. These are the sum of forecasts for different approaches to calculating distances travelled and the graphs are intended to illustrate **scale of change** in distance travelled, not absolute figures.

Across the region, an overall 20% growth in traffic is forecast between 2020 and 2050, which will exacerbate the challenge in reducing transport user carbon. The challenge will be even greater under a high-growth scenario. For example, in Northumberland, traffic is forecast to grow by 35% in the high growth scenario between 2020 and 2050 (compared to 18% in scenario SC01).

4.3 Place types in the North East

The CAP categorises places into different typologies, reflecting urban / rural characteristics, accessibility and travel behaviours. Figure 4-4 presents place types in the North East, which shows the distinct differences between urban and rural areas.

Figure 4-4 Place types in the North East



Source: Carbon Assessment Playbook.

These place types are then used in the CAP to estimate potential impacts of different types of transport interventions on traffic demand and, therefore, emissions.

4.4 Impacts of different interventions

The CAP provides estimated benchmark impacts of different interventions on traffic demand for different place types, and for different journey purposes. Figure 4-5 shows the forecast impacts on employers business and commuting journeys.

Figure 4-5 Impacts on traffic demand (veh-km) for employers business and commuting journeys

Carbon Assessment Playbook: Impacts of Interventions on in-scope veh-km				All	Weekday	Weekday	Weekday	Weekday	Weekday	Weekday	Weekday
				Employers Business	Commuter	Commuter	Commuter	Commuter	Commuter	Commuter	Commuter
ID	Theme	Intervention	Avoid / Shift / Improve	All	Inner Urban	Suburban A	Suburban B	Urban Large	Urban M+S	Rural 1 (Town & Fringe)	Rural 2 (Village & Dispersed)
1	Active Travel	Improvements to cycling/scooting network and provision (including cycle parking & storage)	Shift	-0.1%	-1.2%	-0.6%	-0.4%	-0.5%	-0.1%	-0.3%	-0.3%
2	Active Travel	Bike/bike-scooter hire schemes	Shift	0.0%	-0.6%	-0.3%	-0.2%	-0.2%	-0.1%	-0.1%	-0.1%
3	Active Travel	Improved pedestrian facilities and routes	Shift	0.0%	-0.5%	-0.3%	-0.2%	-0.3%	-0.2%	-0.1%	-0.1%
4	Behavioural Change	Area wide travel planning/mobility management	Avoid/ Shift	-5.0%	-12.6%	-6.4%	-5.6%	-6.1%	-4.1%	-3.9%	-3.9%
5	Behavioural Change	Support for/promotion of EV car clubs	Improve	-1.6%	-4.4%	-2.1%	-1.8%	-2.0%	-1.3%	-1.3%	-1.3%
6	Behavioural Change	Incentive-based apps to reward sustainable travel and off-peak travel behaviour (e.g. Better Points)	Shift/ Improve	-0.8%	-4.7%	-2.3%	-1.9%	-2.2%	-1.4%	-1.3%	-1.3%
7	Behavioural Change	Campaigns to support switch to cleaner, smaller, lower emission fleets for next vehicle purchases (including private cars & taxis)	Improve	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
8	Behavioural Change	Business Travel Plans	Avoid/ Shift	-12.1%	-26.5%	-15.6%	-15.5%	-14.4%	-9.6%	-9.3%	-9.3%
9	Behavioural Change	Support for/promotion of car sharing	Avoid	-8.9%	-20.6%	-10.7%	-9.4%	-10.0%	-7.0%	-6.5%	-6.5%
10	Behavioural Change	School Travel Plans & measures such as Safer Routes to School	Shift	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Integrated Planning Policy	20-Minute Neighbourhoods	Avoid/ Shift	-8.9%	-20.6%	-10.7%	-9.4%	-10.0%	-7.0%	-6.5%	-6.5%
12	Integrated Planning Policy	Introduce mixed-use high-density developments located nearer to sustainable transport routes	Avoid/ Shift	-3.3%	-8.1%	-3.9%	-3.4%	-3.8%	-2.6%	-2.4%	-2.4%
13	Low Emission Vehicles	Encouraging a switch to low emission public transport fleets	Improve	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
14	Low Emission Vehicles	Provide and coordinate EV charging infrastructure (including booking systems)	Improve	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Low Emission Vehicles	Support EV uptake in corporate fleets	Improve	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
16	Parking, Charging & Traffic Management	Road user charging/tolls	Avoid/ Shift/ Improve	-4.8%	-21.9%	-11.6%	-10.7%	-11.8%	-8.2%	-7.9%	-7.9%
17	Parking, Charging & Traffic Management	Off-street parking measures: prices, relocation to less central location and reduction in spaces	Shift	-3.3%	-8.9%	-4.3%	-3.7%	-4.2%	-2.7%	-2.6%	-2.6%
18	Parking, Charging & Traffic Management	On-street parking measures: prices, controls, reduction in spaces	Shift	-7.0%	-17.8%	-9.1%	-7.9%	-8.6%	-5.8%	-5.5%	-5.5%
19	Parking, Charging & Traffic Management	Workplace Parking Levy	Shift	-5.1%	-13.3%	-6.7%	-5.8%	-6.4%	-4.2%	-4.0%	-4.0%
20	Parking, Charging & Traffic Management	Liveable Neighbourhoods/LTNs and other reallocation of road space from private vehicle use to public transport, active travel and other uses	Shift	-8.9%	-17.6%	-9.1%	-7.7%	-8.4%	-5.6%	-5.3%	-5.3%
21	Parking, Charging & Traffic Management	Local cordon-based charges and restrictions (e.g. Clean Air Zones)	Avoid/ Shift/ Improve	-5.1%	-13.3%	-6.7%	-5.8%	-6.4%	-4.2%	-4.0%	-4.0%
22	Parking, Charging & Traffic Management	Consolidation centres/ distribution hubs including Drop-off collection points/ Pick up consolidation for home deliveries	Avoid	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
23	Public Transport	Bus priority measures	Shift/ Improve	-4.6%	-11.4%	-5.6%	-4.6%	-4.8%	-3.3%	-3.0%	-3.0%
24	Public Transport	Improved bus/LRT frequency	Shift	-3.3%	-8.1%	-3.9%	-3.4%	-3.8%	-2.6%	-2.4%	-2.4%
25	Public Transport	Mobility hubs & improved modal integration	Shift	-3.3%	-8.1%	-3.9%	-3.4%	-3.8%	-2.6%	-2.4%	-2.4%
26	Public Transport	Reduced public transport fares	Shift	-3.3%	-5.1%	-2.5%	-2.2%	-2.5%	-1.8%	-1.6%	-1.6%
27	Public Transport	Expansion and integration of demand responsive transport	Shift	0.0%	-8.1%	-3.9%	-3.4%	-3.8%	-2.6%	-2.4%	-2.4%
28	Public Transport	Extended PT network - bus, BRT, tram	Shift	-8.9%	-20.6%	-10.7%	-9.4%	-10.0%	-7.0%	-6.5%	-6.5%
29	Public Transport	New rail stations/line reopening	Shift	-8.9%	-20.6%	-10.7%	-9.4%	-10.0%	-7.0%	-6.5%	-6.5%
30	Technology	Integrated Ticketing, Passenger Information and Mobility as a Service	Shift	-1.6%	-4.0%	-1.9%	-1.7%	-1.8%	-1.2%	-1.2%	-1.2%

There will be different impacts for other journey purposes, for example travel to school or shopping and leisure journeys. For each intervention in the Delivery Plan, an appropriate benchmark has been identified based on the place type and journey purposes targeted.

Figure 4-5 shows that:

- The impacts of measures on traffic demand are higher in urban areas, due to greater ease of access to jobs and services and a wider range of travel choices than in rural areas;
- Active travel interventions (walking and cycling infrastructure improvements and bike hire schemes) are forecast to have relatively modest impacts on in-scope trips because these focus on shorter journeys;
- Business travel plans and area-wide mobility management have potential for relatively high impacts on in-scope trips, because these target a wide range of journeys, including longer journeys for business travel and commuting. School travel plans conversely have no impact on commuting, because these focus on journeys to schools (with limited overall impact, due to short journeys);



- Public transport interventions have the potential to achieve relatively high impacts on in-scope journeys, because they can open-up new travel options, particularly by extending local public transport networks and new railway lines. Bus priority, improved bus frequencies, improved interchange and more competitive pricing can also enhance travel choices and support modal shift for a range of journeys;
- Demand management measures, including parking policies and roadspace reallocation, have the potential to achieve significant traffic reductions through motivating transport users to shift mode where viable alternatives are available; and
- Planning policies, including promoting higher-density development around transport hubs, and measures to support local centres, also have high potential to achieve traffic reductions for in-scope trips, through enabling people to access jobs, shops and services with reduced need to travel by car (these types of intervention are categorised under the 'Avoid' component of the Avoid-Shift-Improve framework described in Section 2.3).

At present, there is limited evidence on the impacts of measures to support the uptake of low emissions vehicles. The CAP assumes that these measures would have no impact on traffic demand, but would instead help to reduce emissions by supporting the uptake of zero emissions vehicles.

4.5 Results of assessment

The assessment has indicated that interventions in the LTP Delivery Programme with a positive impact on emissions could have the potential to achieve progressively increasing traffic reductions over time. Measures to support uptake of zero emissions vehicles would also have a positive (but relatively modest) impact on carbon emissions.

The overall impacts would be relatively modest before 2030, but would increase during the 2030s with the delivery of larger interventions. This will include the delivery of the Washington Metro Loop and Leamside Line during the early 2030s. Beyond 2035, other major rail schemes, including (for example) Northern Powerhouse Rail, would further accelerate the impacts.

The calculations do not take account of the potential impact of the 32 highway schemes identified in Step 1 as having the potential to increase emissions.

It must be noted that the assessments are high-level and indicative, and are dependent on a number of caveats:

- Simplified assumptions have been made about when schemes would be delivered (slippages in delivery programmes will also clearly impact on when the outcomes can be achieved);
- Estimated impacts are based on the CAP benchmark figures taken from Figure 4-5 above, which reflect typical impacts of interventions based on available international evidence, not the location-specific impacts and conditions applying to projects in the Delivery Plan;
- Intensity factors have been applied to the CAP estimated impacts, reflecting an initial assessment of the types of trips that might be affected (e.g. commuting, education trips, leisure trips);
- In-scope factors are highly approximate, as outlined above, drawing on estimates of the potential sizes of populations that would be influenced, but undertaken at a very high level; and
- The CAP impact estimates were used to estimate the indicative scale of impact for a sample of 50 interventions, covering different types of intervention and different parts of the region. These were then used to inform estimates for the other 180 interventions in the programme.

Given the uncertainties outlined above, it is considered appropriate to assume the following ranges of traffic reductions resulting from the programme of interventions:

- 2-5% reduction before 2030;
- 4-7% reduction between 2030 and 2035; and
- 7-10% reduction after 2035.

The impacts during the short-term period would be achieved through the programme of active travel measures, regional travel behaviour change campaign, workplace travel planning programme and other behaviour change measures, and bus improvement schemes. Following 2030, the delivery of larger-scale rail-based investments (including Washington Metro Loop and Leamside Line during the early 2030s, and Northern Powerhouse Rail from 2040) will increase the scale of impacts.

These ranges of reduction in car use imply high levels of mode shift and it is likely the scale of behaviour change required to achieve the upper end would require infrastructure and service improvements to be supported by demand management measures that change the balance between the costs and convenience of the use of car and other modes.

The largest impacts (looking to 2035 and beyond) are forecast to be delivered by the following interventions:

- Metro and local rail enhancements (with a total budget of £2.5 billion, this has the potential to be transformational, although the impacts will be heavily dependent on the nature of these enhancements and scale of in-scope population);
- Northern Powerhouse Rail (the costs of this programme are still to be determined, and the impacts will be dependent on the configuration of services and stations that are served);
- Regional travel behaviour change campaign (although the scale of funding is not yet confirmed, so the impacts will depend on the scale of funding);
- Washington Metro Loop and Leamside line reopening (this project includes allowance for reopening 21 miles of railway, with 3 new metro stations and other new stations served by heavy rail);
- Supporting, maximising and enhancing existing bus routes and key services (effective targeted improvements could improve the attractiveness of bus services for significant proportions of the population, particularly in areas where services are currently poor);
- Investment in improvement to bus stops and bus stations (focused investment will improve the attractiveness of the bus offer for large proportions of the population, particularly where the offer is currently poor); and
- Customer experience strategy (comprising a range of measures to support customers at each stage of the journey, which is assumed to include improved information and simplified ticketing).

Overall, active travel interventions are forecast to have modest impacts on carbon emissions, because these address shorter journeys, although the proposed scale of investment has the potential to target a large proportion of the region's population. Bus priority interventions, and improvements to individual bus stations, are also likely to have modest impacts, in their own right, but are likely to play a key role in improving the reliability and attractiveness of bus journeys. The assessments indicate that investment in improved bus services and infrastructure could, collectively, contribute an important role in enabling mode shift and reductions in car trips across the region, particularly if combined with behaviour change programmes and demand management measures to motivate mode shift.

Over the longer term (2035 and beyond), rail interventions are estimated to have the largest impact on emissions, because these have the potential to connect large numbers of people to new high-quality public transport services and enable mode shift from car. However, these are heavily dependent on the delivery of new large-scale infrastructure, and delays to the delivery of these projects will delay the projected outcomes on traffic (and carbon) reduction.

The infrastructure schemes will impact on emissions over the longer term as they will take time to deliver. It will also be important that they are carefully designed taking a whole life cycle carbon perspective

In terms of closing the emissions gap, Figure 2-1 (in Chapter 2) showed that measures to reduce traffic levels are particularly important in the shorter term to the early 2030s, as uptake of zero emissions vehicles in the fleet picks up. The assessments indicate that bus improvements, information and ticketing programmes, and revenue-based travel behaviour change programmes will have the largest impacts on emissions over the shorter term (before 2030). These are less dependent on major infrastructure, they are scalable, and have the potential to deliver rapid benefits to users of the transport network.

In the case of interventions to support acceleration of EV uptake, it is more difficult to quantify the impacts on emissions, due to a lack of evaluation evidence. The Playbook assumes that campaigns to encourage people to shift to EVs could help accelerate uptake by a year, and large-scale rollout of EV infrastructure could accelerate uptake by up to two years.

Table 4-1 (overleaf) draws together the findings from the assessment process to summarise the potential scale of impacts of the different types of scheme in the LTP Delivery Programme.

Table 4-1 Assessment of LTP Delivery Programme themes

Theme	Impact	Commentary
Active travel	Moderate	Scale of investment means that a large proportion of the population could be served by improved walking and cycling infrastructure. However, this would focus on shorter trips, with a moderate impact on overall traffic demand.
Behaviour change and revenue activities	High	Largest impacts are likely to be achieved through improved public transport customer experience, subsidised fares, regional behaviour change campaigns, and workplace travel planning. However, the scale of impact will depend on the scale of investment, which is still to be confirmed, and the other measures introduced alongside these measures to motivate behaviour change.
Bus and First Mile	High	The combination of investment in improved bus services, improved bus stop infrastructure and bus priority has the potential to significantly enhance the attractiveness of buses across the region. Overall impacts will depend on effective targeting of investment and combination with other measures to motivate mode shift, including areas that are currently more car dependent.
Decarbonisation	Moderate	Measures in the Delivery Plan are primarily focused on EV charging infrastructure and some targeted decarbonisation of the bus fleet in certain areas. It will be critical to target EV charging infrastructure to achieve the right balance in tackling 'range anxiety' and supporting high numbers of users. Further measures (including behaviour change campaigns) will be required to encourage accelerated uptake of EVs amongst different parts of the population.
Ferry	Low	Impacts of ferry emissions have not been assessed in detail, but are likely to be a modest proportion of total transport emissions. Further study will be required.
Rail	Very high	The proposed scale of investment offers the potential to transform public transport connectivity in many parts of the region, including areas that are currently highly car-dependent. The effectiveness of these measures will depend on the ability to encourage car users to use these new services. However, these impacts will be later in the programme, and will be dependent on the delivery of major infrastructure investment across the rail network, which will need careful development to manage and optimise whole life carbon impacts.
Information and ticketing	Moderate	This includes a wide range of interventions to improve the attractiveness of public transport services, including improved timetabling, enhanced information and more seamless payment systems. This will support mode shift in areas with good existing (and new enhanced) public transport.
Maintenance	Low	These interventions are primarily focused on highway maintenance, with very limited impact on the quality of travel choices and hence limited impact on modal shift.
Metro	Moderate	These interventions are mainly focused on renewals and improvements to existing metro assets, which will have a modest impact on the attractiveness of metro. New metro stations and potential extensions will increase the reach of metro, attract new users, and help reduce car trips in areas served, although this will be later in the programme.
Park & Ride	Low	There are a limited number of Park & Ride projects in the programme, and these are likely to have a relatively limited impact on car traffic in the region.
Road	Uncertain	Note the comments in the report about the potential negative consequences of road schemes, with potential induced traffic demand. Multi-modal corridor improvements on the road network have the potential to achieve some limited mode shift, although this will be dependent on achieving a significant rebalancing in the attractiveness of alternative modes.



5. Conclusions and Recommendations

5.1 Introduction

This report has described the initial carbon assessment of the North East Local Transport Plan (LTP), and forms a supporting document to the Integrated Sustainability Appraisal (ISA), which has been prepared by AtkinsRéalis Limited on behalf of North East Combined Authority (North East CA).

The assessment focuses exclusively on impacts on transport user emissions, i.e. tailpipe emissions from vehicles. It does not include assessment of the ‘embodied’ carbon of the capital infrastructure programme, nor does it include maintenance activities or operational emissions from infrastructure estates (e.g. energy use in bus stations). It will be important to take a whole lifecycle approach to considering carbon impacts as the programme progresses, particularly for any infrastructure schemes.

The report provides an overview of the challenges associated with transport user emissions across the region. It highlights that emissions will not reduce at the pace required to meet national decarbonisation commitments if the region relies solely on future uptake of zero emissions vehicles: it will also be necessary to reduce vehicle traffic.

The new LTP offers the opportunity to deliver a step-change in approach. This report has undertaken assessment of the LTP’s policy themes and intervention types, and has demonstrated that there is potential to achieve benefits through both encouraging a shift from private car use and supporting users of zero emissions vehicles. However, there is scope to enhance the impacts of the programme, and the following sections identify recommendations for further consideration by the Combined Authority.

5.2 Addressing the QCR Guidance

The draft Quantified Carbon Reduction (QCR) Guidance, described in Chapter 1, set out the recommended approach to addressing the transport carbon challenge through the LTP process. The QCR guidance has not yet been formally published, so it has not been possible to follow this process. Chapter 2 of this report has provided a high-level overview of existing and forecast emissions, but further work is recommended to identify a potential transport decarbonisation pathway for the region, and the overall gap that will need to be bridged.

This should also explore the specific challenges in different areas – County Durham, Northumberland and Tyne & Wear, drawing on the initial insights from this report. It should also review the balance of interventions needed to bridge the gap, including options to enable higher levels of mode shift and measures to help accelerate the adoption of zero emissions vehicles.

The assessments described in this report are indicative and high-level. More detailed assessments, for a selected number of more significant projects, are recommended to provide greater certainty of potential impacts. These more detailed assessments can then be used to inform a more robust trajectory of potential impacts on carbon over the course of the LTP Delivery Programme.

5.3 Highway schemes

This report has highlighted the potential challenges associated with 32 road-based schemes in the Delivery Programme, from which there is a significant potential risk of induced traffic. It is strongly recommended that these schemes are reviewed in more detail, to address this potential risk.

In the case of schemes being promoted by the local authorities in the region, this should include identification of how these schemes could be planned as multi-modal solutions to meet the needs of the places served. This should include exploration of how these can help reduce traffic in local communities and enable reallocation of roadspace for walking, cycling and improved bus services. New infrastructure should be designed to minimise the risk of encouraging more car trips and to minimise whole life carbon impacts through careful scoping, design and material choices.

The Delivery Plan also includes a number of major enhancements to the Strategic Road Network, which is managed by National Highways. Careful consideration should be given to how these schemes would be consistent with a future in which there is reduced dependence on travel by car across the region.

5.4 Maximising impacts of the programme

Chapter 4 of this report discusses the potential roles of each element of the Delivery Plan. It highlights that, over the shorter term, bus improvement, information and ticketing programmes, and revenue-based travel behaviour change programmes are likely to have the largest impacts on emissions. These are less dependent on major infrastructure (and can therefore be rolled-out faster), they are scalable (with the ability to target larger populations), and have the potential to deliver rapid benefits.

It has previously been shown that measures to reduce traffic demand will be most important during the 2020s and early 2030s. The LTP contains measures that will impact on travel demand over this period, but it will also be important to consider complementary measures to further motivate travel behaviour change, including (for example) parking and other demand management policies.

There is clear evidence that complementary measures are needed to encourage people to make more sustainable travel choices. The provision of improved active travel and public transport facilities is often not sufficient to encourage the scale of mode shift needed to address the decarbonisation challenge. The CAP showed that measures to manage travel demand can be highly effective in motivating people to modify their travel choices. At present, the LTP contains very little information on these measures, and it is strongly recommended that potential measures are identified and assessed.

Behaviour change programmes are identified for delivery over the shorter term, however the funding for these programmes has not yet been determined. These includes the workplace sustainable travel programme, regional travel behaviour change programme, supported travel, and travel subsidies for younger people and jobseekers. The evidence indicates that these have the potential to deliver substantial mode shift, if delivered at scale, and if supported by effective travel alternatives. It is strongly recommended that sufficient funding is allocated to these types of intervention, alongside measures to improve active travel and bus accessibility, to maximise short-term carbon reduction benefits.

Over the longer term, rail interventions are estimated to have the largest impact on emissions, but these will be dependent on the delivery of transformational infrastructure programmes. Delays in the delivery of these programmes would therefore delay further large-scale carbon reduction. More detailed assessments should be undertaken of the impacts of these larger-scale rail interventions, to better understand potential mode shift and reductions in car trips across the region, and their overall contribution to transport decarbonisation across the region.

This should reflect the fact that zero emissions vehicles will account for a higher proportion of the car fleet by the late 2030s, and the impacts on emissions of mode shift will be less significant by this time. It will be critical to ensure that there is effective whole-life carbon management of these rail schemes, to ensure that the 'payback' resulting from mode shift adequately offsets the embodied emissions from construction of this transformational rail infrastructure. If it is determined that these rail-based schemes are needed to support the region's decarbonisation ambitions, a plan should be developed to minimise risks to delivery.

5.5 Decarbonising freight

Road freight is a major source of carbon emissions. The TDP highlighted that, of UK domestic transport emissions in 2019, HGVs generated 15.9% and light duty vehicles (vans) generated 15.7%. Van traffic is forecast to grow particularly fast in the future, whilst there will be particular challenges in developing viable decarbonisation solutions at speed for HGVs.

At present, the LTP Delivery Plan provides limited information on potential options to support decarbonisation of road freight. It is recognised that this will require national action, to facilitate the uptake of hydrogen and/or battery electric powertrains for HGVs, but it is likely that regional action will be needed to provide fuelling/charging infrastructure. The North East CA covers a very large geographic area, extending more than 100 miles from Newton Aycliffe to the Scottish border. It will therefore be critical to plan the infrastructure needed for decarbonisation of road freight across the region.

There could also be scope for options such as freight consolidation centres, to reduce the need for diesel-powered HGVs to enter city centres, with the remaining 'last leg' of the journeys replaced by zero emissions delivery vehicles. Whilst this could have significant local environmental benefits, the lengths of these trips would be relatively short, and the overall carbon benefits are likely to be relatively modest.

5.6 Whole life carbon management

The LTP Delivery Programme has a strong focus on new infrastructure, including capital investment of more than £600 million in active travel, £1.1 billion in metro and more than £4.5 billion in heavy rail. This report has not considered the 'embodied' carbon associated with the construction of new infrastructure, but this is a critical issue that will need to be addressed as the programme is developed.

Moving forward, it will be important to adopt the PAS 2080 approach¹² to whole life carbon management, which should address the embodied carbon in construction, maintenance and operation of assets, alongside the potential reductions in user emissions. This should use the 'avoid/switch/improve' approach to design, through early challenge of the scope of potential solutions (integrated with robust options scoping and assessment), switch to lower-carbon materials, and application of carbon reduction methods during the construction process. Wherever possible, consideration should be given to repurposing and making better use of existing infrastructure, before planning new infrastructure.

5.7 Summary

Overall, this report has demonstrated that the LTP has the potential to support reductions in transport user carbon emissions across the North East region. This will be achieved through a diverse portfolio of interventions in the Delivery Plan, which will achieve both short-term benefits through an early focus on active travel improvements (with relatively modest impacts), bus improvements, and travel behaviour change campaigns. Over the longer-term, there is a strong emphasis on transformational projects that have the potential to deliver significant carbon reduction benefits, although further work is required to articulate these benefits.

Further work will be required to assess the highway schemes included in the Delivery Plan, and it is also recommended that further work is undertaken to explore how the carbon reduction benefits of the

¹² [PAS 2080:2023 Carbon Management in Infrastructure | BSI](#)

programme could be optimised. In addition, further work is recommended to explore how the Plan could more proactively support decarbonisation of freight traffic.

Finally, it will be important to apply whole life carbon management principles as the LTP programme is developed further, including assessment of the embodied carbon associated with the region's ambitious infrastructure delivery programme.

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AtkinsRéalis



AtkinsRealis
AtkinsRéalis UK Limited
The Vantage
32-36 Great Victoria Street
Belfast
BT2 7BA

paddy.mcentee@atkinsrealis.com

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Appendix H. Habitats Regulations Assessment

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**Habitats Regulations
Assessment Stage 1
Screening and Stage 2
Appropriate
Assessment**

North East Combined Authority

October 2024

**NORTH
EAST LOCAL
TRANSPORT
PLAN**

Notice

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This document has 149 pages including the cover.

Document History

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Client	North East Combined Authority
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INTRODUCTION

1. Introduction

AtkinsRéalis has been appointed by the North East Combined Authority (North East CA) to prepare a Habitats Regulations Assessment (HRA) of the North East Local Transport Plan (North East LTP). North East CA are developing a new statutory Local Transport Plan to reflect the region's transport priorities and setting out the approach to achieve a green, integrated transport network that works for all with a timeline and plan for delivery up to 2040.

1.1 Terms of Reference

HRA is required by Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) (the 'Habitats Regulations') for all plans and projects which may have 'likely significant effects' on a European Site or European offshore marine site (either alone or in combination with other plans and projects) and are not directly connected with or necessary to the management of the European Site.

European sites include Special Areas of Conservation (SAC) and Special Protection Areas (SPA). HRA is also required, as a matter of UK Government policy¹ for potential SPAs (pSPA), possible SACs (pSAC), wetlands of international importance (Ramsar sites), proposed Ramsar sites (pRamsar) and sites identified, or required, as compensatory measures for adverse effects on listed and proposed European sites and Ramsar sites for the purposes of considering plans and projects, which may affect them. Hereafter, all of the above designated nature conservation sites are referred to as 'European Sites'.

The stages of HRA process are:

- **Stage 1 - Screening:** To test whether a plan or project either alone or in combination with other plans or projects is likely to have a significant effect² on a European Site;
- **Stage 2 - Appropriate Assessment:** To determine whether, in view of a European Site's conservation objectives, the plan or project (either alone or in combination with other plans or projects) would have an adverse effect on the integrity of the site with respect to the site structure, function and conservation objectives. If adverse impacts are anticipated, potential mitigation measures to alleviate impacts should be proposed and assessed;
- **Stage 3³ – Derogations (allow exceptions):** Where a project or plan is assessed as having an adverse residual impact (or risk of this) on the integrity of a European Site, it may qualify for a derogation. Three legal tests must be applied in the following order:
 1. There are no feasible alternative solutions that would be less damaging or avoid damage to the site.
 2. The proposal needs to be carried out for imperative reasons of overriding public interest.
 3. The necessary compensatory measures can be secured.

¹ Ministry of Housing Communities and Local Government (2023) National Planning Policy Framework. December 2023.

² Likely significant effect is any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the site was designated. If any plan or project causes the cited interest features of a site to fall into unfavourable condition, they can be considered to have a likely significant effect on the site.

³ Derogations stages were previously described as two separate stages, but now commonly grouped together.

1.2 Habitats Regulations Assessment Stage 1 Screening

Having determined that the project or plan is not directly connected⁴, or necessary for the management of a European Site, it is necessary to undertake screening to determine whether the proposals are likely to have a Likely Significant Effect (LSE) on any European Sites.

It is important to note that the burden of evidence is to show, on the basis of objective information, that the project or plan will have no LSE on a European Site. If there may be an LSE, or there is uncertainty and an LSE cannot be ruled out, this would trigger the need for an Appropriate Assessment (AA). As a result of European case law, irrespective of the normal English meaning of 'likely', in this statutory context a 'LSE' is a 'possible significant effect', one whose occurrence cannot be ruled out on the basis of objective information⁵.

Recent European case law⁶ ruled that it was not acceptable at screening to take account of measures intended to avoid or reduce effects upon European Sites, therefore, where such measures are required, the project or plan must be subject to a Stage 2 HRA.

This report comprises the Stage 1 Screening and Stage 2 Appropriate Assessment of the Scheme.

⁴ The project or plan is not related to the management of the European site(s)

⁵ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook, October 2024 edition UK: DTA Publications Limited

⁶ Court of Justice of the European Union (CJEU) judgement referred to as People Over Wind (Peter Sweetman v Coillte Teoranta, Case C-323/17)

BACKGROUND TO NORTH EAST LOCAL TRANSPORT PLAN

2. The Plan

2.1 The background and need for the Plan

The North East CA has a successful legacy and track record of delivery established through effective partnership working between the region's Local Authorities. Prior to the formation of the North East CA, the North East Joint Transport Committee (JTC) co-ordinated the North East's transport policies, funding and delivery on behalf of the two combined authorities that preceded the North East Combined Authority (North East CA). The North East Transport plan (2021-2035), developed by North East CA, is the current adopted Transport Plan for transport this was inherited by the North East CA. The plan sets out the region's transport aspirations up to 2035. It included a programme of around 240 schemes which equal at least £6.8 billion of transport investment.

Following a devolution deal for the North East in December 2023, the roles and responsibilities of the North East Joint Transport Committee were merged into the new North East Combined Authority (North East CA). North East CA was formed on 7 May 2024 and is led by an Elected Mayor and Cabinet. The combined authority covers the seven local authority areas of County Durham, Gateshead, Newcastle, North Tyneside, Northumberland, South Tyneside, Sunderland, and the Northumberland National Park authority, with a total population of just over 2 million.

The North East Devolution Deal gives the Combined Authority powers, specific to transport including: "the ability to introduce bus franchising, control appropriate local transport functions e.g. local transport plans, and the control of a key route network".

North East CA are developing a new statutory Local Transport Plan (LTP) to reflect the region's transport priorities and setting out the approach to achieve a green, integrated transport network that works for all with a timeline and plan for delivery up to 2040. This involves creating a green, integrated transport network that works for all. North East CA believe this will make sustainable travel options more attractive, convenient, and safer, enabling more people and freight to make greener journeys.

North East CA's vision is to 'champion the full potential of our region. Collaborating with our partners and local authorities, we'll create a better way of life by connecting communities, giving people the skills to succeed, and improving wellbeing for all, so that the North East is recognised as an outstanding place to live, work, visit and invest'.

The vision is based on five commitments of North East CA to reflect the cross-cutting approach that will be required:

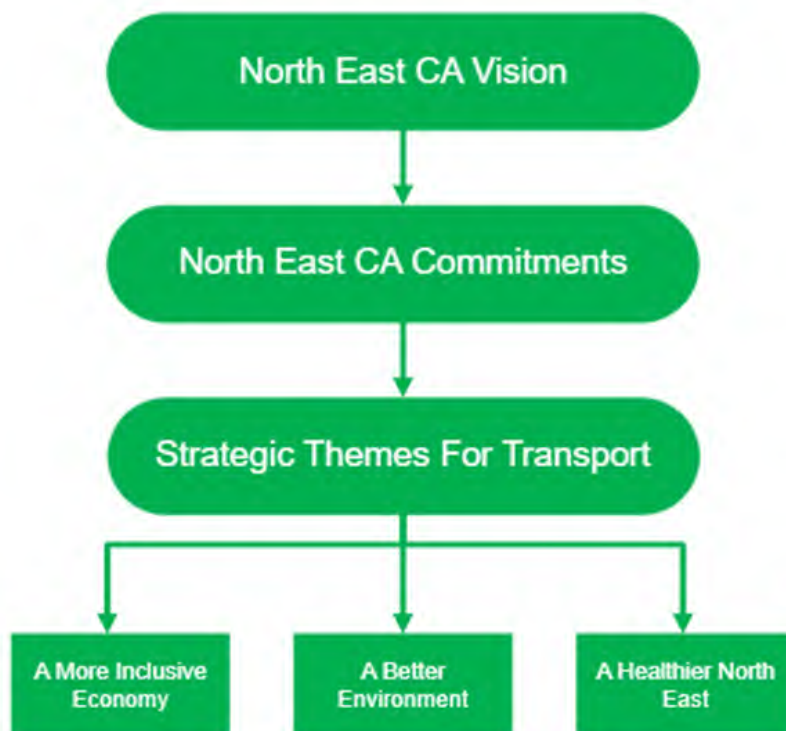
1. A fairer North East;
2. A greener North East;
3. A connected North East;
4. An international North East; and
5. A successful North East.

Transport will act as an enabler to help meet the vision and each of the five North East CA commitments. The North East CA vision and commitments have been used to develop three strategic themes for transport that will ensure that transport activities contribute to the North East CA role in improving the North East’s economy, skills, health, and environment. The three cross cutting themes for transport which underpin the delivery of the North East CA vision and commitment are set out in Table 2-1 and presented in Figure 2-1.

Table 2-1 - North East CA Themes

Strategic Theme	LTP Requirement
A more inclusive economy	The LTP will enable inclusive economic growth across the North East, helping to attract investment, boost job creation, and overcome inequality by enabling access to opportunity.
A better environment	The LTP will help to protect our environment and tackle climate change by providing an attractive, seamless, and sustainable transport network for people and freight across our region.
A healthier North East	The LTP will help achieve better health outcomes for people in our region by encouraging active and sustainable travel and facilitating better transport access to healthcare and social networks.

Figure 2-1 – North East CA vision and commitments linkages with strategic themes for transport



There are a range of challenges in the North East (as with elsewhere in the United Kingdom) brought about by significant environmental and societal changes. It is the intention that the implementation

and delivery of policies and schemes in the LTP will contribute to tackling these challenges currently facing the North East. A summary of the challenges can be broadly considered to be:

- Car and van journeys made up 58% of all journeys made in 2022 and car ownership in the North East is increasing.
- Public transport use is falling over the long-term. Since 2014, Bus and Metro passenger journeys per head and vehicle miles have both decreased.
- 31% of residents in the North East (622,000 people) are at risk of transport related social exclusion (TRSE).
- A range of transport issues has led to a contrast between rural isolation in our more remote areas and poor air quality and congestion in parts of our towns and cities.
- Commuting to workplaces is dominated by car travel, so congestion is a significant issue on our roads, which affects public transport access and attractiveness, reduces productivity, and increases inactivity and vehicle emissions.
- Transport contributes a significant proportion of carbon emissions. Approximately 97% of transport generated greenhouse gas emissions in the region are from roads, with A-roads being the greatest contributor.
- In 2022, only 36% of journeys to school (5–16 year olds) were made by active travel, the second lowest percentage of any region in England.

As such, the update of LTP shows an ongoing commitment from the North East CA to take action to deliver wide-ranging improvements for cleaner, healthier and safer transport across the region.

The LTP will consist of an overarching strategic LTP document which provides the overall context, purpose and direction of the plan and is accompanied by a Delivery Plan which will articulate LTP interventions to be tested by evidence from an Integrated Sustainability Appraisal (ISA).

METHODOLOGY



3. Methodology

3.1 Overview

The Habitats Regulations Assessment Handbook⁷ outlines that screening for appropriate assessment requires gathering sufficient information to objectively conclude whether effects on a European Site will be significant or not. On this basis, screening to ascertain whether appropriate assessment is required covers four themes:

- Determining whether the plan (or project) is directly connected with or necessary to the management of the European Site;
- Identifying the potential effects on the European Site;
- Assessing the LSE on the European Site; and,
- Describing the plans (or projects) and characterising other plans (or projects) that in combination have the potential for having significant effects on the European Site.

The preliminary steps in the assessment have been based on these themes.

3.2 Determination of the European Sites included in the HRA

Under the Conservation of Habitats and Species Regulations 2017 (as amended)⁸ the North East CA must undertake an HRA to ascertain if the Plan is likely to give rise to a significant effect on a European Site or European Offshore Marine Site.

The following selection criteria based on the National Highways Design Manual for Roads and Bridges (DMRB) standard LA 115 Habitats Regulations assessment⁹, based on the geographic extent of any impacts which could arise as a result of the Proposed Scheme and as explained below, have been used to determine what European Sites to consider in the HRA screening assessment:

- All European Sites within 2 km of the Plan Area;
- All European Sites up to 30 km from the Plan Area where bats are a qualifying interest feature;
- All European Sites up to 10 km from the Plan Area where birds are a qualifying interest feature¹⁰;
- All European Sites upstream or downstream of watercourses either within or adjacent to the Plan Area; and,

⁷ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook, October 2024 edition UK: DTA Publications Limited.

⁸ As amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

⁹ DMRB LA 115 - Habitats Regulations assessment. Available at: [LA 115 - Habitats Regulations assessment - DMRB \(standardsforhighways.co.uk\)](https://standardsforhighways.co.uk/la-115-habitats-regulations-assessment-dmrbs/)

¹⁰ The core range for many species, for example breeding and non-breeding bird species, can extend beyond the boundaries of SPA site designations, meaning land beyond a designated site boundary could have 'functional linkage' with a designated site. Functional linkages include key flyways, foraging areas or breeding sites. Although core ranges of species can vary from very short distances to tens of kilometres or more, for inland sites in this region a distance of 10 km is considered to be sufficient and precautionary in this instance.

- All European Sites containing a groundwater dependent terrestrial ecosystem (GWDTE), which are potentially connected by a hydrological or hydrogeological linkage to the Plan Area.

3.3 Data Gathering

Gathering the information on the European Sites included in the HRA Stage 1 Screening involved a desk-based review of the following sources:

- MAGIC (Multi-Agency Geographic Information for the Countryside) – <http://magic.defra.gov.uk>;
- Joint Nature Conservation Committee (JNCC) - <http://jncc.defra.gov.uk>;
- Natural England Designated Sites View - <https://designatedsites.naturalengland.org.uk/SiteSearch.aspx>.

3.4 Effect pathways

Plans or projects can adversely affect a site by:

- Causing delays in progress towards achieving the Conservation Objectives of the European Site;
- Interrupting progress towards achieving the Conservation Objectives of the European Site;
- Disrupting those factors that help to maintain the favourable conditions of the European Site; and,
- Interfering with the balance, distribution and density of key species that are the indicators of the favourable condition of the European Site.

Supplementary Advice¹¹ from Natural England describes the measures necessary to achieving the Conservation Objectives for a European Site, comprising a range of ecological attributes that are most likely to contribute to the overall integrity of a European Site.

With reference to the Supplementary Advice on Conservation Objectives (SACOs)¹², effect pathways on the Conservation Objectives for the European Site were considered against the following list:

- **Habitat loss and fragmentation** – includes direct loss of habitats under the footprint of temporary or permanent works. Indirect effects through the loss of functionally linked habitats, i.e. habitats that support species outside of the European Site boundary;
- **Species disturbance (visual, noise, vibration)** – this refers to disturbance during construction, operation or decommissioning works on species that may cause behavioural effects, e.g. avoidance, change in foraging behaviour. Physical works, vehicle movements, light pollution and presence of staff/ workers are all considered;
- **Changes to water quality** – considers effects on species (and their prey) as a result of contamination, changes in pH, increased nutrient loads, salinity, turbidity, alterations in the thermal regime, discharges or changes in sedimentation levels;
- **Changes to air quality** – evaluates the risk of discharges to air, including fugitive dust and combustion emissions;

¹¹ Natural England. (2015) *Conservation objectives for land-based protected sites in England: how to use the site advice* [online]. Available from <<https://www.gov.uk/guidance/conservation-objectives-for-land-based-protected-sites-in-england-how-to-use-the-site-advice>> (Accessed October 2024).

¹² SACO information obtained from NE online resources: [Site Search \(naturalengland.org.uk\)](https://www.gov.uk/guidance/conservation-objectives-for-land-based-protected-sites-in-england-how-to-use-the-site-advice)

- **Changes to surface and groundwater hydrology** – changes to the flow, supply, availability and drainage of water, and increased risks associated with flooding;
- **Introduction of Invasive Non-Native Species (INNS)** – the risk of introducing or spreading INNS as a result of the Proposed Scheme;
- **Recreation** – direct and indirect impacts on species and habitats as a result of increased recreational use, including increased visitor numbers, dog walkers, vehicle or watercraft use and associated issues such as dog fouling, litter and anti-social behaviour (e.g. littering, vandalism and fires).

3.5 Obtaining information on other projects and plans

The Habitats Regulations requires assessment of the potential for LSE of the project ‘in combination’ with other projects and plans.

The effects of this project in combination with other projects are the cumulative effects which will, or might, result from the addition of the effects of other relevant plans or projects, and making an assessment as to whether these could be significant.

The Habitats Regulations Assessment Handbook¹³ advises that any plans or projects at the following stages may be relevant to an in-combination assessment:

- Planning applications submitted but not yet determined;
- Planning application refusals subject to appeal procedures and not yet determined;
- Projects authorised but not yet started;
- Projects started but not yet completed;
- Known projects that do not require external authorisation, e.g. permitted development;
- ‘Projects’ subject to periodic review (e.g. annual licences) during the time that their renewal is under consideration;
- Proposals in adopted plans (e.g. land use plans, transport plans, minerals and waste plans, shoreline management plans etc.); and
- Proposals in finalised draft plans (see examples above) formally published or submitted for final consultation, examination or adoption.

¹³ Tyldesley, D., and Chapman, C., (2013) The Habitats Regulations Assessment Handbook, October 2024 edition UK: DTA Publications Limited.

The National Infrastructure Planning¹⁴ website was searched for Nationally Significant Infrastructure Projects which could have effects ‘in combination’ with the Plan.

A desktop review of local authority websites and planning portals was completed to identify plans or projects that have undergone a HRA and could have an LSE in combination with the Plan. Only ‘reasonably foreseeable’ and ‘committed’ projects and plans have been included in this assessment. Therefore, a desktop review of projects proposed or consented within the last five years is considered to be sufficient and precautionary in this instance.

The search included the following local authority planning website(s) for relevant planning documents, planning applications and consents, as well as a review of allocated and proposed sites:

- Northumberland County Council¹⁵;
- County Durham County Council¹⁶;
- Sunderland City Council¹⁷;
- Gateshead Council¹⁸;
- Newcastle upon Tyne District¹⁹;
- North Tyneside Council²⁰;
- South Tyneside Council²¹
- Scottish Borders Council²²;
- Stockton-on-Tees Borough Council²³;
- Cumbria County Council²⁴;
- North Yorkshire County²⁵;
- Hartlepool Borough Council²⁶;
- Darlington Borough Council²⁷
- Berwick-upon-Tweed Council²⁸;
- Blyth Valley Council²⁹;
- Hexham Town Council³⁰;
- Bishop Auckland Council³¹;
- City of Durham Parish Council³²;
- Easington Village Parish Council³³;
- Penrith and The Border Council³⁴;
- Richmond District Council³⁵;
- Sedgefield Town Council³⁶;

¹⁴ Planning Inspectorate: Find a National Infrastructure Project. Available at: <https://national-infrastructure-consenting.planninginspectorate.gov.uk> (Accessed October 2024).

¹⁵ <https://www.northumberland.gov.uk/Home.aspx> (Accessed October, 2024)

¹⁶ <https://www.durham.gov.uk/> (Accessed October, 2024)

¹⁷ <https://www.sunderland.gov.uk> (Accessed October, 2024)

¹⁸ <https://www.gateshead.gov.uk/> (Accessed October, 2024)

¹⁹ <https://new.newcastle.gov.uk/> (Accessed October, 2024)

²⁰ <https://my.northynteside.gov.uk/> (Accessed October, 2024)

²¹ <https://www.southtyneside.gov.uk/> (Accessed October, 2024)

²² <https://www.scotborders.gov.uk/> (Accessed October, 2024)

²³ <https://www.stockton.gov.uk/> (Accessed October, 2024)

²⁴ <https://www.cumbria.gov.uk/> (Accessed October, 2024)

²⁵ <https://www.northyorks.gov.uk/> (Accessed October, 2024)

²⁶ <https://www.hartlepool.gov.uk/site/index.php> (Accessed October, 2024)

²⁷ <https://www.darlington.gov.uk/> (Accessed October, 2024)

²⁸ <https://www.berwick-tc.gov.uk/> (Accessed October, 2024)

²⁹ <https://www.blythtowncouncil.gov.uk/> (Accessed October, 2024)

³⁰ <https://www.hexhamtowncouncil.gov.uk/> (Accessed October, 2024)

³¹ <https://bishopauckland-tc.gov.uk/> (Accessed October, 2024)

³² <https://cityofdurham-pc.gov.uk/> (Accessed October, 2024)

³³ <https://easingtonvillageparishcouncil.gov.uk/> (Accessed October, 2024)

³⁴ <https://www.penrithtowncouncil.gov.uk/> (Accessed October, 2024)

³⁵ <https://www.richmondshire.gov.uk/contact-us/richmondshire-district-council/> (Accessed October, 2024)

³⁶ <https://www.sedgefieldtowncouncil.gov.uk/> (Accessed October, 2024)

- Stockton Borough Council³⁷;
- Hartlepool Borough Council³⁸.

Only HRAs that have been completed within the last 10 years have been considered within the assessment.

3.6 Assessing the Impacts of the Plan ‘Alone’ and ‘In-combination’

Following the gathering of information on the European Sites an assessment has been undertaken to predict the LSE of the Plan ‘alone’ on the European Sites. In order to inform this process, all components of the Plan were assessed to see whether they could result in LSE on the European Sites.

The potential for likely significant effects of the Plan ‘in-combination’ with other projects and plans for each European Site has also been considered in this HRA. As part of this process HRA that have been completed due to possible impacts on the European Sites included in this HRA were reviewed in order to determine whether there is the potential for in-combination effects.

LSE are assessed by reference to the conservation objectives of the qualifying features (interest features) of the European Sites. Any project or plan that causes the cited interest features of a site to fall into unfavourable condition can be considered to have an LSE on the European Site. Stage 1 of the HRA process does not assess effects on the integrity of European Sites, that would be undertaken at Stage 2 (AA) of the HRA process.

HRA is an iterative process, where necessary, suggestions can be made of how to amend the plan or project to avoid likely significant effects on a European Site. This iterative approach has been adopted as part of this assessment.

The precautionary principle (as enshrined in the Habitats Regulations) has been taken into account during this HRA. The precautionary principle is used when an HRA cannot objectively demonstrate that there will be no LSEs on the European Sites. If this occurs the subsequent stages of HRA must be completed for the project or plan.

3.7 Stage 2: Appropriate Assessment

For European Sites where an LSE is predicted (alone or in combination with other plans or projects), or it cannot be concluded that there is no LSE, an AA has been undertaken. The purpose of the AA is to establish whether there are elements of the plan or project which could have an adverse effect on the integrity (AEoI) of any European Site. The integrity of a European Site is defined as:

“..the coherence of the site’s ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/ or the populations of the species for which the site is, or will be, designated”³⁹

³⁷ <https://www.stockton.gov.uk/>

³⁸ <https://www.hartlepool.gov.uk/site/index.php>

³⁹ Natural England (2019) MPA Conservation Advice

Glossary of Terms. Available here:

https://designatedsites.naturalengland.org.uk/pdfs/MPA_CAGlossary_March2019.pdf

The Habitats Regulations Assessment Handbook provides guidance on the ‘integrity test’⁴⁰. It emphasises that the integrity of a European Site involves its ecological structure, function and ecological processes, and relates to the site’s Conservation Objectives; if the Conservation Objective for a feature will be undermined, site integrity is adversely affected.

The AA considers each individual effect pathway separately, as well as any combination of relevant effect pathways from the plan or project and any other plans or projects. Assessment is based on the final plan or project and any necessary mitigation measures have been considered.

Therefore, the AA:

- Outlines the elements of the plan or project that were identified as having a potential LSE on one or more qualifying features of each European Site;
- Presents available baseline data from desk study or field work, as necessary, to characterise the potential effects, e.g. whether short/ long-term, reversible or irreversible, and in relation to the proportion/ importance of the interest affected, and the overall effect on the European Site’s Conservation Objectives. This has been done in sufficient detail to ensure all impacts have been considered and sufficiently appraised;
- Assesses the effects of the plan or project on the Conservation Objectives of the relevant interest features, with reference to any Supplementary Advice;
- Determines whether or not the integrity of the European Site(s) will be affected, taking into account proposed mitigation measures.

⁴⁰ Section C11 The ‘integrity test’. Available here: <https://www.dtapublications.co.uk/handbook/content.aspx?section=C11>

EUROPEAN SITES

4. The European Sites

A total of 33 European Sites were identified using the selection criteria (as set out in Section 3.2), comprising 18 SACs, nine SPAs and six Ramsar Sites. No SACs with bats as a qualifying feature were identified within 30 km of the Plan Area. The location of the European Sites in relation to the Plan Area are shown on the European Sites Plan in Appendix A. Details of the European Sites, including the location, qualifying features, vulnerabilities and conservation objectives are provided in Appendix B.

The European Site identified are:

- Ford Moss SAC;
- Roman Wall Loughs SAC;
- Newham Fen SAC;
- Thrislington SAC;
- Moor House - Upper Teesdale SAC;
- Berwickshire and North Northumberland Coast SAC;
- North Northumberland Dunes SAC;
- North Pennine Moors SAC;
- Castle Eden Dene SAC;
- Durham Coast SAC;
- Border Mires, Kielder – Butterburn SAC;
- Simonside Hills SAC;
- Tyne and Allen River Gravels SAC;
- Tweed Estuary SAC;
- River Tweed SAC;
- North Pennine Dales Meadows SAC;
- River Eden SAC;
- Coquet Island SPA;
- Lindisfarne SPA;
- Northumbria Coast SPA;
- Simonside Hills SPA;
- North Pennine Moors SPA;
- Holburn Lake and Moss SPA;
- Irthinghead Mires Ramsar Site;
- Holburn Lake and Moss Ramsar Site;
- Lindisfarne Ramsar Site;
- Teesmouth and Cleveland Coast Ramsar Site;
- Northumbria Coast Ramsar Site;
- Farne Islands SPA;
- Tyne and Nent SAC;
- Din Moss – Hoselaw Loch Ramsar Site;
- Din Moss – Hoselaw Loch SPA;
- Langholm - Newcastleton Hills SPA.

Tables B-1 to B-33 in Appendix B provide the information relating to each of the European Sites.

STAGE 1: SCREENING

5. Stage 1 Screening

5.1 Policies Screening Results (Alone)

All elements of the North East LTP were screened for policies and actions that may result in LSE on European Sites. The results of the screening are summarised in Table 5-1 below with the more detailed screening of the policies and strategies in the table in Appendix C.1.

Table 5-1 - North East LTP Policy Screening Summary

Policy Type	Policy	LSE	Justification
Planning journeys/ informing users/ supporting customers	1. Information, help, or assistance should be easily available and accessible to everyone before, during, and after a journey.	No	Policy will not lead to development as it is focussed on improving customer information through the use of technology.
	2. Live journey information should be accurate and consistent wherever and however it is being accessed. It should be presented in a way which is understandable and trusted by people.	No	Policy will not lead to development as it is focussed on improving customer information through the use of technology.
	3. The integrated network should have a strong identity to give confidence in the network and encourage people to make greener journeys.	No	Policy will not lead to development as it is focussed on improving customer experience.
Ticketing and fares	4. Fares and tickets should be as simple and easy to use as possible. Better integrated ticketing and fares should mean easier journeys. Fare structures and pricing should be convenient and simple with unnecessary complexities being removed.	No	The policy is aimed at affordability for users and in itself will not lead to development.
	5. People should be able to travel across the whole region, between rural and urban areas, incorporating bus, Metro, rail, and the Shields Ferry without needing to buy multiple tickets and with payment methods that enable seamless travel.	No	The policy is aimed at affordability for users and in itself will not lead to development.

Policy Type	Policy	LSE	Justification
Safety, especially of women and girls, and other improvements in service quality	6. There should be clear and effective channels through which to report harassment and violence against women and girls on the network.	No	The scheme will not lead to development.
	7. Targeted action should be taken and resources should be assigned to prevent violence against women and girls on the region's transport network. This should cover preventing offences from happening but should also look to tackle the root causes of violence and prevent it from developing.	No	The policy is aimed at improving safety, whilst additional CCTV may be erected this would be minor and would, therefore, not have an LSE.
	8. Women and girls should have increased trust, confidence, and perceptions of safety on the transport network.	Yes	The policy may lead to development including improved lighting which could have an LSE subject to design and location.
	9. Roads should be made safer, with a specific focus on the most vulnerable users.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	10. Integrated public transport services on the network must comply with legal and policy accessibility requirements, including ensuring services are accessible for all. Drivers and staff should ensure that everyone feels welcome and safe at stations and on services, strengthening confidence in the network.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	11. The customer experience should be transformed setting the highest service standards, where users can expect the provision of safe, reliable, clean, and efficient transport infrastructure.	No	This policy would not lead to development that could have an LSE on European Sites.
	12. The network should have consistent and cohesive branding such as colour schemes, signage, design standards, and quality of service, so that there is a clear 'look and feel' of the network on routes, stops, and stations.	No	This policy would not lead to development that could have an LSE on European Sites.

Policy Type	Policy	LSE	Justification
	13. The North East should set the highest standards for a fleet of green public transport vehicles which must meet premier standards of service quality.	No	This policy would not lead to development that could have an LSE on European Sites.
	14. People should feel a sense of pride in the network and be keen to use it again.	No	This policy would not lead to development that could have an LSE on European Sites.
Reach and resilience of infrastructure	15. The geographical reach of the integrated transport network should extend into every community of the North East, including our rural and coastal areas.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	16. To support the development of the integrated network, there should be a joined-up approach to transport infrastructure investment and spatial planning.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	17. Transport services should meet the demands of people, accommodating shift patterns for work and late evening social activities, enhancing the reach of the network.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	18. There should be strong transport connectivity beyond our boundaries for both people and freight.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	19. Infrastructure that enables people to walk, wheel, or cycle should be central to the transport network and should link to public transport for longer journeys.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	20. The network should be able to deal with disruptions, accidents, and extreme weather more effectively.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a

Policy Type	Policy	LSE	Justification
			potential risk of an LSE subject to design and location.
	21. Our highway network should provide essential access to all areas of the region, with particular emphasis on rural and coastal communities, who often bear the brunt of disruptive weather patterns.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	22. Charging infrastructure for Zero Emission Vehicles (ZEVs) should be present across the whole network, including at key stations and interchanges and rapid charging hubs.	Yes	The policy may lead to the development of new charging infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	23. Capacity should be boosted on the East Coast Main Line and the Durham Coast Line to meet our need for more long-distance rail passenger and freight services, supporting strong connectivity beyond our boundaries.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
Connections between different transport types	24. Our region should no longer consider different forms of transport as separate networks and move to one integrated and highly interconnected network where people can make seamless door to door journeys.	No	This policy would not lead to development that could have an LSE on European sites.
	25. The integrated network should be based around making it easier to switch between different types of transport including public transport, active travel, taxis, and other transport options such as Park and Ride, micromobility and community transport.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
	26. There should be well co-ordinated public transport timetables and services which complement each other and enable seamless and smooth transfer from one type of transport to the next.	Yes	The policy may lead to improvements to roads therefore there is a potential risk of an LSE subject to design and location.
	27. The Shields Ferry should continue to be a vital part of the integrated network, with even better linkages with other types of transport.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a

Policy Type	Policy	LSE	Justification
			potential risk of an LSE subject to design and location.
	28. Park and ride provision should be comprehensive, enabling people to seamlessly switch onto fast and frequent onward journeys.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.

5.2 Delivery Plan Screening Results (Alone)

All delivery plans of the North East LTP were screened for LSE on European Sites. A total of 272 plans are included within the North East LTP of which 65 were screened in as having a potential LSE subject based on the information available and subject to their exact location and design. Those plans screened as having a potential LSE are summarised in Table 5-2 below with the more detailed screening of the policies and strategies in the table in Appendix C.2.

Table 5-2 - North East LTP Delivery Plan Screening Summary

Policy Type	Scheme ID	Scheme name	LSE	Justification
Planning journeys/ Informing users/ Supporting Customers	CA46	EV Partnership Steering Group	Yes	The plans may lead to development that could have an LSE on the European Sites subject to the nature, scale and location of the works.
	CA60	Regionwide Travel behaviour change package and campaign		
	CA63	Real Time Passenger Information Screen replacements		
	CA32	Upgrades to the two Urban Traffic Management Control Centres for command and control of the network		
	DU46	Chester le Street ITS/light touch SCOOT		
	NE07	Newcastle Smart Corridors		
Safety, especially of women and girls, and other improvements in service quality	CA41	Supporting, maximising and enhancing existing bus routes and key services	Yes	The plans may lead to development that could have an LSE on the European Sites subject to the nature, scale and location of the works.
	NO08	New Blyth Bus Station		
	NO15	Enhanced service between Berwick and Newcastle		
	ST14	The Nook Strategic Junction Improvements		
	SU39	Sunderland Station Central Entrance.		
	NX02	Upgrading Heritage Stations on Tyne and Wear Metro		
	NX08	Small Metro Station Upgrades systemwide		
	SU34	Wearmouth Bridge NMU resurfacing		

Policy Type	Scheme ID	Scheme name	LSE	Justification
	EX11	Local rail Diesel fleet replacement – regional		
Reach and resilience of infrastructure	DU09	Improvements to the National Cycle Network Route 1 in County Durham	Yes	The plans may lead to development that could have an LSE on the European Sites subject to the nature, scale and location of the works.
	DU16	A177 cycling improvements, linking Coxhoe with Net Park		
	GA30	A694 corridor improvements		
	NE16	Coast Road		
	NO03	Critical Rural Road (U and C Class) Maintenance Programme		
	NO13	Northumberland LCWIP		
	NT01	Improvements to key sustainable routes in North Tyneside		
	ST02	Highway Maintenance Resurfacing Backlog in South Tyneside		
	ST03	Commercial Road Multi-Modal Corridor Improvements		
	ST05	A19 Southbound Lane Gain / Lane Drop		
	ST12	A1018 Multi-Modal Corridor Improvements		
	ST13	A183 Strategic Transport Corridor (NCN 1 - Phase 2) - Connecting to Sunderland Boundary - Souter to Whitburn		
	ST16	Major Highway Structural Maintenance Improvements (Heugh Street, Newcastle Road, Jarrow Slake).		
	ST18	National Cycling Network - Route 14 Improvements		
SU01	Sunderland Strategic Transport Corridor SSTC4 - Upgrades to Wessington Way / A19 junction			
SU03	St Michael's Way/High Street West journey time improvement and congestion pinch-point relief to improve road safety, bus priority and improve pedestrian safety			

Policy Type	Scheme ID	Scheme name	LSE	Justification
	SU09	Improving Strategic Cycle Networks in Sunderland A690 - City centre to Silksworth		
	SU10	SSGA to Ryhope Village Cycle Route		
	SU31	Improving Strategic Cycle Networks in Sunderland – Ryhope Road Strategic Cycle Route		
	SU32	Improving Strategic Cycle Networks in Sunderland A690 - City centre to Silksworth Phase 2		
	DU37	Great North Cycle Route improvements in County Durham.		
	NE05	Rotary Way junction upgrade and cycling improvements`		
	NE12	Flood and Climate Resilience (Newcastle citywide)		
	NO16	Future extensions for the Northumberland Line		
	NX23	Howdon Viaduct		
	SU06	Continued improvements to access the IAMP area including off- road cycle facilities to accommodate expected increase in traffic and stimulate economic development (IAMP Infrastructure Phase 2)		
	SU11	A183 Whitburn Road Roker Ravine Cycle bridge		
	SU12	Active Travel Improvements in Sunderland - Route 2 - Newcastle Road		
	CA25	Freight Gauge Clearance		
	DU57	Bishop Auckland to Barnard Castle active mode route improvements		
	DU61	Leamside Line		
	NO14	Belford Station		
	NT12	New rail station on East Coast Main Line - North West of North Tyneside		
	NX16	South Shields Ferry Landing Renewal and Replacement of both vessels		

Policy Type	Scheme ID	Scheme name	LSE	Justification
	SU05	Kier Hardie Way All user improvements		
	SU07	Queen Alexandra Bridge (A1231) / Camden Street Gyratory improvements. To provide congestion relief and bus priority		
	SU19	Inner Ring Road Eastern Section Southern bridgehead Junction		
	SU20	Inner Ring Road Eastern Section High Street West junction		
	SU21	Inner Ring Road Eastern Section Borough Road Junction		
	SU22	Inner Ring Road Eastern Section Hendon Road/Lawrence Street junction		
	SU23	Inner Ring Road Eastern Section - A1018 / A1231 Junction		
Connections between different transport types	NO19	Blyth to St Mary's Active Travel Scheme	Yes	The plans may lead to development that could have an LSE on the European Sites subject to the nature, scale and location of the works.
	NT03	Delivery of the transport elements of the North Shields Fish Quay Plan		
	NT07	Improving Whitley Bay town centre public realm delivery and improve accessibility for all users		
	ST20	South Shields Town Centre Active Travel Route		
	CA39	Park and Rides		
	NT14	Coastal Connectivity		
	SU30	Riverside Sunderland footbridge approach improvements		
	SU35	St Mary's Boulevard - Bus Priority and Pedestrian movements		
	NX20	Ferry - Royal Quays Landing study		

5.3 In-Combination Assessment

As the screening assessment identified potential LSEs 'alone', an in-combination LSE screening is provided in Table 5-3 below.

No plans or projects with potential for in-combination effects were identified from the following sources: Gateshead Council, Newcastle-upon-Tyne District Council, Stockton-on-Tees Borough Council, Hartlepool Borough Council, Darlington Borough Council, Berwick-upon-Tweed Council, Blyth Valley Council, Hexham Town Council, Bishop Auckland Council, City of Durham Parish Council, Easington Village Parish Council, Penrith and The Border Council, Richmond District Council, Sedgfield Town Council and Stockton Borough Council.

Table 5-3 - In-Combination Screening Table

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
Northumberland County Council	Unknown – only inspector's report review located.	The HRA concluded that some policies would have an LSE on European Sites, specifically Northumbria Coast SPA and Ramsar Site and the Lindisfarne SPA and Ramsar Site due to increased recreational disturbance, and the North Northumberland Dunes SAC due to increased spread of non-native pirri-pirri bur. The plan mitigated these effects by requiring developers of proposals that will increase the number of residential or tourism units within 10 km of the coast (7 km for minor applications) to contribute to a Coastal Mitigation Service.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development, it is not possible to rule out the potential for LSE in-combination with this plan.
County Durham County Council	Durham County Council, Sustainability Appraisal and Habitats Regulations Assessment Post Adoption Statement, County Durham Plan, 2020	The HRA concluded that there was an LSE as a result of increased recreational pressure and disturbance. The HRA concluded that the implementation of the avoidance strategy along with the monitoring proposals will effectively	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
		ensure that adverse effects upon the integrity of the coastal Natura 2000 sites will be avoided.	
Sunderland District City Council	Sunderland City Council Core Strategy and Development Plan Report to inform Habitats Regulations Assessment	The screening concluded that LSE from recreation, urban effects, coastal squeeze, water quality and air quality could not be excluded. The appropriate assessment concluded that within the implementation of mitigation measures there would be no effect on integrity of the European Sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.
	South Sunderland Growth Area Draft Supplementary Planning Document HRA Appropriate Assessment January 2016	The appropriate assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European Sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.
	Sunderland City Council and South Tyneside Council International Advanced Manufacturing Park Area Action Plan (IAMP AAP) Habitats Regulations Assessment Stage 1 Screening - Statement to Inform Publication Draft, August 2016	The proposed IAMP AAP is not considered likely to have any direct or indirect impact on European Sites due to its distance from these; the proposed operational activities at the site; the nature of habitats present; and the designated features.	No – the assessment concluded no LSE/ no effect, therefore, there is no risk of in-combination effects.
North Tyneside Council	North Tyneside Council Local Plan Habitat Regulations	The screening identified Physical Damage, Contamination; Non-physical disturbance and	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
	Assessment - Appropriate Assessment March 2017	recreation as having potential LSE on the European Sites. The appropriate assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European Sites.	possible to rule out the potential for LSE in-combination with this plan.
	North Tyneside Coastal Mitigation Supplementary Planning Document Habitat Regulations Assessment Screening Statement North Tyneside Council August 2019	The assessment concluded that no LSE on European Sites due to its distance from these; the proposed operational activities at the site; the nature of habitats present; and the designated features.	No – the assessment concluded no LSE/ no effect, therefore, there is no risk of in-combination effects.
South Tyneside Council	Whitburn Neighbourhood Plan, Habitat Regulations Assessment, Screening Report, Habitat Regulations Assessment, (July 2021)	The assessment concluded that the plan is unlikely to have an LSE on any European Sites.	No – the assessment concluded no LSE/ no effect, therefore, there is no risk of in-combination effects.
	East Boldon Neighbourhood Plan, Strategic Environmental Assessment/ Screening, Habitat Regulations Assessment, (September 2020)	The assessment concluded that the plan is unlikely to have an LSE on any European Sites.	No – the assessment concluded no LSE/ no effect, therefore, there is no risk of in-combination effects.
Scottish Borders Council	Habitats Regulations Appraisal (HRA) Record for the Scottish Borders Local Development Plan (2023 update),	The assessment concluded that the plan is unlikely to have an LSE on any European Sites.	No – the assessment concluded no LSE/ no effect, therefore, there is no risk of in-combination effects.

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
	Updated Habitat Regulations Appraisal Record, Supplementary Guidance: Glentress Masterplan, February 201	The assessment concluded that the plan is unlikely to have an LSE on any European Sites.	No – the assessment concluded no LSE/ no effect, therefore, there is no risk of in-combination effects.
Cumbria County Council	Habitats Regulations Appraisal Cumbria Minerals and Waste Local Plan, 2015 to 2030, September 2017	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European Sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.
North Yorkshire County	North Yorkshire County Council Minerals and Waste Joint Plan, Addendum to the Habitat Regulations Assessment, November 2019	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European Sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.
	North Yorkshire County Council Minerals and Waste Joint Plan, Information to Inform Appropriate Assessment, November 2020	The appropriate assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European Sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.
	North Yorkshire County Council Minerals and Waste Joint Plan, Information to Inform Appropriate Assessment – Blubberhouses Quarry, July 2021	The appropriate assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European Sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
National Infrastructure Planning	Habitat Regulations Assessment for an Application Under the Planning Act 2008 A1 in Northumberland: Morpeth to Ellingham 24 May 2024	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.
	Net Zero Teesside Project Planning Inspectorate Reference: EN010103 Land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton on-Tees, Teesside [The Net Zero Teesside Order] Document Reference: 5.13 Habitat Regulations Assessment Report, November 2022	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	Uncertain – Until further detail is known in respect of delivery plan locations and the nature of development it is not possible to rule out the potential for LSE in-combination with this plan.

5.4 Stage 1 Screening Conclusion

5.4.1 Screening

The North East LTP contains five policy types with a total of 28 policies. The 28 policies were reviewed and the following policies were assessed as having a potential LSE on the European sites as they may lead to development:

8. Women and girls should have increased trust, confidence, and perceptions of safety on the transport network.
9. Roads should be made safer, with a specific focus on the most vulnerable users.
10. Integrated public transport services on the network must comply with legal and policy accessibility requirements, including ensuring services are accessible for all. Drivers and staff should ensure that everyone feels welcome and safe at stations and on services, strengthening confidence in the network.
15. The geographical reach of the integrated transport network should extend into every community of the North East, including our rural and coastal areas.
16. To support the development of the integrated network, there should be a joined-up approach to transport infrastructure investment and spatial planning.
17. Transport services should meet the demands of people, accommodating shift patterns for work and late evening social activities, enhancing the reach of the network.
18. There should be strong transport connectivity beyond our boundaries for both people and freight.
19. Infrastructure that enables people to walk, wheel, or cycle should be central to the transport network and should link to public transport for longer journeys.
20. The network should be able to deal with disruptions, accidents, and extreme weather more effectively.
21. Our highway network should provide essential access to all areas of the region, with particular emphasis on rural and coastal communities, who often bear the brunt of disruptive weather patterns.
22. Charging infrastructure for Zero Emission Vehicles (ZEVs) should be present across the whole network, including at key stations and interchanges and rapid charging hubs.
23. Capacity should be boosted on the East Coast Main Line and the Durham Coast Line to meet our need for more long-distance rail passenger and freight services, supporting strong connectivity beyond our boundaries.
25. The integrated network should be based around making it easier to switch between different types of transport including public transport, active travel, taxis, and other transport options such as Park and Ride, micromobility and community transport.

26. There should be well co-ordinated public transport timetables and services which complement each other and enable seamless and smooth transfer from one type of transport to the next.
27. The Shields Ferry should continue to be a vital part of the integrated network, with even better linkages with other types of transport.
28. Park and ride provision should be comprehensive, enabling people to seamlessly switch onto fast and frequent onward journeys.

The plan also includes 272 delivery plans which summarises individual plans for development/change within the Plan between 2024 and 2040.

The delivery plans were reviewed to identify which plans could lead to development and if so if an LSE would be possible. Using the precautionary principle, any plans that could lead to development and could impact a European Site, based on their location, nature and size, were recorded as having an LSE.

As the level of information currently available is very limited, where an LSE has been identified it is assumed that one or more of the following effects on the European Sites included within the plan could occur:

- Habitat loss and fragmentation;
- Species disturbance (visual, noise, vibration);
- Changes to water quality;
- Changes to air quality;
- Changes to surface and groundwater;
- Introduction of invasive non-native species (INNS);
- Recreation impacts.

5.4.2 In-combination Assessment

As the North East LTP was found to have an LSE alone, in-combination effects have been considered as part of this assessment for which a number of other plans and projects were identified as having an uncertain in-combination effect and are, therefore, taken forward for consideration at Stage 2, AA. Those sections of the North East LTP where no effects were identified due to an absence of policies that may lead to development do not require an in-combination assessment.

5.5 Conclusion

The HRA Stage 1 Screening assessment has concluded that LSE cannot be discounted for all potential impact pathways arising from the Plan. Therefore, Stage 2 AA has been undertaken and is detailed in the Section 6 below.

STAGE 2: APPROPRIATE ASSESSMENT



6. Stage 2 - Appropriate Assessment

6.1 Introduction

Following completion of the HRA Stage 1 Screening assessment, potential for LSEs were identified for European Sites in the Plan Area or within the zone of influence of the Plan Area, as follows:

- Ford Moss SAC;
- Roman Wall Loughs SAC;
- Newham Fen SAC;
- Thrislington SAC;
- Moor House - Upper Teesdale SAC;
- Berwickshire and North Northumberland Coast SAC;
- North Northumberland Dunes SAC;
- North Pennine Moors SAC;
- Castle Eden Dene SAC;
- Durham Coast SAC;
- Border Mires, Kielder – Butterburn SAC;
- Simonside Hills SAC;
- Tyne and Allen River Gravels SAC;
- Tweed Estuary SAC;
- River Tweed SAC;
- North Pennine Dales Meadows SAC;
- River Eden SAC;
- Coquet Island SPA;
- Lindisfarne SPA;
- Northumbria Coast SPA;
- Simonside Hills SPA;
- North Pennine Moors SPA;
- Holburn Lake and Moss SPA;
- Irthinghead Mires Ramsar Site;
- Holburn Lake and Moss Ramsar Site;
- Lindisfarne Ramsar Site;
- Teesmouth and Cleveland Coast Ramsar Site;
- Northumbria Coast Ramsar Site;
- Farne Islands SPA;
- Tyne and Nent SAC;
- Din Moss – Hoselaw Loch Ramsar Site;
- Din Moss – Hoselaw Loch SPA;
- Langholm - Newcastleton Hills SPA.

Therefore, Stage 2 Appropriate Assessment is required for each of these European Sites.

6.2 Mitigation and Control Measures

The following measures will be employed during any development works arising from the Plan to avoid and reduce ecological impacts, including avoiding causing any adverse effects on any European Sites. These measures are taken into account in the AA below.

6.3 Assessment of Effects

Each potential LSE of the Plan identified by the screening stage is considered in turn below taking into account relevant specific information and mitigation measures.

6.4 Protection within the North East Local Transport Plan

To ensure the protection of the European Sites potentially affected by the North East LTP, the following specific actions/ requirements have been included within the plan:

- The North East CA and its constituent Local Authorities, as Scheme Promoters, will engage with statutory bodies including the Environment Agency, Natural England and Historic England in order to advance interventions and to understand, avoid or mitigate against any adverse impacts;
- Scheme Promoters will be responsible for undertaking statutory assessments where required, including Environmental Impact Assessments and HRAs;
- Infrastructure will be designed to be adaptative, responsive and resilient, for example, to mitigate against the impacts of climate change through design;
- To reduce flood risk, schemes will be designed with appropriate drainage or attenuation systems. Opportunities to improve sustainable drainage systems will be explored where possible;
- Efforts will be taken to enhance the natural environment where possible, this includes implementing Biodiversity Net Gain and enhancing green and blue infrastructure through scheme delivery;
- Interventions will recognise sensitive receptors to noise and light and will build in mitigation at the outset;
- Key habitat sites, protected landscapes and historic features will be preserved in the delivery of this plan through early engagement and design, where possible Scheme Promoters will seek to undertake enhancements.

The above text thereby provides confidence that protection measures and further assessment (where required) in respect of European Sites has been integrated within the Plan for implementation at a lower tier.

6.4.1 Habitat loss and fragmentation

The screening assessment concluded that the Plan could result in direct damage to habitats within the designations. This could result in damage to designated habitat features/ criterion or result in impacts on species that use these habitats.

Although broad locations of potential schemes have been provided within the Delivery Plans, there is no detail currently available regarding the actual works to be undertaken as part of each scheme and the final scheme extent. However, none of the schemes fall within any of the European Sites

identified. Therefore, provided all schemes seek to avoid the loss of habitats during construction and operation, it is considered that habitat loss and/ or fragmentation will be unlikely as a result of the North East LTP.

6.4.1.1 Conclusion

It is concluded that with the implementation of appropriate mitigation measures no adverse effect on the integrity of the European Sites identified will result from North East LTP alone through habitat loss and fragmentation.

6.4.2 Species Disturbance

Given the high level of the North East LTP and the lack of scheme details, it is not possible at this stage to confirm that species disturbance may occur. However, schemes arising out of the North East LTP could in theory result in species disturbance via noise, vibration and visual disturbance of the qualifying species of European Sites.

In order to limit the potential for impacts, the following mitigation could be implemented for any schemes or actions arising out of North East LTP:

- Obtain appropriate licencing for legally protected species to ensure no impact on favourable conservation status;
- Restrict timing of most disturbing activities to avoid or limit seasonal disturbance (e.g. avoid or limit disturbance during core breeding seasons);
- Limit noise from plant and machinery;
- Creation of noise attenuation bunds;
- Creation of buffer zones and set-back distances, particular around sensitive features (e.g. bat roosts);
- Visual screening of works;
- Sensitively designed lighting directed away from habitat areas and the minimum amount of lighting required to undertake the task;
- Restrict works either geographically or temporally (e.g. avoid winter or avoid night-time working);
- Educate workers on importance of adjacent European Sites;
- Create alternative areas for outdoor recreation to discourage some workers from visiting European Sites, particularly those with species sensitive to disturbance.

6.4.2.1 Conclusion

It is concluded that with the implementation of appropriate mitigation measures no adverse effect on the integrity of the European Sites identified will result from North East LTP alone through species disturbance.

6.4.3 Changes to water quality

Changes in water quality could result from direct discharges from sewage or surface water run-off outfalls, altering water chemistry, nutrient levels, pH or oxygen levels. Any de-watering works could also result in sediment discharge into aquatic habitats. Other potential pollutant sources include accidental spillages of fuels or oil, heavy metals leaching from soil run-off, pollutants such as dust and construction waste in surface water run-off and increases in nutrient loading. Any surface water

discharges that are made into local watercourses and waterbodies or directly or indirectly into European Sites could be damaging. The release of these pollutants and increases in suspended sediment into freshwater environments could lead to smothering of habitats and species, or changes in species diversity as a result of increased toxicity or nutrients, so affecting the achievement of the conservation objectives and site integrity.

In order to reduce these potential effects, drainage systems should be designed to either avoid discharge into watercourses, or to attenuate and reduce the risk of pollutants and suspended solids. Modelling of any discharges or releases may be required once any project-level details are known in order to quantify any impacts. As such, the following mitigation measures could be implemented:

- Works should be undertaken following pollution prevention guidelines⁴¹ and Construction Industry Research and Information Association (CIRIA) guidance on the control of water pollution from construction sites⁴²;
- Drainage systems should be designed to avoid direct discharge into watercourses;
- Attenuation and/ or settlement ponds installed to reduce the risk of pollutants and suspended sediment reaching the receptors;
- Sustainable Drainage Systems (SuDS) installed;
- Implementation of a flocculant system before discharge;
- Silt curtains used whilst dredging;
- Implementation of pollution prevention guidelines;
- Implementation of effective soil management plans to avoid run-off from any earthworks;
- Foul water discharged to existing treatment plants and not to surface water; and,
- Appropriate bunding around fuel storage.

6.4.3.1 Conclusion

It is concluded that with the implementation of appropriate mitigation no adverse effect on the integrity of the European Sites identified will result from North East LTP alone through changes in water quality.

6.4.4 Changes to air quality

During construction, emissions to air would be mainly from plant and machinery, road traffic and dust from works, or emissions from concrete batching plants. During operation, traffic on new roads or increased volumes of traffic on existing roads may alter local air quality resulting in additional impacts on sensitive habitats within 200 m of the affected road network.

The potential effects of increases in deposition of nitrogen compounds (NO_x) include long-term changes in habitat and species distribution and diversity as nutrient loading encourages more vigorous species, such as grasses, to out-compete forbs and slow growing non-vascular plants. Acidification of soils and freshwater (primarily today through nitrogen deposition) causes similar

⁴¹ Guidance - Pollution Prevention for Businesses: <https://www.gov.uk/guidance/pollution-prevention-for-businesses>.

⁴² The CIRIA documents are a series of publications developed by the Construction Industry Research and Information Association. Each document is targeted at a particular type of business or activity and covers environmental good practice to minimise pollution. Available at: <https://www.ciria.org/>

effects, depending on the geology and soil chemistry influence susceptibility of an ecosystem to acid deposition.

An assessment of any adverse impacts from changes in air quality should be undertaken on a site-by-site basis, through determination of the applicability of the critical levels and critical loads at each site, and further ecological assessment and modelling. Critical loads for vegetation types are presented on the Air Pollution Information System (APIS) website⁴³.

Good practice measures to control dust from construction sites should be sufficient to limit the amount of emissions reaching the European Sites. With respect to emissions of NO_x or acidic compounds through construction activities, generic mitigation measures such as turning engines off when idle, operating equipment on ultra-low sulphur diesel, ensuring engines are routinely maintained, providing public transport for workers etc. may limit emissions to within acceptable thresholds.

In order to limit the potential for impacts the following mitigation could be implemented for any schemes or actions arising out of the North East LTP:

- Enclosure of silos, cement powder delivery systems and installation of dust mitigation systems;
- Avoid dust releasing activities;
- Site design to reduce dust emissions (e.g. covering stockpiles, reducing vehicle speed);
- Dust control measures implemented (e.g. damping down with water bowsers);
- Regular maintenance of plant and machinery;
- Drivers to switch off vehicles when stationary;
- Avoid use of diesel generators;
- Implement air quality monitoring scheme;
- Turning engines off when idle;
- Operating equipment on ultra-low sulphur diesel;
- Ensuring engines are routinely maintained; and,
- Providing public transport for workers.

Operational impacts cannot be mitigated in this way and would need to be avoided through modelling and management of the affected road network, particularly roads that lie within 200 m of a European Site.

6.4.4.1 Conclusion

It is concluded that with the implementation of appropriate mitigation no adverse effect on the integrity of the European Sites identified will result from North East LTP alone through changes in air quality.

6.4.5 Changes to surface and groundwater hydrology

Excavations and earthworks during construction and new roads and other impermeable surfaces during operation have the potential to change surface water hydrodynamics. Diversion or blocking of surface water features, the presence of earthworks or roads all have the potential to alter existing surface water drainage characteristics in the catchment. Pluvial flood events may become more

⁴³ <http://www.apis.ac.uk/>

frequent as the built-up area increases, and fluvial flooding may increase if surface water run-off is diverted into watercourses. A reduction or increase in surface water flows could affect water quality.

In order to limit the potential for impacts the following mitigation could be implemented for any schemes or actions arising out of the North East LTP:

- Re-routing of watercourses, positioning of earthworks to reduce risk of effects;
- Modelling or monitoring of flow rates and water levels in local watercourses where these may be affected by development;
- Complete a Flood Consequences Assessment (FCA) to assess potential surface water and groundwater effects during phases of development and operation; and,
- Mitigation to control any surface floodwater.

6.4.5.1 Conclusion

It is concluded that with the implementation of appropriate mitigation no adverse effect on the integrity of the European Sites identified will result from North East LTP alone through changes in surface and groundwater hydrology.

6.4.6 Introduction of INNS

The risk of terrestrial INNS introduction to European Sites remains if appropriate mitigation measures are not implemented. Any works have the potential to spread INNS that are already established on the site and elsewhere in the UK. During operation, the introduction and spread of INNS is considered less likely due to reduced movement of substrate and vehicles.

In practice, to manage these risks, any future project proponent will be required to apply Biosecurity Risk Assessments and Method Statements to cover all activities. These are likely to include regular survey and monitoring requirements for INNS. The implementation of effective Biosecurity Risk Assessments and procedures should enable to rule out any risk to site integrity.

In order to limit the potential for impacts the following mitigation could be implemented for any schemes or actions arising out of the North East LTP:

- Implementation of Biosecurity Risk Assessments and Method Statements to cover all activities;
- Undertake measures that would control and eradicate INNS within the area of works; and
- Implementation of regular survey and monitoring requirements for INNS.

Mitigation through iterative design and the implementation of standard mitigation and good practice guidance should ensure no risk to achievement of conservation objectives and consequently no adverse effect on site integrity.

6.4.6.1 Conclusion

It is concluded that with the implementation of appropriate mitigation no adverse effect on the integrity of the European Sites identified will result from North East LTP alone through the introduction of INNS.

6.4.7 Recreational pressures

Improving access to European Sites, particularly in combination with local increases in population driven by housing and employment development, can increase the amount of recreation at a European Site. This may result in increased disturbance/ erosion of habitats, disturbance of species within the site from increased numbers of people and dogs, littering, vandalism and other anti-social behaviour. It can also drive the need for more visitor facilities and car parking facilities, visitor management, an educational programme and site warden; increased recreational pressure on European Sites from increased accessibility and visitor numbers, can result in disturbance and habitat erosion if not managed.

In order to limit the potential for impacts the following mitigation could be implemented for any schemes or actions arising out of the North East LTP:

- Visitor management schemes, including provision of dedicated footpaths, fencing and screening of sensitive areas;
- Education of visitors through signage and online information; and
- Provision of Suitable Alternative Natural Greenspace (SANGS) for new residential developments to ease the pressure on European Sites (where this is an issue).

6.4.7.1 Conclusion

It is concluded that with the implementation of appropriate mitigation no adverse effect on the integrity of the European Sites identified will result from North East LTP alone through recreational pressures.

6.5 In-combination Assessment

In-combination assessment of adverse effects for the European Sites screened in for AA is provided in Table 6-1 below. It can be concluded that there will be no adverse effects on site integrity as a result of potential in-combination affects between the Plan and other plan and projects.

The need for an in-combination assessment will still need to be considered at a lower level of plan-making, once more details are available and particularly at the project-stage when more specific information about proposed development can be obtained.

Table 6-1 - In-Combination Effect Assessment Table

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
Northumberland County Council	Unknown – only inspectors report review located.	The HRA concluded that some policies would have an LSE on European sites specifically Northumbria Coast SPA and Ramsar Site and the Lindisfarne SPA and Ramsar Site due to increased recreational disturbance, and the North Northumberland Dunes SAC due to increased spread of non-native pirri-pirri bur. The plan mitigated these effects by requiring developers of proposals that will increase the number of residential or tourism units within 10 km of the coast (7 km for minor applications) to contribute to a Coastal Mitigation Service.	No effect on integrity With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.
County Durham County Council	Durham County Council, Sustainability Appraisal and Habitats Regulations Assessment Post Adoption Statement, County Durham Plan, 2020	The HRA concluded that there was an LSE as a result of increased recreational pressure and disturbance. The HRA concluded that the implementation of the avoidance strategy along with the monitoring proposals will effectively ensure that adverse effects upon the integrity of the coastal Natura 2000 sites will be avoided.	No effect on integrity With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
Sunderland District City Council	Sunderland City Council Core Strategy and Development Plan Report to inform Habitat Regulations Assessment	The screening concluded that LSE from recreation, urban effects, coastal squeeze, water quality and air quality could not be excluded. The appropriate assessment concluded that within the implementation of mitigation measures there would be no effect on integrity of the European sites.	<p>No effect on integrity</p> <p>With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.</p>
	South Sunderland Growth Area Draft Supplementary Planning Document HRA Appropriate Assessment January 2016	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	<p>No effect on integrity</p> <p>With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.</p>
North Tyneside Council	North Tyneside Council Local Plan Habitat Regulations Assessment - Appropriate Assessment March 2017	<p>The screening identified Physical Damage, Contamination; Non-physical disturbance and recreation as having potential LSE on the European sites.</p> <p>The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.</p>	<p>No effect on integrity</p> <p>With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.</p>
Cumbria County Council	Habitats Regulations Appraisal Cumbria Minerals and Waste Local Plan, 2015 to 2030, September 2017	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	<p>No effect on integrity</p> <p>With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is</p>

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
			considered unlikely that a combined adverse effect on site integrity would occur.
North Yorkshire County	North Yorkshire County Council Minerals and Waste Joint Plan, Addendum to the Habitat Regulations Assessment, November 2019	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	No effect on integrity With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.
	North Yorkshire County Council Minerals and Waste Joint Plan, Information to Inform Appropriate Assessment, November 2020	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	No effect on integrity With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.
	North Yorkshire County Council Minerals and Waste Joint Plan, Information to Inform Appropriate Assessment – Blubberhouses Quarry, July 2021	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	No effect on integrity With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.
	Habitat Regulations Assessment for an Application	The assessment concluded with the implementation of mitigation measures and	No effect on integrity

Competent Authority	HRA Reference	Findings of HRA	In-combination assessment
National Infrastructure Planning	Under the Planning Act 2008 A1 in Northumberland: Morpeth to Ellingham 24 May 2024	accepting the high level of the plan there would be no effect on integrity of the European sites.	With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.
	Net Zero Teesside Project Planning Inspectorate Reference: EN010103 Land at and in the vicinity of the former Redcar Steel Works site, Redcar and in Stockton on-Tees, Teesside [The Net Zero Teesside Order] Document Reference: 5.13 Habitat Regulations Assessment Report, November 2022	The assessment concluded with the implementation of mitigation measures and accepting the high level of the plan there would be no effect on integrity of the European sites.	<p>No effect on integrity</p> <p>With the inclusion of the text within the plan to reduce potential effects on European Sites and the mitigation measures identified above, it is considered unlikely that a combined adverse effect on site integrity would occur.</p>

CONCLUSION

7. Conclusions

The following European Sites were considered at screening:

- Ford Moss SAC;
- Roman Wall Loughs SAC;
- Newham Fen SAC;
- Thrislington SAC;
- Moor House - Upper Teesdale SAC;
- Berwickshire and North Northumberland Coast SAC;
- North Northumberland Dunes SAC;
- North Pennine Moors SAC;
- Castle Eden Dene SAC;
- Durham Coast SAC;
- Border Mires, Kielder – Butterburn SAC;
- Simonside Hills SAC;
- Tyne and Allen River Gravels SAC;
- Tweed Estuary SAC;
- River Tweed SAC;
- North Pennine Dales Meadows SAC;
- River Eden SAC;
- Coquet Island SPA;
- Lindisfarne SPA;
- Northumbria Coast SPA;
- Simonside Hills SPA;
- North Pennine Moors SPA;
- Holburn Lake and Moss SPA;
- Irthinghead Mires Ramsar Site;
- Holburn Lake and Moss Ramsar Site;
- Lindisfarne Ramsar Site;
- Teesmouth and Cleveland Coast Ramsar Site;
- Northumbria Coast Ramsar Site;
- Farne Islands SPA;
- Tyne and Nent SAC;
- Din Moss – Hoselaw Loch Ramsar Site;
- Din Moss – Hoselaw Loch SPA;
- Langholm - Newcastleton Hills SPA.

In the absence of detailed project-specific information, a high-level assessment of the potential for actions within the North East LTP to have an adverse effect on the integrity of European Sites was undertaken. A total of 33 European Sites were assessed against the predicted impacts arising from development as a result of 28 Policies and 272 Delivery Plans.

Detailed information is not yet available about the nature and extent of any works or actions as part of schemes that are likely to arise out of the North East LTP. However, it is considered reasonable to anticipate from the information available that the developments could be delivered in a manner which avoids any adverse effects on the integrity of the European Sites through the use of standard mitigation techniques, as set out in Section 6.4 above. Furthermore, it is predicted that adverse impacts can be avoided or 'designed out' and to facilitate this process early consultation with Natural England is strongly recommended, i.e. during the screening and scoping stage of projects.

Taking into account the proposed mitigation measures, the wording in the North East LTP (as set out in Section 6.4 above) which commits to the protection of the European Sites, it can be concluded that the North East LTP will not have an adverse effect on the integrity of the European Sites 'alone' or 'in combination' with other plans and projects.

APPENDICES

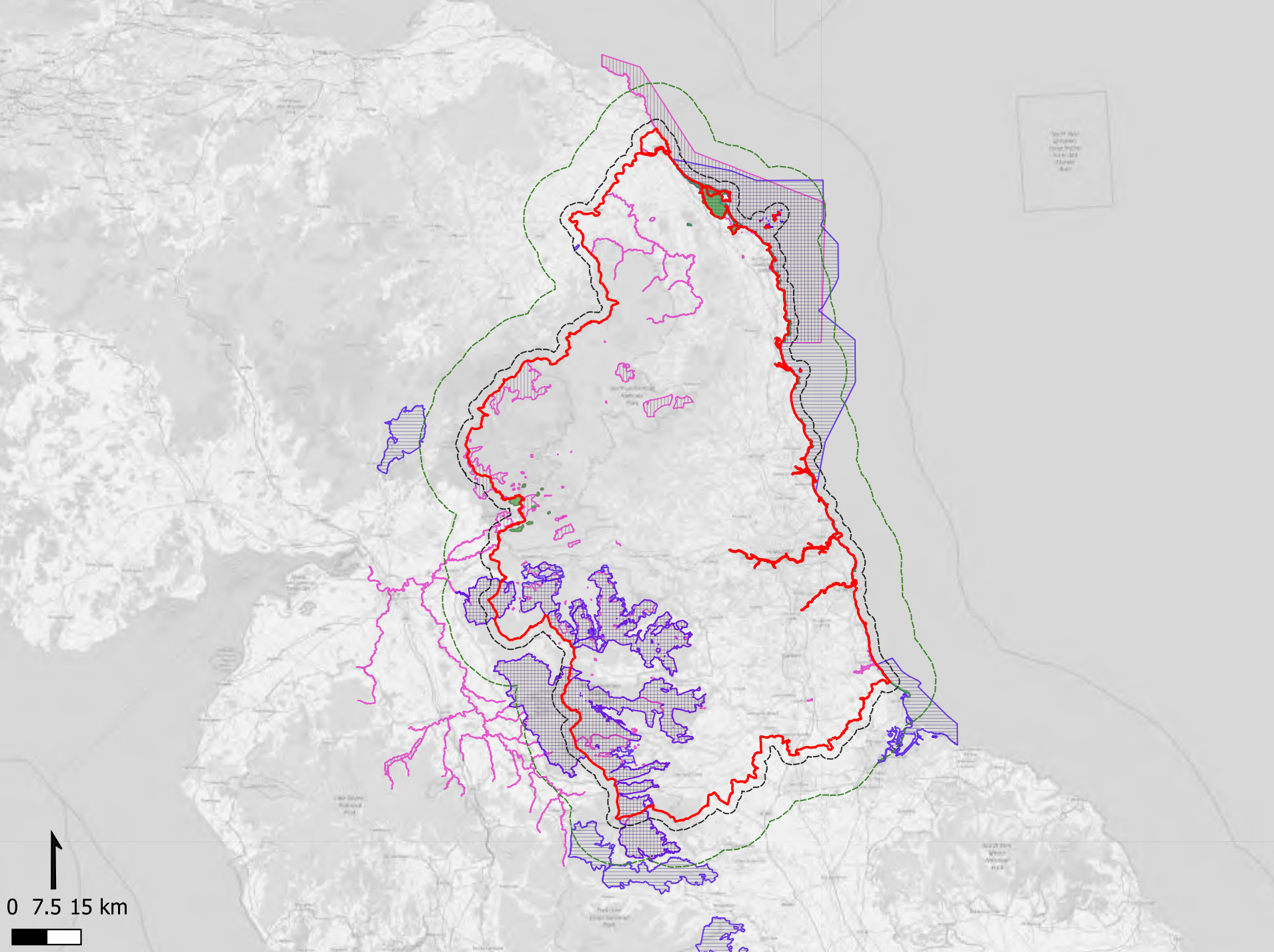
Appendix A. European Sites Plan



GENERAL NOTES
 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
 2. ONLY WRITTEN DIMENSIONS SHOULD BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS.

Legend

- NECA Boundary
- 2km Buffer
- 10km Buffer
- Ramsar Site
- SPA
- SAC



Purpose: NECA LTP HRA

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AtkinsRéalis

5th Floor,
 The Vantage,
 32-36 Great Victoria Street,
 Belfast, BT2 7BA

Client	North East CA	
Project	North East Local Transport Plan	

Title	Des/Drawn	Checked	Authorised
	JC	PW	LMG
Date	Date	Date	Date
28/10/2024	29/10/2024	29/10/2024	29/10/2024
Status	Drawing Number		Rev
For Issue	1		1

Appendix B. Designated Sites included within the Assessment

Table B-1 Information about the Ford Moss SAC

Site Designation Status	Ford Moss SAC UK0030151
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	Ford Moss is one of the few rain-fed mires in the drier east of the Border Upland. Typical bog communities are present though they have been degraded to some extent by historic drainage and burning. Woodland around the margins of the site contains stands of mature oak and Scot's pine, willow/birch carr and stands of bog myrtle. Pine woodlands have been long present on the site and feature many indicators of W18 woodland including chickweed wintergreen.
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 7110 Active raised bogs.
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Air pollution, air-borne pollutants; ▪ Human induced changes in hydraulic conditions; ▪ Forest and Plantation management & use.
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of the qualifying natural habitat ▪ The structure and function (including typical species) of the qualifying natural habitat, and, ▪ The supporting processes on which the qualifying natural habitat rely

Table B-2 Information about the Roman Wall Loughs SAC

Site Designation Status	Roman Wall Loughs UK0030267
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	The Roman Wall Loughs area contains three natural eutrophic lakes, Crag, Broomlee and Greenlee Loughs. Together the loughs contain 11 species of pondweed <i>Potamogeton</i> including <i>P. lucens</i> , <i>P. pusillus</i> , and <i>P. obtusifolius</i> . <i>P. gramineus</i> occurs in all three loughs in an unusual association with stoneworts <i>Chara</i> spp. The nationally-rare autumnal water-starwort (<i>Callitriche hermaphroditica</i>) occurs in Crag Lough. Shoreweed (<i>Littorella uniflora</i>) grows in Broomlee and Greenlee Loughs, and greater bladderwort <i>Utricularia vulgaris</i> in the latter.
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Invasive non-native species; ▪ Unknown threat or pressure; ▪ Pollution to groundwater (point sources and diffuse sources).
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of the qualifying natural habitats ▪ The structure and function (including typical species) of the qualifying natural habitats, and, ▪ The supporting processes on which the qualifying natural habitats rely.

Table B-3 Information about the Newham Fen SAC

Site Designation Status	Newham Fen UK0012890
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	Newham Fen is the finest eutrophic basin mire on the coastal plain of Northumberland or anywhere else in Northumbria. It is a calcareous spring-fed mire and holds the only known example of the base-rich Schoenus-Juncus mire in all of this area, which grades (or did grade) to open water. The Willow-Birch-Reed woodland is also the best and most extensive known example of its type in this area. Very many rare and scarce species occur at the site; there is the best invertebrate fauna of any fen in Northumberland, including the most notable assemblage of dragonflies. The site has now been recognised as important in a European context.
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 7230 Alkaline fens.
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Air pollution, air-borne pollutants.
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and ▪ The supporting processes on which qualifying natural habitats rely

Table B-4 Information about the Thrislington SAC

Site Designation Status	Thrislington UK0012838
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	Thrislington SAC, a former quarry, contains one of the most important stands of lowland calcareous grassland on magnesian limestone substrate in Britain. The qualifying feature for the SAC is semi-natural dry grasslands and scrubland facies on calcareous substrates Festuco-Brometalia and an important orchid site. Thrislington contains the largest of the few remaining stands of CG8 <i>Sesleria caerulea</i> - <i>Scabiosa columbaria</i> grassland which exists only in the north east of England, and although a relatively small SAC at 22.72 ha, its importance is due to the fragmented locations of remaining grassland sites of this nature.
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Air pollution, air-borne pollutants; ▪ Changes in abiotic conditions; ▪ Unknown threat or pressure.
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and ▪ The supporting processes on which qualifying natural habitats rely

Table B-5 Information about the Moor House - Upper Teesdale SAC

Site Designation Status	Moor House - Upper Teesdale UK0014774
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	This large, 150,000 hectares area of moorland massif extends 110 km from north to south, between the Tyne Gap (Hexham) and the Ribble-Aire corridor (Skipton). Within the site is an extensive plateau of between 600m and 893m. The varied topography, hydrology, soils and underlying geology has contributed to a high degree of habitat heterogeneity. Vegetation is largely unenclosed heather moorland, either as blanket bog or drier alpine and sub-alpine heaths, with smaller areas of wetland, grassland, and other habitats, including a range of 'minority' habitats eg alpine pioneer formations, base-rich flushes, calaminarian grassland. Post-glacial relict flora and fauna are present. At the moorland fringes are areas of enclosed grassland including mountain hay meadows which have been managed at a relatively low level of agricultural intensification and so retain a diversity of meadow species. Bird populations of international importance are present.
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. ▪ 4060 Alpine and Boreal heaths ▪ 5130 Juniperus communis formations on heaths or calcareous grasslands ▪ 6130 Calaminarian grasslands of the Violetalia calaminariae ▪ 6150 Siliceous alpine and boreal grasslands ▪ 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) ▪ 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) ▪ 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels ▪ 6520 Mountain hay meadows ▪ 7130 Blanket bogs ▪ 7220 Petrifying springs with tufa formation (Cratoneurion) ▪ 7230 Alkaline fens ▪ 7240 Alpine pioneer formations of the Caricion bicoloris-atrofuscae ▪ 8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) ▪ 8120 Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>) ▪ 8210 Calcareous rocky slopes with chasmophytic vegetation

	<ul style="list-style-type: none"> ▪ 8220 Siliceous rocky slopes with chasmophytic vegetation <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 4030 European dry heaths ▪ 8240 Limestone pavements <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 1015 Round-mouthed whorl snail (<i>Vertigo genesii</i>) ▪ 1528 Marsh saxifrage (<i>Saxifraga hirculus</i>)
<p>Vulnerabilities of the European Site</p>	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Modification of cultivation practices ▪ Fire and fire suppression ▪ Interspecific floral relations ▪ Grazing ▪ Reduced fecundity/ genetic depression
<p>Conservation Objectives of the European Site</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species, and, ▪ The distribution of qualifying species within the site

Table B-6 Information about the Berwickshire and North Northumberland Coast SAC

Site Designation Status	Berwickshire and North Northumberland Coast UK0017072
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	<p>The Northumberland Coastal Site Improvement Plan covers the following sites: Berwickshire & Northumberland Coast SAC, Coquet Island SPA, Farne Islands SPA, Lindisfarne SPA, North Northumberland Dunes SAC, Northumbria Coast SPA, and Tweed Estuary SAC. As such there are fully marine, intertidal, saltmarsh and dune areas designated to protect a diverse range of important birds and habitats. The long stretch of coast, over which the designated sites are located, ranges from largely agricultural in the north down to urban and industrial conurbations further south. The Tweed Estuary SAC is a long narrow estuary, with intertidal mudflats and sandflats. The SAC supports a population of both river and sea lamprey with the water quality classified as excellent throughout. The Berwickshire & Northumberland Coast SAC supports a biodiverse assemblage of marine life. It covers 115 km of coastline and extends out to four nautical miles to encompass 645 square kilometers of shore and sea. Lindisfarne SPA qualifies by supporting a range of over-wintering wildfowl and waders such as Light Bellied Brent geese (50% world pop), it is also noted for its wintering waterfowl assemblage. The site also qualifies for supporting Annex 1 species little tern, and roseate tern. Farne Islands SPA consists of a group of low-lying islands that support seabird colonies of international importance, including arctic, common and sandwich tern, guillemot and Atlantic puffin as well as a wide range of other seabirds. The Northumberland Coast SPA supports internationally important populations of over-wintering purple sandpiper and turnstone, and a breeding colony of little tern at Beadnell Bay. North Northumberland Dunes SAC has five types of Annex 1 dune habitats. Coquet Island SPA supports the sole colony of rare roseate terns in the UK along with large numbers of auks and gulls. With the nearby Farne Islands SPA it constitutes an important breeding ground for North Sea seabirds.</p>
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 1140 Mudflats and sandflats not covered by seawater at low tide ▪ 1160 Large shallow inlets and bays ▪ 1170 Reefs ▪ 8330 Submerged or partially submerged sea caves <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 1364 Grey seal (<i>Halichoerus grypus</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Invasive non-native species ▪ Human induced changes in hydraulic conditions ▪ Pollution to surface waters (limnic & terrestrial, marine & brackish) ▪ Outdoor sports and leisure activities, recreational activities

Conservation Objectives of the European Site

- Other human intrusions and disturbances

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Table B-7 Information about the North Northumberland Dunes SAC

Site Designation Status	North Northumberland Dunes UK0017097
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	<p>The Northumberland Coastal Site Improvement Plan covers the following sites: Berwickshire & Northumberland Coast SAC, Coquet Island SPA, Farne Islands SPA, Lindisfarne SPA, North Northumberland Dunes SAC, Northumbria Coast SPA, and Tweed Estuary SAC. As such there are fully marine, intertidal, saltmarsh and dune areas designated to protect a diverse range of important birds and habitats. The long stretch of coast, over which the designated sites are located, ranges from largely agricultural in the north down to urban and industrial conurbations further south. The Tweed Estuary SAC is a long narrow estuary, with intertidal mudflats and sandflats. The SAC supports a population of both river and sea lamprey with the water quality classified as excellent throughout. The Berwickshire & Northumberland Coast SAC supports a biodiverse assemblage of marine life. It covers 115 km of coastline and extends out to four nautical miles to encompass 645 square kilometers of shore and sea. Lindisfarne SPA qualifies by supporting a range of over-wintering wildfowl and waders such as Light Bellied Brent geese (50% world pop), it is also noted for its wintering waterfowl assemblage. The site also qualifies for supporting Annex 1 species little tern, and roseate tern. Farne Islands SPA consists of a group of low-lying islands that support seabird colonies of international importance, including arctic, common and sandwich tern, guillemot and Atlantic puffin as well as a wide range of other seabirds. The Northumberland Coast SPA supports internationally important populations of over-wintering purple sandpiper and turnstone, and a breeding colony of little tern at Beadnell Bay. North Northumberland Dunes SAC has five types of Annex 1 dune habitats. Coquet Island SPA supports the sole colony of rare roseate terns in the UK along with large numbers of auks and gulls. With the nearby Farne Islands SPA it constitutes an important breeding ground for North Sea seabirds.</p>
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 2110 Embryonic shifting dunes ▪ 2120 "Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")" ▪ 2130 "Fixed coastal dunes with herbaceous vegetation ("grey dunes")" ▪ 2170 Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) ▪ 2190 Humid dune slacks <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 1395 Petalwort (<i>Petalophyllum ralfsii</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Outdoor sports and leisure activities, recreational activities

	<ul style="list-style-type: none"> ▪ Pollution to surface waters (limnic & terrestrial, marine & b Invasive non-native species rackish) ▪ Interspecific faunal relations ▪ Changes in biotic conditions
<p>Conservation Objectives of the European Site</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species, and, ▪ The distribution of qualifying species within the site.

Table B-8 Information about the North Pennine Moors SAC

Site Designation Status	North Pennine Moors SAC UK0030033
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	This large, 150,000 hectares area of moorland massif extends 110 km from north to south, between the Tyne Gap (Hexham) and the Ribble-Aire corridor (Skipton). Within the site is an extensive plateau of between 600m and 893m. The varied topography, hydrology, soils and underlying geology has contributed to a high degree of habitat heterogeneity. Vegetation is largely unenclosed heather moorland, either as blanket bog or drier alpine and sub-alpine heaths, with smaller areas of wetland, grassland, and other habitats, including a range of 'minority' habitats e.g. alpine pioneer formations, base-rich flushes, calaminarian grassland. Post-glacial relict flora and fauna are present. At the moorland fringes are areas of enclosed grassland including mountain hay meadows which have been managed at a relatively low level of agricultural intensification and so retain a diversity of meadow species. Bird populations of international importance are present.
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 4030 European dry heaths ▪ 5130 Juniperus communis formations on heaths or calcareous grasslands ▪ 7130 Blanket bogs ▪ 7220 Petrifying springs with tufa formation (Cratoneurion) ▪ 8220 Siliceous rocky slopes with chasmophytic vegetation ▪ 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> ▪ 6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i> ▪ 6150 Siliceous alpine and boreal grasslands ▪ 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) ▪ 7230 Alkaline fens ▪ 8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) ▪ 8210 Calcareous rocky slopes with chasmophytic vegetation <p>Annex II species present as a qualifying feature, but not a primary reason for site selection</p> <ul style="list-style-type: none"> ▪ 1528 Marsh saxifrage (<i>Saxifraga hirculus</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Interspecific floral relations ▪ Fire and fire suppression

	<ul style="list-style-type: none"> ▪ Human induced changes in hydraulic conditions ▪ Grazing ▪ Modification of cultivation practices
<p>Conservation Objectives of the European Site</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species, and, ▪ The distribution of qualifying species within the site.

Table B-9 Information about the Castle Eden Dene SAC

Site Designation Status	Castle Eden Dene SAC UK0012768
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	Castle Eden Dene represents the most extensive northerly native occurrence of Yew (<i>Taxus baccata</i>) woods in the UK. Extensive yew groves are found in association with Ash-Elm Fraxinus-Ulmus woodland and it is the only site selected for yew woodland on magnesian limestone in north-east England.
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 91J0 <i>Taxus baccata</i> woods of the British Isles
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Problematic native species ▪ Forest and Plantation management & use ▪ Air pollution, air-borne pollutants ▪ Invasive non-native species
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and ▪ The supporting processes on which qualifying natural habitats rely

Table B-10 Information about the Durham Coast SAC

Site Designation Status	Durham Coast SAC UK0030140
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	Durham Coast SAC is the only example of vegetated sea cliffs on magnesian limestone exposures in the UK. These cliffs extend along the North Sea coast for over 20 km from South Shields southwards to Blackhall Rocks. Their vegetation is unique in the British Isles and consists of a complex mosaic of paramaritime, mesotrophic and calcicolous grasslands, tall-herb fen, seepage flushes and wind-pruned scrub. Within these habitats rare species of contrasting phytogeographic distributions often grow together forming unusual and species-rich communities of high scientific interest. The communities present on the sea cliffs are largely maintained by natural processes including exposure to sea spray, erosion and slippage of the soft magnesian limestone bedrock and overlying glacial drifts, as well as localised flushing by calcareous water.
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Invasive non-native species ▪ Human induced changes in hydraulic conditions ▪ Abiotic (slow) natural processes ▪ Fertilisation ▪ Other human intrusions and disturbances
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and ▪ The supporting processes on which the qualifying natural habitats rely

Table B-11 Information about the Border Mires, Kielder – Butterburn SAC

Site Designation Status	Border Mires, Kielder – Butterburn SAC UK0012923
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	The SAC, with a total area of 11,851.77 ha, straddles Cumbria and Northumberland and contains some of the best examples of deep peat lenses in England. Much of the land has been afforested, although significant areas of high quality original bog remain throughout the forested expanse and these have been selected to represent this habitat type in northern England. The climate is wetter here than in some other parts of northern England, and this is reflected in the composition of the vegetation, which is dominated by species of cottongrass <i>Eriophorum</i> and a reduced cover of heather <i>Calluna vulgaris</i> . The SAC contains very good examples of the Sphagnum-rich cross-leaved heath <i>Erica tetralix</i> and Sphagnum papillosum vegetation type.
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 7130 Blanket bogs ▪ 7140 Transition mires and quaking bogs <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> ▪ 4030 European dry heaths ▪ 7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Modification of cultivation practices ▪ Changes in biotic conditions ▪ Air pollution, air-borne pollutants ▪ Human induced changes in hydraulic conditions ▪ Forest and Plantation management & use
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely

Table B-12 Information about the Simonside Hills SAC

Site Designation Status	Simonside Hills SAC UK0030336
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	<p>The Simonside Hills SAC lies on a sandstone-ridge in central Northumberland, and form an iconic part of the landscape of Northumberland National Park.</p> <p>The site is particularly important for the extent of heather moorland forming a mosaic of dry and wet heath, with valley and raised mires on wetter and flatter ground. There are frequent rocky outcrops and it is a popular spot for walking being near to the small town of Rothbury.</p> <p>Whilst a large proportion of the dry heath is managed by rotational burning for red grouse, there are still substantial areas not under active management.</p> <p>Bracken is widely distributed and forms dense stands along certain stream courses, invariably in association with small areas of grassland.</p>
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 4030 European dry heaths <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 7130 Blanket bogs
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Modification of cultivation practices ▪ Other human intrusions and disturbances ▪ Outdoor sports and leisure activities, recreational activities ▪ Fire and fire suppression ▪ Invasive non-native species
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the qualifying natural habitats ▪ The structure and function (including typical species) of the qualifying natural habitats, and, ▪ The supporting processes on which the qualifying natural habitats rely

Table B-13 Information about the Tyne and Allen River Gravels SAC

Site Designation Status	Tyne and Allen River Gravels SAC UK0012816
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	This site in north-east England encompasses the most extensive, structurally varied and species-rich examples of riverine Calaminarian grasslands in the UK. The river gravels contain a range of structural types, ranging from a highly toxic, sparsely vegetated area with abundant lichens through to closed willow/alder <i>Salix/Alnus</i> woodland. In addition, the site is of considerable functional interest for the series of fossilised river channel features. Spring sandwort (<i>Minuartia verna</i>) and thrift (<i>Armeria maritima</i>) are particularly abundant, and there are several rare species, including Young's helleborine (<i>Epipactis youngiana</i>), (recently re-identified as <i>Epipactus dunensis</i> .) which has its main UK population at this site. The site is also of great importance for its lichen communities. A number of rare and scarce species are present, including the Red Data Book-listed <i>Peltigera venosa</i> .
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i>
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Air pollution, air-borne pollutants ▪ Invasive non-native species ▪ Biocenotic evolution, succession ▪ Unknown threat or pressure
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and ▪ The supporting processes on which qualifying natural habitats rely

Table B-14 Information about the Tweed Estuary SAC

Site Designation Status	Tweed Estuary UK0030292
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	The Tweed Estuary is a complex estuary, which discharges into the North Sea. It is a long narrow estuary, which is still largely natural and undisturbed, with its water quality classified as excellent throughout. The Tweed is a long narrow estuary with a wide variety of intertidal mudflat and sandflat communities. Sandstell Point, at the mouth of the estuary, is a wide spit of clean mobile sand.
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 1130 Estuaries ▪ 1140 Mudflats and sandflats not covered by seawater at low tide <p>Annex II species present as a qualifying feature, but not a primary reason for site selection</p> <ul style="list-style-type: none"> ▪ 1095 Sea lamprey (<i>Petromyzon marinus</i>) ▪ 1099 River lamprey (<i>Lampetra fluviatilis</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Outdoor sports and leisure activities, recreational activities ▪ Pollution to surface waters (limnic & terrestrial, marine & brackish) ▪ Other human intrusions and disturbances ▪ Invasive non-native species ▪ Human induced changes in hydraulic conditions
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely ▪ The populations of qualifying species, and, ▪ The distribution of qualifying species within the site.

Table B-15 Information about the River Tweed SAC

Site Designation Status	River Tweed SAC UK0012691
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	Scottish partner organisations have contributed to the development of the Plan and it has therefore been written to cover both English and Scottish parts of the SAC. The River Tweed is the most species-rich example of a river with <i>Ranunculus</i> (sub-type 2) in the north-eastern part of its range. The river has a high ecological diversity which reflects the mixed geology of the catchment. Stream water-crowfoot (<i>Ranunculus penicillatus</i> ssp. <i>pseudofluitans</i> , a species of southern rivers and streams, here occurs at its most northerly location as does fan-leaved water-crowfoot (<i>R. Circinatus</i>), along with river water-crowfoot (<i>R. Fluitans</i>), common water-crowfoot (<i>R. Aquatilis</i>), pond water-crowfoot (<i>R. Peltatus</i>) and a range of hybrids. The river is also designated for Atlantic salmon (<i>Salmo salar</i>), Otter (<i>Lutra lutra</i>), Sea lamprey (<i>Petromyzon marinus</i>), Brook lamprey (<i>Lampetra planeri</i>) and River lamprey (<i>Lampetra fluviatilis</i>).
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 1106 Atlantic salmon (<i>Salmo salar</i>) ▪ 1355 Otter (<i>Lutra lutra</i>) <p>Annex II species present as a qualifying feature, but not a primary reason for site selection</p> <ul style="list-style-type: none"> ▪ 1095 Sea lamprey (<i>Petromyzon marinus</i>) ▪ 1096 Brook lamprey (<i>Lampetra planeri</i>) ▪ 1099 River lamprey (<i>Lampetra fluviatilis</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Pollution to groundwater (point sources and diffuse sources) ▪ Invasive non-native species ▪ Human induced changes in hydraulic conditions
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely

- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Table B-16 Information about the North Pennine Dales Meadows SAC

Site Designation Status	North Pennine Dales Meadows SAC UK0014775
Location of European Site	The site is located within the NORTH EAST CA area.
Brief Description of the European Site	The North Pennine Dales Meadows SAC is a series of isolated fields within the higher parts of the enclosed valley bottoms of several north Pennine and Cumbrian valleys. The SAC is comprised of 58 component Sites of Special Scientific Interest (SSSI), which are located across the counties of Cumbria, Durham, Lancashire, North Yorkshire and Northumberland. It contains the major part of the remaining UK resource of mountain hay meadows and purple moor grass meadows, supporting a characteristic herb-rich vegetation unique to the Pennines and other upland areas of Northern England. The fields are part of the agricultural landscape and economy and are managed by summer cutting for hay; and grazing through the rest of the year.
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 6520 Mountain hay meadows <p>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Mowing / cutting of grassland ▪ Fertilisation ▪ Air pollution, air-borne pollutants ▪ Modification of cultivation practices
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely

Table B-17 Information about the River Eden SAC

Site Designation Status	River Eden SAC UK0012643
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	<p>The River Eden is England's finest large river system on limestone and sandstone. The Eden catchment encompasses East Cumbria, from its headwaters in the Yorkshire Dales to its discharge in the Solway Firth Estuary. The designated area of the River Eden includes headwaters running off the Orton block limestone, the North Pennine Moors and the eastern fells of the Lake District. The variation in geology, altitude and flow result in an extremely high number of aquatic plant species, with over 180 species recorded, many uncommon and at the edge of their geographical range. In places on the Eden there still remains natural riparian habitats of wet woodland, sedge swamp and oxbow lakes. The River Irthing in particular supports extensive areas of alder-floodplain woodland and the river shingles that this dynamic habitat forms upon . The Eden is one of the finest rivers in the UK for Atlantic salmon, bullhead and the three lamprey species found in the UK. The limestone streams and the upper main river support an extensive white-clawed crayfish population. Otter is found throughout the catchment. Ullswater, part of the River Eden SAC, is the second largest lake in the Lake District. It is a relatively deep lake, with both oligotrophic and mesotrophic elements to its flora and fauna.</p>
Qualifying features	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the Isoëto-Nanojuncetea ▪ 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation ▪ 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> ▪ 1092 White-clawed (or Atlantic stream) crayfish (<i>Austropotamobius pallipes</i>) ▪ 1095 Sea lamprey (<i>Petromyzon marinus</i>) ▪ 1096 Brook lamprey (<i>Lampetra planeri</i>) ▪ 1099 River lamprey (<i>Lampetra fluviatilis</i>) ▪ 1106 Atlantic salmon (<i>Salmo salar</i>) ▪ 1163 Bullhead (<i>Cottus gobio</i>) ▪ 1355 Otter (<i>Lutra lutra</i>)
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Changes in biotic conditions ▪ Pollution to groundwater (point sources and diffuse sources) ▪ Human induced changes in hydraulic conditions ▪ Cultivation ▪ Invasive non-native species

**Conservation
Objectives of the
European Site**

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Table B-18 Information about the Coquet Island SPA

Site Designation Status	Coquet Island SPA UK9006031
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	Off the Northumberland coast is Coquet Island, a vibrant seabird reserve that's home to the UK's only breeding Roseate Terns. It's also an important site for nesting Puffins and Common, Sandwich and Arctic terns.
Qualifying features	<p>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</p> <p>During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Sterna dougallii</i> (Europe - breeding) 93.02% of the GB breeding population 5 year peak mean (2010-2014); ▪ <i>Sterna hirundo</i> (Northern/Eastern Europe - breeding) 11.89% of the GB breeding population over a 5 year peak mean (2010-2014); ▪ <i>Sterna paradisaea</i> (Arctic - breeding/Southern Oceans - wintering) 2.32% of the GB breeding population over a five year peak mean (2010-2014); ▪ <i>Sterna sandvicensis</i> (Western Europe/Western Africa) 11.82% of the GB breeding population over a 5 year peak mean (2010-2014). <p>ARTICLE 4.2 QUALIFICATION (2009/147/EC):</p> <p>An internationally important assemblage of seabirds. In the breeding season the area regularly supports 47,662 individuals (5 year peak mean 2010-2014) including the 4 species listed above plus: <i>Fratercula arctica</i>, <i>Chroicocephalus ridibundus</i> as main components of the assemblage.</p>
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Invasive non-native species ▪ Other human intrusions and disturbances ▪ Outdoor sports and leisure activities, recreational activities ▪ Interspecific faunal relations ▪ Changes in biotic conditions
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features, and, ▪ The distribution of the qualifying features within the site.

Table B-19 Information about the Lindisfarne SPA

Site Designation Status	Lindisfarne SPA UK9006011
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	Northumberland Marine SPA is located on the Northumberland coast between Blyth and Berwick-upon-Tweed. The coastal parts of the site consist of sandy bays separated by rocky headlands backed by dunes or soft and hard cliffs. There are extensive areas of inter-tidal rocky reef, long sandy beaches at Beadnell, Embleton and Druridge Bay and extensive sand and mud flats at Budle Bay and Fenham Flats at Lindisfarne. Discrete areas of intertidal mudflats and estuarine channels are also included where the site extends into the Aln, Coquet, Wansbeck and Blyth estuaries. The open coast habitats extend into the subtidal zone, where large shallow inlets and bays and extensive rocky reefs are present. Further offshore, soft sediments predominate.
Qualifying features	<p>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</p> <p>During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Sterna albifrons</i> (Eastern Atlantic - breeding) 0.6% of the GB breeding population 5 year mean, 1992-1996 ▪ <i>Sterna dougallii</i> (Europe - breeding) at least % of the GB breeding population Count, as at late 1990s <p>Over winter the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Cygnus cygnus</i> (Iceland/UK/Ireland) 0.9% of the GB population 5 year peak mean 1991/92-1995/96 ▪ <i>Limosa lapponica</i> (Western Palearctic - wintering) 5.6% of the GB population 5 year peak mean 1991/92-1995/96 ▪ <i>Pluvialis apricaria</i> [North-western Europe - breeding] 2.1% of the GB population 5 year peak mean 1991/92-1995/96 <p>ARTICLE 4.2 QUALIFICATION (79/409/EEC)</p> <p>Over winter the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Anas penelope</i> (Western Siberia/North-western/North-eastern Europe) 0.6% of the population 5 year peak mean 1991/92-1995/96 ▪ <i>Anser anser</i> [Iceland/UK/Ireland] 1.4% of the population 5 year peak mean 1991/92-1995/96 ▪ <i>Branta bernicla hrota</i> [Svalbard/Denmark/UK] 36.9% of the population 5 year peak mean 1991/92-1995/96 ▪ <i>Calidris alba</i> (Eastern Atlantic/Western & Southern Africa - wintering) 0.9% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ <i>Calidris alpina alpina</i> (Northern Siberia/Europe/Western Africa) 1.4% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ <i>Charadrius hiaticula</i> (Europe/Northern Africa - wintering) 0.3% of the population 5 year peak mean 1991/92-1995/96

	<ul style="list-style-type: none"> ▪ <i>Clangula hyemalis</i> (Iceland/Greenland) 0.3% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ <i>Mergus serrator</i> (North-western/Central Europe) 0.2% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ <i>Pluvialis squatarola</i> (Eastern Atlantic - wintering) 3.6% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ <i>Somateria mollissima</i> (Britain/Ireland) 2% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ <i>Tadorna tadorna</i> (North-western Europe) 1.2% of the population in Great Britain 5 year peak mean 1991/92-1995/96
<p>Vulnerabilities of the European Site</p>	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Pollution to surface waters (limnic & terrestrial, marine & brackish) ▪ Invasive non-native species ▪ Changes in biotic conditions ▪ Interspecific faunal relations ▪ Outdoor sports and leisure activities, recreational activities
<p>Conservation Objectives of the European Site</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features, and, ▪ The distribution of the qualifying features within the site.

Table B-20 Information about the Northumbria Coast SPA

Site Designation Status	Northumbria Coast SPA UK9006131
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	The Northumbria Coast Special Protection Area is a European marine site. European marine sites are defined as any part of a European site covered (continuously or intermittently) by tidal waters or any part of the sea in or adjacent to Great Britain up to the seaward limit of territorial waters.
Qualifying features	<p>ARTICLE 4.1 QUALIFICATION (2009/147/EC):</p> <p>During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Sterna albifrons</i> 1.7% of the GB breeding population over 5 year peak mean (1993-1997) and <i>Sterna paradisaea</i> 2.92% of the GB population over 5 year peak mean (2010-2014). <p>ARTICLE 4.2 QUALIFICATION (2009/147/EC): During the wintering season the area regularly supports</p> <ul style="list-style-type: none"> ▪ <i>Arenaria interpres</i> (Western Palearctic - wintering) 2.6% of biogeographic population over 5 year peak mean (1992/3-1996/7). During the wintering season the area regularly supports <i>Calidris maritima</i> 1.6% of biogeographic population over 5 year peak mean (1992/3-1996/7).
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Outdoor sports and leisure activities, recreational activities ▪ Changes in biotic conditions ▪ Interspecific faunal relations ▪ Pollution to surface waters (limnic & terrestrial, marine & brackish) ▪ Other human intrusions and disturbances
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features, and, ▪ The distribution of the qualifying features within the site.

Table B-21 Information about the Simonside Hills SPA

Site Designation Status	Simonside Hills SPA UK0030336
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	The Simonside Hills SPA lies on a sandstone-ridge in central Northumberland, and form an iconic part of the landscape of Northumberland National Park.
Qualifying features	<p>ARTICLE 4.1 QUALIFICATION (2009/147/EC):</p> <p>During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Sterna dougallii</i> (Europe - breeding) 1.88% of the GB breeding population in (1985); ▪ <i>Sterna hirundo</i> (Northern/Eastern Europe - breeding) 1.69 % of the GB breeding population in (1985); ▪ <i>Sterna paradisaea</i> (Arctic - breeding/Southern Oceans - wintering) 3.78% of the GB breeding population over a 5 year peak mean (2010-2014); ▪ <i>Sterna sandvicensis</i> (Western Europe/Western Africa) 7.84% of the GB breeding population 5 year peak mean (2010-2014). <p>ARTICLE 4.2 QUALIFICATION (2009/147/EC):</p> <p>An internationally important assemblage of seabirds. In the breeding season the area regularly supports:</p> <p>163,819 individuals (5 year peak mean 2010-2014) including the 5 species listed above plus: <i>Fratercula arctica</i>, <i>Phalacrocorax carbo</i>, <i>Phalacrocorax aristotelis</i> and <i>Rissa tridactyla</i>. Site regularly supports <i>Uria aalge</i> 1.72% of the aalge biogeographic population over a 5 year peak mean (2010-2014).</p>
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Outdoor sports and leisure activities, recreational activities ▪ Changes in biotic conditions ▪ Other human intrusions and disturbances ▪ Invasive non-native species ▪ Interspecific faunal relations
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features, and, ▪ The distribution of the qualifying features within the site.

Table B-22 Information about the North Pennine Moors SPA

Site Designation Status	North Pennine Moors SPA UK9006272
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	This large, 150,000 hectares area of moorland massif extends 110 km from north to south, between the Tyne Gap (Hexham) and the Ribble-Aire corridor (Skipton). Within the site is an extensive plateau of between 600m and 893m. The varied topography, hydrology, soils and underlying geology has contributed to a high degree of habitat heterogeneity. Vegetation is largely unenclosed heather moorland, either as blanket bog or drier alpine and sub-alpine heaths, with smaller areas of wetland, grassland, and other habitats, including a range of 'minority' habitats e.g. alpine pioneer formations, base-rich flushes, calaminarian grassland. Post-glacial relict flora and fauna are present. At the moorland fringes are areas of enclosed grassland including mountain hay meadows which have been managed at a relatively low level of agricultural intensification and so retain a diversity of meadow species. Bird populations of international importance are present.
Qualifying features	<p>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</p> <p>During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Circus cyaneus</i> 2.2% of the GB breeding population Count as at 1993 and 1994 ▪ <i>Falco columbarius</i> 10.5% of the GB breeding population Estimated population ▪ <i>Falco peregrinus</i> 1.3% of the GB breeding population Count as at 1991 ▪ <i>Pluvialis apricaria</i> [North-western Europe - breeding] at least 6.2% of the GB breeding population Estimated population
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Reduced fecundity/ genetic depression ▪ Grazing ▪ Fire and fire suppression ▪ Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.) ▪ Human induced changes in hydraulic conditions
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features

- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Table B-23 Information about the Holburn Lake and Moss SPA

Site Designation Status	Holburn Lake and Moss SPA UK9006041
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	Holburn Lake and Moss SPA, which is situated inland in rural east Northumberland, is an important winter roost for Greylag geese <i>Anser anser</i> . The habitat used by the geese on the site is restricted to Holburn Lake, although the site also includes lowland raised bog and upland heath which are not used by the geese. Greylag geese also make use of open-water habitat on nearby land which is not covered by the SPA designation.
Qualifying features	ARTICLE 4.2 QUALIFICATION (79/409/EEC) Over winter the area regularly supports: <ul style="list-style-type: none"> ▪ <i>Anser anser</i> [Iceland/UK/Ireland] 2.2% of the population 5 year peak mean 1991/92-1995/96
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Abiotic (slow) natural processes ▪ Human induced changes in hydraulic conditions ▪ Changes in biotic conditions
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely ▪ The population of each of the qualifying features, and, ▪ The distribution of the qualifying features within the site.

Table B-24 Information about the Irthinghead Mires Ramsar Site

Site Designation Status	Irthinghead Mires Ramsar site UK11032
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	A composite site embracing seven separate areas of mire near the Irthing River's source. The site displays internationally important examples of blanket mire, a notable variety of mosses, and typical mire vegetation. It supports breeding waders, several rare plants, and a rare spider. The mires appear to be gradually drying-out as a result of nearby afforestation.
Qualifying features	<p><u>Ramsar criterion 1</u> Supports an outstanding example of undamaged blanket bogs which are characteristic of the vegetation of upland north-western Britain. Most English (and many Scottish) blanket bogs have been extensively degraded by afforestation, burning, agricultural drainage and overgrazing. The Irthinghead Mires are one of few examples of this vegetation type in a near-natural state. There is also good representation of different topographic mire type and surface patterning.</p> <p><u>Ramsar criterion 2</u> A notable variety of Sphagnum mosses.</p> <p><u>Ramsar criterion 3</u> Butterburn Flow several rare plants, whilst a rare spider, Eboria caliginosa, has been recorded at Coom Rogg Moss.</p>
Vulnerabilities of the European Site	None recorded
Conservation Objectives of the European Site	Conservation objectives are not available for Ramsar sites.

Table B-25 Information about the Holburn Lake and Moss Ramsar Site

Site Designation Status	Holburn Lake and Moss Ramsar site UK11030
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	An artificial lake and island supporting reedbeds and adjacent mire areas supporting various species of typical mire vegetation. The lake is a roosting site for internationally important numbers of geese.
Qualifying features	<p><u>Ramsar criterion 1</u> The site is a nationally rare example of a lowland raised mire.</p> <p><u>Ramsar criterion 3</u> The site is an important winter roost site for greylag geese, of which the entire Icelandic race winters in Britain.</p> <p><u>Ramsar criterion 4</u> Regularly visited by large flocks of mallard <i>Anas platyrhynchos</i>, wigeon <i>Anas penelope</i> and teal <i>Anas crecca</i>, provides an inland roost for coastal wildfowl during unfavourable weather conditions. A few pairs of shelduck <i>Tadorna tadorna</i>, shoveler <i>Anas clypeata</i> and tufted duck <i>Aythya fuligula</i> regularly breed here.</p> <p><u>Ramsar criterion 6 – species/populations occurring at levels of international importance.</u> Qualifying Species/populations (as identified at designation): Species with peak counts in winter:</p> <ul style="list-style-type: none"> ▪ Greylag goose (<i>Anser anser anser</i>), Iceland/UK, Ireland 2150 individuals, representing an average of 2.4% of the population (Source period not collated)
Vulnerabilities of the European Site	None recorded
Conservation Objectives of the European Site	Conservation objectives are not available for Ramsar sites, therefore the conservation objectives for Holburn Lake and Moss SPA have been referenced.

Table B-26 Information about the Lindisfarne Ramsar Site

Site Designation Status	Lindisfarne Ramsar site UK11036
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	Extensive intertidal flats, with a large area of saltmarsh, a major sand dune system with well-developed dune slacks supporting beds of <i>Zostera</i> . The slacks provide food for an internationally important flock of wintering geese, <i>Branta bernicla hrota</i> (2,428), of the Spitzbergen breeding population. Various species of ducks and geese winter in internationally important numbers regularly exceeding 20,000 individuals. The site is of national importance for breeding terns. The dune systems support a rich flora and diverse invertebrate fauna. Tourism attracts up to 750,000 visitors annually.
Qualifying features	<p><u>Ramsar criterion 1</u></p> <p>This site contains extensive intertidal flats, together with a large area of saltmarsh, and major sand dune system with well developed dune slacks.</p> <p><u>Ramsar criterion 5</u></p> <p>Assemblages of international importance:</p> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> ▪ 44970 waterfowl (5 year peak mean 1998/99-2002/2003) <p><u>Ramsar criterion 6 – species/populations occurring at levels of international importance.</u></p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> ▪ Light-bellied brent goose, (<i>Branta bernicla hrota</i>), Svalbard 2799 individuals, representing an average of 55.9% of the population (5 year peak mean 1998/9-2002/3) ▪ Eurasian wigeon (<i>Anas Penelope</i>), NW Europe 10857 individuals, representing an average of 2.6% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Ringed plover (<i>Charadrius hiaticula</i>) Europe/Northwest Africa 114 individuals, representing an average of 0.3% of the GB population (5 year peak mean 1998/9-2002/3 - spring peak) ▪ Common redshank (<i>Tringa totanus tetanus</i>), 1572 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3) <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> ▪ Greylag goose (<i>Anser anser answer</i>), Iceland/UK, Ireland 750 individuals, representing an average of 0.9% of the GB population (5 year peak mean for 1995/6-1999/2000) ▪ Bar-tailed godwit (<i>Limosa lapponica lapponica</i>), W Palearctic 3757 individuals, representing an average of 3.1% of the population (5 year peak mean 1998/9-2002/3)

Vulnerabilities of the European Site

The site is vulnerable to:

- Introduction/invasion of non-native animal species

Conservation Objectives of the European Site

Conservation objectives are not available for Ramsar sites, therefore the conservation objectives for Lindisfarne have been referenced.

Table B-27 Information about the Teesmouth and Cleveland Coast Ramsar Site

Site Designation Status	Teesmouth and Cleveland Coast Ramsar site UK11068
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	An estuary, highly modified by human activities, encompassing a range of habitats including sand and mud flats, rocky shore, saltmarsh, freshwater marsh, and sand dunes. Nationally and internationally important numbers of various species of waterbirds stage and winter at the site. The site supports a rich assemblage of invertebrates, including seven nationally rare species. Human activities include recreation, hunting, and fishing.
Qualifying features	<p><u>Ramsar criterion 5</u> Assemblages of international importance: Species with peak counts in winter</p> <ul style="list-style-type: none"> ▪ 9528 waterfowl (5 year peak mean 1998/99-2002/2003) <p><u>Ramsar criterion 6 – species/populations occurring at levels of international importance.</u> Qualifying Species/populations (as identified at designation): Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> ▪ Common redshank (<i>Tringa totanus tetanus</i>), 883 individuals, representing an average of 0.7% of the GB population (5 year peak mean 1998/9-2002/3) <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> ▪ Red knot (<i>Calidris canutus islandica</i>), W & Southern Africa (wintering) 2579 individuals, representing an average of 0.9% of the GB population (5 year peak mean 1998/9-2002/3)
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Eutrophication
Conservation Objectives of the European Site	Conservation objectives are not available for Ramsar sites.

Table B-28 Information about the Northumbria Coast Ramsar Site

Site Designation Status	Northumbria Coast Ramsar site UK11049
Location of European Site	The site is located within the North East CA area.
Brief Description of the European Site	Comprises several discrete sections of rocky foreshore between Spittal, in the north of Northumberland, and an area just south of Blackhall Rocks in County Durham. These stretches of coast regularly support internationally important numbers of purple sandpiper (<i>Calidris maritima</i>) and turnstone (<i>Arenaria interpres</i> , 1739 individuals, 2.6 % of the Eastern Atlantic Flyway population). The Ramsar site also includes an area of sandy beach which supports a nationally important breeding colony of little tern and parts of three artificial piers which form important roost sites for purple sandpiper. The 96% of the site composed of Wetland Type D (rocky marine shore) includes cliffs, crags/ledges, intertidal rock, open coast (including bay), and pools and assists in shoreline stabilization, dissipation of erosive forces, and sediment trapping. Little terns are vulnerable to disturbance by tourists in the summer causing reduced breeding success, and the National Trust employs wardens in summer to protect the little tern colony. A range of recreational activities takes place along the coast, including walking, camping, sea angling, birdwatching, and water sports (water skiing, sailing, windsurfing and canoeing). Birdwatching is particularly popular at Druridge Bay. In addition to many day trippers who come to the site, a sizeable population of summer visitors stay in caravan parks and other accommodation along the coast.
Qualifying features	<p><u>Ramsar criterion 6 – species/populations occurring at levels of international importance.</u></p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species regularly supported during the breeding season:</p> <ul style="list-style-type: none"> ▪ Little tern (<i>Sterna albifrons albifrons</i>), W Europe 43 apparently occupied nests, representing an average of 2.2% of the GB population (Seabird 2000 Census) <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> ▪ Purple sandpiper (<i>Calidris maritima maritima</i>), E Atlantic -wintering 291 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Ruddy turnstone (<i>Arenaria interpres interpres</i>), NE Canada, Greenland/W Europe & NW Africa 978 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)
Vulnerabilities of the European Site	None recorded
Conservation Objectives of the European Site	Conservation objectives are not available for Ramsar sites.

Table B-29 Information about the Tyne and Nent SAC

Site Designation Status	Tyne and Nent SAC UK0030293
Location of European Site	970 m west of the North East CA boundary.
Brief Description of the European Site	Tyne and Nent calaminarian grasslands are anthropomorphic in origin, and have been formed by the rivers Tyne and Nent depositing former mining debris/spoil on riverbanks and floodplains. The term 'calaminarian' refers to these deposits that contain high concentrations of heavy metals- typically copper, lead, zinc and cadmium. The impact of the deposition is the formation of vegetation communities that show high tolerance to the polluted mine spoil, or at least can grow without the competition that they would otherwise receive in more mesotrophic grassland. Hence, sparsley vegetated habitats evolve which have species such as alpine pennycress, scurvygrass, thrift, and spring sandwort amongst others. Lichens may also be a feature of these habitats.
Qualifying features	Annex I habitats that are a primary reason for selection of this site <ul style="list-style-type: none"> ▪ 9180 <i>Tilio-Acerion</i> forests of slopes, screes and ravines
Vulnerabilities of the European Site	The site is vulnerable to: <ul style="list-style-type: none"> ▪ Air pollution, air-borne pollutants ▪ Interspecific floral relations ▪ Forest and Plantation management & use
Conservation Objectives of the European Site	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> ▪ The extent and distribution of qualifying natural habitats ▪ The structure and function (including typical species) of qualifying natural habitats, and, ▪ The supporting processes on which qualifying natural habitats rely

Table B-30 Information about the Farne Islands SPA

Site Designation Status	Farne Islands SPA UK9006021
Location of European Site	2.45 km east of the North East CA boundary.
Brief Description of the European Site	The Farne Islands are a group of rocky Islands stretching from between 2.4 to 7.6 km offshore. The islands are rocky plateaus formed from Whin Sill rock, the total area of all the islands is 101 ha consisting of 15 – 20 islands depending on tide, they are split into the Inner Farnes and the Outer Farnes. The botanical interest is limited but the islands are famous as a breeding ground for grey seal and as a seabird nesting colony.
Qualifying features	<p>ARTICLE 4.1 QUALIFICATION (2009/147/EC)</p> <p>During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> ▪ Roseate tern <i>Sterna dougallii</i> (Europe - breeding) 1.88% of the GB breeding population in (1985); ▪ Common tern <i>Sterna hirundo</i> (Northern/Eastern Europe - breeding) 1.69 % of the GB breeding population in (1985); ▪ Arctic tern <i>Sterna paradisaea</i> (Arctic - breeding/Southern Oceans - wintering) 3.78% of the GB breeding population over a 5 year peak mean (2010-2014); ▪ Sandwich tern <i>Sterna sandvicensis</i> (Western Europe/Western Africa) 7.84% of the GB breeding population 5 year peak mean (2010-2014). <p>ARTICLE 4.2 QUALIFICATION (2009/147/EC):</p> <p>An internationally important assemblage of seabirds.</p> <p>In the breeding season the area regularly supports 163,819 individuals (5 year peak mean 2010-2014) including the 5 species listed above plus: <i>Fratercula arctica</i>, <i>Phalacrocorax carbo</i>, <i>Phalacrocorax aristotelis</i> and <i>Rissa tridactyla</i>.</p> <p>Site regularly supports <i>Uria aalge</i> 1.72% of the aalge biogeographic population over a 5 year peak mean (2010-2014).</p>
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Outdoor sports and leisure activities ▪ Changes in biotic conditions ▪ Other human intrusions and disturbances ▪ Invasive non-native species ▪ Interspecific faunal relations
Conservation Objectives of the European Site	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> ▪ The extent and distribution of the habitats of the qualifying features ▪ The structure and function of the habitats of the qualifying features ▪ The supporting processes on which the habitats of the qualifying features rely

- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Table B-31 Information about the Din Moss – Hoselaw Loch Ramsar Site

Site Designation Status	Din Moss – Hoselaw Loch Ramsar site
Location of European Site	3.2 km north of North East CA boundary.
Brief Description of the European Site	A small freshwater lake with associated fen and raised mire that provides a roosting site for internationally important numbers of wintering geese (2,008) from the Icelandic breeding population. Human activities include bird hunting on nearby lands.
Qualifying features	<p><u>Ramsar criterion 6 – species/populations occurring at levels of international importance</u></p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> ▪ Pink-footed goose (<i>Anser brachyrhynchus</i>), Greenland, Iceland/UK 1180 individuals, representing an average of 0.4% of the population (5 year peak mean 1991/92-1995/96) ▪ Greylag goose (<i>Anser anser</i>), Iceland/UK, Ireland 2054 individuals, representing an average of 2.3% of the population (Source period not collated)
Vulnerabilities of the European Site	None reported.
Conservation Objectives of the European Site	Conservation objectives are not available for Ramsar sites, therefore the conservation objectives for Din Moss – Hoselaw Loch SPA have been referenced.

Table B-32 Information about the Din Moss – Hoselaw Loch SPA

Site Designation Status	Din Moss – Hoselaw Loch SPA UK9004291
Location of European Site	3.2 km north of North East CA boundary.
Brief Description of the European Site	Hoselaw Loch is a shallow, naturally nutrient-rich loch. Towards the south west end of the loch is Din Moss, one of the largest and most intact areas of raised bog in the Scottish Borders. The loch is used by overwintering wildfowl, particularly pink-footed geese.
Qualifying features	<p>ARTICLE 4.2 QUALIFICATION (2009/147/EC)</p> <p>Over winter the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Anser anser</i>: over 3% of the Iceland/UK/Ireland population no count period specified: ▪ <i>Anser brachyrhynchus</i> over 1% of the Eastern Greenland/Iceland/UK population no count period specified.
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Changes in biotic conditions ▪ Other forms of pollution ▪ Renewable abiotic energy use
Conservation Objectives of the European Site	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> ▪ Population of the species as a viable component of the site ▪ Distribution of the species within site ▪ Distribution and extent of habitats supporting the species ▪ Structure, function and supporting processes of habitats supporting the species ▪ No significant disturbance of the species

Table B-33 Information about the Langholm - Newcastleton Hills SPA

Site Designation Status	Newcastleton Hills SPA UK9003271
Location of European Site	9.1 km west of the North East CA boundary
Brief Description of the European Site	This 7,544 ha SPA regularly supports a breeding population of hen harrier although this has fallen in recent years.
Qualifying features	<p>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</p> <p>During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> ▪ <i>Circus cyaneus</i> 2.7% of the GB breeding population Count as at 1994-1998
Vulnerabilities of the European Site	<p>The site is vulnerable to:</p> <ul style="list-style-type: none"> ▪ Interspecific faunal relations ▪ F03 Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.) ▪ Other ecosystem modifications ▪ Grazing
Conservation Objectives of the European Site	<p>To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> ▪ Population of the species as a viable component of the site ▪ Distribution of the species within site ▪ Distribution and extent of habitats supporting the species ▪ Structure, function and supporting processes of habitats supporting the species ▪ No significant disturbance of the species

Appendix C. Screening Assessment Tables

C.1 Policy Screening Table

Policy	Policy Proposal	LSE	Justification
Planning journeys/informing users/ supporting customers			
<p>1) Information, help, or assistance should be easily available and accessible to everyone before, during, and after a journey.</p>	<p>Information provided on our integrated transport network should be reliable, helpful, consistent, clear, accessible to all, and should be available for every stage of the door-to-door journey. It should also be able to be adapted to suit the individual needs, meeting the varied requirements of people and freight. This should ensure customers feel supported throughout their journey.</p> <p>There should be more joined-up information informing users about station facilities, and how to access hubs and interchanges by different types of transport.</p> <p>Enhanced levels of information should make it easier for residents and visitors to travel to and from stations, tourism assets, and employment centres by sustainable transport.</p> <p>Technology should continuously evolve and improve the customer experience, remaining easy to use, intuitive, and engaging for everyone.</p> <p>People should be able to easily contact the network to raise queries or feedback compliments, regardless of the transport type. Feedback from network users should be responded to promptly and clearly.</p> <p>At the end of the journey, people should still be able to interface with the network if they need to do so and people should find it easy to offer feedback about their experience.</p> <p>People should receive a considered and appropriate response to all queries, complaints, and comments.</p> <p>Customer support for an integrated network should include everything users need to support them in making a journey, such as information, ticketing, the ability to make complaints, and to report and retrieve lost property.</p>	No	<p>Policy will not lead to development as it is focussed on improving customer information through the use of technology.</p>



Policy	Policy Proposal	LSE	Justification
<p>2) Live journey information should be accurate and consistent wherever and however it is being accessed. It should be presented in a way which is understandable and trusted by people.</p>	<p>People should be informed about how their journey is progressing, and each step should be simple to navigate, improving the customer experience.</p> <p>As people navigate the network signage should be easy to follow and technological prompts should be available, all of which will continue to evolve as technology develops over time.</p> <p>Information provision should include comprehensive detail informing users of services and facilities which are available on the network. For example, there should be live information showing the number of available car park spaces, park and ride spaces, the number of available cycle hires docked, cycle storage spaces, as well as the number of available charge points for electric vehicles.</p> <p>Live journey updates should include live information across all forms of transport, highlighting journey times, roadworks, disruption, delays, and congestion. If disruption does occur during a journey, people should be presented with alternative solutions. This should also help support the movement of freight.</p> <p>The integrated network should provide a new app so that users can better plan journeys. As technology advances, the network should offer personalised journey updates and alert systems. People should be informed via live journey information if their usual bus is running late, there is disruption on their route or if a connecting service is running late, and the time it can be expected arrive. Journey updates should also include relevant information on onward journeys.</p> <p>Data from our Urban Traffic Management and Control (UTMC) systems should be increasingly used to provide up-to-date and accurate information directly and instantaneously to vehicles, so people are aware of issues as they happen such as road accidents, roadworks, lane closures, diversions, traffic signal faults, and impacts of extreme weather. UTMC systems should also be used to enable bus services to run to timetable and be more punctual.</p> <p>Our transport network should be actively managed with live journey data being centrally processed to enhance coordination and consistency, not only allowing information sharing, but also interactively changing the way our network performs through traffic signals on our highways, also improving the efficient flow of freight.</p>	<p>No</p>	<p>Policy will not lead to development as it is focussed on improving customer information through the use of technology.</p>

Policy	Policy Proposal	LSE	Justification
	Open data should be used to improve journey planning and improve live journey information for people.		
3) The integrated network should have a strong identity to give confidence in the network and encourage people to make greener journeys.	The integrated network should be a quality product which should help people to make greener journeys. A range of impactful education, campaigning, marketing, and other tools should be used to promote the network. This should include advising people where to go to find information to help them plan and make a journey.	No	Policy will not lead to development as it is focussed on improving customer experience.
Ticketing and fares			
4) Fares and tickets should be as simple and easy to use as possible. Better integrated ticketing and fares should mean easier journeys. Fare structures and pricing should be convenient and simple with unnecessary complexities being removed.	<p>There should be simple fare bands which are affordable. This should include fare capping with a maximum daily, and weekly fare charge regardless of the number of journeys made. This should also include initiatives for children and young people to ensure fares are affordable, helping to reduce child poverty in the region.</p> <p>There should be a specific focus on offering great value ticketing and fares products which help people reach education or new employment opportunities previously beyond their reach. In addition to this, there should be specific initiatives to support people getting back into work or training.</p> <p>Ticketing products and payment methods should allow seamless travel across different types of transport, without the need to purchase separate tickets for each part of a journey, including park and ride, electric vehicle charging, public transport, and cycle hire.</p> <p>The Pop Card should be expanded beyond bus and Metro so it can also be used on local rail services.</p> <p>There should be a range of payment methods that can be used to support people who don't use a smart phone or have access to online banking.</p> <p>People should be able to tap in and out at the start and end of a journey, simplifying payment, and further technological advancements should enhance this experience</p>	No	The policy is aimed at affordability for users and in itself will not lead to development.

Policy	Policy Proposal	LSE	Justification
	<p>by making payment even more seamless. A fully integrated public transport system should mean making one payment.</p> <p>Rewards and incentives should be considered within the network, whereby active travel and public transport use is rewarded.</p> <p>Ticketing and fares initiatives should also support and promote the North East's tourism assets, making sustainable travel more convenient for tourists visiting our region.</p> <p>Our ticketing and fare's structure should be perceived as fair, supporting the North East CA vision and commitments.</p>		
<p>5) People should be able to travel across the whole region, between rural and urban areas, incorporating bus, Metro, rail, and the Shields Ferry without needing to buy multiple tickets and with payment methods that enable seamless travel.</p>	<p>Unified ticketing and fares should enable people to use a single ticket or payment across different types of transport, making the network simple to use. The ability to make seamless journeys through easy ticketing and payment should be a key feature of the integrated network.</p> <p>Ticketing and payments should also integrate with wider transport services such as EV charging, Park and Ride, car clubs, and cycle and e-scooter hire, enabling network users to plan and pay for their entire door to door journey through a single offer and platform.</p> <p>Integrated fares and ticketing should make it easier for people travelling to and from our region's national and international gateways, such as Newcastle International Airport, Port of Tyne's International Passenger Terminal, and mainline railway stations.</p>	<p>No</p>	<p>The policy is aimed at affordability for users and in itself will not lead to development.</p>
<p>Reach and resilience of infrastructure</p>			
<p>6) The geographical reach of the integrated transport network should extend into</p>	<p>The reach of the integrated transport network should be expanded, connecting people to towns, cities, employment, education, housing growth, and essential services.</p>	<p>Yes</p>	<p>The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.</p>

Policy	Policy Proposal	LSE	Justification
<p>every community of the North East, including our rural and coastal areas.</p>	<p>The coverage of our public transport network should increase throughout our region, regardless of the type of location, in terms of operation times and locations served.</p> <p>Bus services should be improved to support region-wide efforts to address our region’s economic, environmental and health challenges, enabling more people to access work and training opportunities.</p> <p>In addition to this, the North East CA should also work with the area’s local authorities to support and maximise existing bus routes.</p> <p>Rail partnerships should be established to meaningfully influence and shape local rail services and investment decisions that affect our communities, enhance the reach and resilience of the network and further integration with the Tyne and Wear Metro.</p> <p>Expanding the reach of the network should also enable seamless access to our key gateways such as Newcastle International Airport, sea ports and national rail services.</p> <p>There should be no “one size fits all” approach to the network, ensuring the needs of people living in rural areas are taken into account, helping to address transport related social exclusion (TRSE). For example, the network should have flexible, demand responsive transport, community transport, mobility hubs, and services feeding into stations and interchanges.</p> <p>Examples of new services that could be made available across the region include bike hire (including electric bikes), car hire and sharing (car clubs), ‘Mobility as a service’ (MAAS) where digital transport service platforms enable users to access, pay, and get live journey information on a range of public and private transport options and sharing opportunities for freight and other transport. In addition to this, our current cycle network should be expanded so it covers more of the region, including our rural communities.</p> <p>Our integrated transport network should include ‘mobility hubs’: visible, safe, and accessible spaces where public transport and active travel are co-located alongside improvements to the public realm, along with community facilities.</p>		



Policy	Policy Proposal	LSE	Justification
	<p>There should be a clear ‘look and feel’ of the network highlighting its comprehensive reach across the North East. Park and ride provision should be comprehensive.</p> <p>There should be more park and ride provision in our rural areas and remote coastal communities to help link our residents and visitors to the public transport elements of the network.</p> <p>The North East CA should seek to continue to develop the future Metro and local rail network for more stations and future expansion plans.</p> <p>How do we get there? – The Leamside Line</p> <p><i>Proposals to reopen the Leamside Line and expand the reach and resilience of our Metro network are included as part of the LTP delivery plan.</i></p> <p><i>The full reopening of the Leamside Line in the North East is an integral part of any national programme to upgrade capacity on the East Coast Main Line (ECML). By diverting slow-moving freight traffic, it would enable up to nine passenger trains per hour to run on the congested section of the ECML between Newcastle and Northallerton. This provides the ECML with much-needed capacity, allowing for the expansion of long-distance rail connections between London and Edinburgh via the North East.</i></p> <p>Taking Metro to Washington</p> <p>The Leamside Line would also provide direct access to the region’s rail and Metro network for communities in Washington, Penshaw, West Rainton, Ferryhill, and Fencehouses. Some of these areas suffer from high levels of deprivation, and fast new connections into Newcastle and beyond would help foster economic growth and social inclusion.</p> <p><i>To date, the North East CA has utilised a combination of its own funding and government grants to develop a business case for the full Leamside Line. In partnership with Nexus, we have also progressed the extension of the Tyne and Wear Metro to Washington using the northern section of the Leamside alignment. However, a project of this scale and transformational impact will ultimately require access to central Government funding streams. We are therefore calling on the Government to take the full restoration of the Leamside Line forward as a national</i></p>		



Policy	Policy Proposal	LSE	Justification
	<i>project, with input from the North East CA as a local partner, as part of a long-term programme to future-proof the ECML.</i>		
<p>7) To support the development of the integrated network, there should be a joined-up approach to transport infrastructure investment and spatial planning.</p>	<p>New employment sites and housing should have strong sustainable travel links, such as public transport and active travel. New development such as housing or businesses should also be served by a range of high-quality walking, wheeling and cycling links. Sustainable transport provision should be an integral part of any new development.</p> <p>There should be enhanced infrastructure to improve freight connectivity and delivery services. For example, improving road freight movements into and out of Newcastle International Airport and our five seaports.</p> <p>Routes, services, and infrastructure should also directly connect communities to large employment sites, urban centres, out of town business parks, rural coastal communities, and village centres.</p> <p>Expanding the reach of the integrated network into every community should be developed through engaging with communities to ensure that elements of the network properly meet local needs and circumstances.</p> <p>There should be a full review of public transport accessibility as early as possible which will inform where there are gaps and where improvements need to be made. The results from the accessibility review should be used to set out how to make sure all bus and Metro stops are accessible to disabled people, for example, and that transport staff are provided with Disability Equality training.</p>	<p>Yes</p>	<p>The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.</p>
<p>8) Transport services should meet the demands of people, accommodating shift patterns for work and late evening social activities,</p>	<p>More people should be able to access sustainable transport, reducing reliance on cars. People of all ages, especially those without access to a car should benefit from enhanced reach and connectivity of the network. Public transport services should start earlier and end later.</p>	<p>Yes</p>	<p>The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.</p>

Policy	Policy Proposal	LSE	Justification
enhancing the reach of the network.			
9) There should be strong transport connectivity beyond our boundaries for both people and freight.	<p>More freight should travel sustainably by rail. Our region should have a Strategic Rail Freight Interchange (SRFI) to enable intermodal rail freight services to and from our region. There should be a fair allocation of rail network capacity for both passenger and freight services.</p> <p>Our region should have a defined Key Route Network (KRN) to support the movement of people and goods, provide direct connections to major transport interchanges and to proposed new development sites. It will also consider which roads in the region are most important for regional road-based freight movements. Given regional investment priorities for the Major Road network (MRN) are set by Transport for The North (TfN), the North East CA should work with TfN to make the case for investment in the North East and ensure there is a clear route to mitigation of the carbon impacts of its programme.</p>	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
10) Infrastructure that enables people to walk, wheel, or cycle should be central to the transport network and should link to public transport for longer journeys.	<p>Cycle and walking routes should be joined-up and link together public transport stations, interchanges, and other locations such as key tourist attractions, employment sites, education, essential services, new housing developments, and access to green spaces.</p> <p>There should be wide, segregated, and well-maintained pedestrian infrastructure with reduced street clutter, dropped kerbs, ramp access provision where needed, and other inclusive infrastructure such as well-designed crossing points. Where possible, in rural areas active travel links between neighbouring areas, services and public transport interchanges should be improved and these routes should have high levels of infrastructure maintenance.</p> <p>The region should have an affordable and accessible regional cycle hire scheme, also offering electric bikes. This could support first and last mile journeys and help expand the reach of the network.</p>	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
11) The network should be able to deal with	Investment should be made in existing and new services and infrastructure to ensure it is resilient and capable of providing a punctual and reliable service.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is

Policy	Policy Proposal	LSE	Justification
<p>disruptions, accidents, and extreme weather more effectively.</p>	<p>Our highways should be managed in a way that provides the best possible improvements for all users within the resources that are available. Prioritising safety enhancements, regular maintenance for all users, including people and freight, should help to improve the resilience of roads.</p> <p>Resilience should also be a key factor for further improvements to our region's public transport offer and for enhancing the current public transport facilities, including through regular maintenance.</p> <p>Potholes and surface imperfections on our roads should be addressed and drainage should be regularly maintained to mitigate flooding.</p> <p>Public transport in our region should be more reliable and able to cope better with different types of weather and where there is a fault or issue on part of the system.</p> <p>Our region should be able to effectively secure maintenance funding for different types of infrastructure which make up the transport network.</p> <p>How do we get there? – Metro signalling</p> <p><i>The signalling system used by the Metro to control the safe movement of trains across the network is in urgent need of replacement.</i></p> <p><i>Failure to invest in this project will result in increased failures of the signals which would impact reliability, increase delays, and reduce the attractiveness of Metro as a public transport option. In the long-term would result in sections of track being removed from use for a passenger service.</i></p> <p><i>To overcome these issues, there is a pressing need for a new signalling system from 2030. A main priority will be to develop the business case to replace the signalling system for the Metro network to ensure work can commence on replacing this critical asset by 2025 which will enable plans to expand the Metro network and to deliver a more resilient and efficient Metro network.</i></p> <p><i>A new signalling system to replace the current, outdated system to allow Metro to continue to operate safely, linking with capacity enhancements and expansion of the Metro network is included as part of the delivery plan.</i></p> <p>Our region should have a clear strategy to maintain and improve our transport assets, such as a Transport Asset Management Plan (TAMP), which should deliver</p>		<p>a potential risk of an LSE subject to design and location.</p>

Policy	Policy Proposal	LSE	Justification
	<p>strategic investment in our network focusing on long term asset performance and reduced liability for future generations.</p> <p>How do we get there? – A19 junctions north of Newcastle</p> <p><i>The A19 is a vital route connecting the North East with our border regions, the wider UK, as well as to our international links. It is also a key link for many of the North East’s important employment and economic growth sites. Lack of capacity is a significant issue at the junctions north of Newcastle: Moor Farm and Seaton Burn. These pinch points generate congestion, worsen air quality, result in unreliable journey times, and hold back our region’s economic growth.</i></p> <p><i>National Highways (NH) is the government-owned company that operates, maintains, and improves the strategic road network (SRN). The North East has been calling on NH to address these issues urgently.</i></p> <p>How do we get there? – A1 Morpeth to Ellingham</p> <p><i>A1 in Northumberland between Morpeth and Ellingham is currently suffering with congestion and safety problems. The planned project of dualling this section of road has been stalled many times at significant costs before it was finally confirmed in May 2024.</i></p> <p><i>National Highways need to deliver on this project at pace and without the delays and postponements that have held up delivery of this important scheme for the North East in recent years.</i></p> <p><i>For the resilience of our strategic road network to meet the needs of its users it is vital that the existing single lane sections of the A1 between Ellingham and Morpeth in Northumberland are dualled and that junction improvements on the A19 north of Newcastle take place. This will help address congestion, improve journey time reliability, and unlock growth opportunities.</i></p> <p>Both of these regional interventions are included as part of the LTP delivery plan. We should continue the fight to secure the backing needed to dual the A1 to Scotland.</p> <p>Community engagement should take place to ensure that the network quality meets the needs of all its people.</p>		



Policy	Policy Proposal	LSE	Justification
<p>12) Our highway network should provide essential access to all areas of the region, with particular emphasis on rural and coastal communities, who often bear the brunt of disruptive weather patterns.</p>	<p>Our Strategic and Key Route Network (KRN) should have a built-in resilience. For example, there should be high standards of drainage, lighting, highway surface materials and road conditions. This should allow our region’s road network to serve the needs of our region to 2040.</p> <p>Our UTMC centres should be used to make the integrated transport network more resilient. For example, using Intelligent Transport Systems (ITS) to improve the flow of traffic.</p>	<p>Yes</p>	<p>The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.</p>
<p>13) Charging infrastructure for Zero Emission Vehicles (ZEVs) should be present across the whole network, including at key stations and interchanges and rapid charging hubs.</p>	<p>People should be able to conveniently and reliably charge their electric vehicles using a public charge point wherever they need to regardless of whether they live in urban, sub-urban, or rural locations.</p> <p>Public charge point infrastructure should cover remote rural communities with lower levels of utilisation and urban areas with high deprivation and low car ownership to ensure comprehensive provision.</p> <p>There should be more publicly available EV charging infrastructure throughout our region, including comprehensive coverage at hubs on major routes and at visitor destinations. The provision of rapid EV charging hubs should be supported on major routes and visitor destinations.</p> <p>Electric vehicle charging should become part of everyday life, just like refuelling a petrol or diesel car or van.</p> <p>ZEV infrastructure should not be only limited to electric vehicle charging, the development of hydrogen as an alternative zero emission fuel for heavy transport (large vans, heavy goods vehicles, buses, and trains), should have advanced further and form part of the integrated network.</p>	<p>Yes</p>	<p>The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.</p>
<p>14) Capacity should be boosted</p>	<p>Investing in long distance transport infrastructure increasing the capacity and resilience of the East Coast Main Line and Durham Coast Line should improve our</p>	<p>Yes</p>	<p>The policy may lead to improvements to transport infrastructure, therefore, there is</p>

Policy	Policy Proposal	LSE	Justification
<p>on the East Coast Main Line and the Durham Coast Line to meet our need for more long-distance rail passenger and freight services, supporting strong connectivity beyond our boundaries.</p>	<p>region's connectivity. There should also be improved local rail connectivity on the ECML north of Newcastle.</p> <p>Improved national rail links should also enable the North East to welcome new businesses and organisations to be based here.</p> <p>How do we get there? – Improving East Coast Main Line (ECML) capacity and resilience</p> <p><i>The East Coast Main Line (ECML) capacity has been a consistent area of focus in the North East's engagement with Government, Network Rail and Transport for the North.</i></p> <p><i>The single most significant barrier to improving the external rail connectivity of the North East is the ECML reducing from four tracks to two between Northallerton and Newcastle which means that only 6 trains per hour can run from and to the North East on this section. Also, on the ECML corridor to Edinburgh having few locations where long-distance services can overtake slow-moving freight, limits growth in potential rail connections.</i></p> <p><i>Without major upgrades in the North East and elsewhere, the ECML will be unable to meet these future demands.</i></p> <p><i>The LTP delivery plan identifies the need to fast-track capacity upgrades to the ECML in the North East, including an intervention to release capacity for more trains to/from London without disrupting existing passenger and freight flows.</i></p> <p>More people should be able to travel sustainably to and from our region's international gateways from right across the North East, benefitting residents, businesses, and tourists.</p> <p>There should be strategic investment in our transport links (surface access) to and from all areas of the North East to our five seaports and the airport to support the sustainable movement of both passengers and freight.</p> <p>New technologies should be trialled and introduced, unlocking investment opportunities, enabling freight to be delivered in new ways.</p> <p>There should be reduced journey times for the movement of people, and goods between freight centres in our region, those across the UK, and international gateways.</p>		<p>a potential risk of an LSE subject to design and location.</p>



Policy	Policy Proposal	LSE	Justification
Safety, especially of women and girls, and other improvements in service quality			
<p>15) There should be clear and effective channels through which to report harassment and violence against women and girls on the network.</p>	<p>Awareness should be raised of the channels available for women and girls to report any concerns they may have when travelling on the transport network; these channels should be accessible to all. This should include support for those who feel vulnerable before, during, or after journeys and should outline the short and long-term support available.</p> <p>Detailed guidance should be provided on what to do, and who to contact if anyone feels unsafe, concerned, or if they are a victim of an incident when using the network. This guidance should be developed in collaboration with women and girls to ensure it addresses the relevant issues and helps to build trust that reporting of incidents will lead to an effective outcome. Women and girls should be confident that the channels through which they report problems ensure that they are heard, provide confidence that action will be taken, and inform them of any outcomes that come from reporting.</p> <p>There should also be active encouragement for other passengers witnessing a situation to report it to network operators so that action can be taken.</p> <p>Improved reporting of incidents and concerns should help to identify the types of issues and the scale of the problem, helping to ensure that targeted action can be taken, and resources can be appropriately allocated.</p>	No	The scheme will not lead to development.
<p>16) Targeted action should be taken and resources should be assigned to prevent violence against women and girls on the region's transport network. This should cover preventing</p>	<p>There should be a zero-tolerance policy towards hate crime, anti-social behaviour of any kind or harassment on public transport towards passengers and staff.</p> <p>Resources should be targeted to ensuring the prevention of offences against women and girls, improving both safety but also people's perceptions of safety and security.</p> <p>This should include measures directly on the transport network but should also look to target the root causes of issues and educate people.</p> <p>Additional CCTV, enhanced security on the network and body worn cameras should be widespread to prevent issues before they occur and play a role in catching perpetrators and bringing them to justice. Beyond this however, they should provide reassurance to passengers. Resources should be targeted on areas identified by</p>	No	The policy is aimed at improving safety, whilst additional CCTV may be erected this would not cause an LSE.

Policy	Policy Proposal	LSE	Justification
<p>offences from happening but should also look to tackle the root causes of violence and prevent it from developing.</p>	<p>women and girls in the region as feeling unsafe. This should include days of action to offer a presence in response to identified higher rates of incidents, or circumstances that may lead to the possibility of a higher rate of incidents across the transport network.</p> <p>Enhanced training should be provided to staff across the network to help prevent and manage violence against women and girls and provide reassurance. Gaps in current training and safety practices should be identified and filled. There should be greater levels of professional and friendly staffing presence to improve safety, and perceptions of safety, on the public transport element of the integrated network. There should also be close partnership working with the police to maintain a safe network.</p> <p>Additionally, there should be efforts taken to change behaviour and try to prevent the early causes of violence against women and girls on the transport network and improve safety. This should look to show people how to be active bystanders and provide awareness of inappropriate behaviour and attitudes to help prevent issues from occurring. Education should make people understand what makes women and girls uncomfortable and why, as well as informing about the consequences that could face offenders.</p>		
<p>17) Women and girls should have increased trust, confidence, and perceptions of safety on the transport network.</p>	<p>It should be safer and easier to walk, wheel, and cycle to and from key local destinations, for everyday journeys such as for work, healthcare, education, and leisure purposes, and to access other public transport.</p> <p>Direct action should be taken to create increased trust and confidence in the safety of the network and to improve perceptions of safety. To a degree, the standards outlined above will help to achieve this. Overt and covert days of actions should incorporate enforcement against offenders and improved reporting should help identify offenders exploiting the transport network.</p> <p>However, there should be further actions taken to improve the perception of safety and allow women and girls to build confidence in using the transport network. Improvements to physical infrastructure should play a significant role in this, including:</p>	Yes	<p>The policy may lead to development including improved lighting which could have an LSE on the European Sites subject to their location.</p>

Policy	Policy Proposal	LSE	Justification
	<ul style="list-style-type: none"> ▪ Improvements to public transport stops and stations to make them safer, such as better lighting, removing blind spots and clear safety information, including what to do in an emergency. ▪ The green, integrated transport network should bring new, safe bus stops, a vital addition that is too often overlooked. ▪ Better lighting, routes segregated from traffic and improved CCTV should also be present across the active travel network. Additionally, obstructions such as vegetation should be removed from routes, blind bends should be avoided, and routes should be planned around areas with higher footfall to ensure safe journeys. ▪ Active travel, taxi and car club infrastructure should be well integrated with public transport to ensure there are not long distances that need to be travelled at night between transport options, and these facilities should also be well-lit. ▪ Public electric vehicle charging infrastructure should be situated in well-lit locations with high passing footfall where possible. ▪ Additionally, investment should be directed into placemaking around transport hubs, making them pleasant places to be, increasing footfall and reducing the likelihood of people having to wait by themselves. Our streets should be welcoming and safe spaces for all people, enabling more journeys to be made by active travel and public transport. <p>Beyond physical interventions, awareness should continually be raised around the issues faced by women and girls on the transport network to ensure it remains a topic of discussion and improvements continue to be made to prevent violence and harassment.</p>		
<p>18) Roads should be made safer, with a specific focus on the most vulnerable users.</p>	<p>All road users in our region should feel safe when using the network, including pedestrians, cyclists, wheelers, car drivers, and heavy goods vehicle drivers. However, there should be a specific focus on making roads safer for the most vulnerable users (defined as pedestrians, cyclists, and motorcyclists). Our region should aim to reduce the amount of road casualties and fatalities year on year and should aspire for zero road deaths and serious injuries.</p>	<p>Yes</p>	<p>The policy may lead to improvements to roads, therefore, there is a potential risk of an LSE subject to design and location.</p>



Policy	Policy Proposal	LSE	Justification
	<p>With the support of the region's local highway authorities the region should draw up an action plan covering a holistic set of measures to reduce the number of North East road casualties, with the overall ambition for zero road fatalities and serious injuries by 2040, with an emphasis on working to achieve this sooner.</p>		
<p>19) Integrated public transport services on the network must comply with legal and policy accessibility requirements, including ensuring services are accessible for all. Drivers and staff should ensure that everyone feels welcome and safe at stations and on services, strengthening confidence in the network.</p>	<p>There should be further accessibility improvements on public transport so it is a truly integrated service and people with additional needs should be supported by staff on the network.</p> <p>Our communities should not be impacted negatively by vehicular traffic, with volumes, speeds, and any resultant air pollution being kept to a minimum. This includes ensuring heavy goods vehicles avoid residential areas where possible.</p> <p>Stations and interchanges should have secure car parks and cycle storage, so people have confidence that their vehicle or cycle are safe until they return to it. Cycle storage should allow for a range of cycle types to be stored securely at transport hubs, stations, and interchanges.</p>	<p>Yes</p>	<p>The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.</p>
<p>20) The customer experience should be transformed setting the highest service standards, where users can expect the</p>	<p>Our two Urban Traffic Management Control (UTMC) centres should be used to improve the functionality and performance of the integrated transport network.</p> <p>Public transport services should have timely arrivals and departures with minimal delays.</p> <p>People should be able to easily find pre-journey information on punctuality, customer satisfaction, and safety, increasing confidence in using the network.</p>	<p>No</p>	<p>This policy would not lead to development that could have an LSE on European sites.</p>

Policy	Policy Proposal	LSE	Justification
<p>provision of safe, reliable, clean, and efficient transport infrastructure.</p>	<p>The strategic highway network should offer more reliable journey times for the movement of both people and goods. This should help lead to a greater share of journeys being made by sustainable travel, as well as freeing up capacity on road network for essential journeys.</p> <p>Asset management plans should ensure that future weather patterns do not cause undue disruption.</p> <p>The use of Intelligent Transport Systems (ITS) incorporating UTMC and live journey time control should be enhanced to improve journey time reliability, reduce congestion and assisting people on the network.</p> <p><u>Cleanliness and maintenance</u></p> <p>There should be comprehensive cleaning regimes at public transport stations, stops, and interchanges to create a positive first impression for people.</p> <p>Cleanliness and hygiene standards should be maintained on public transport vehicles, with regular cleaning and maintenance schedules.</p> <p>Stations and interchanges should have comfortable, secure, well-lit, and clean facilities so people have confidence in using them.</p> <p>There should be high levels of cleanliness and maintenance of Park and Ride sites, mobility hubs and cycle storage facilities.</p> <p>EV chargepoint infrastructure for cars, vans and light goods vehicles should be of a consistent standard and well maintained across our region, facilitating confidence for people. Chargepoint infrastructure should be accessible for all users.</p> <p>Maintenance should be carried out promptly across the whole integrated transport network. Assets should be maintained in the best possible condition to ensure their continued efficiency of operation.</p>		
<p>21) The network should have consistent and cohesive branding such as colour schemes,</p>	<p>Signage and wayfinding should be consistent across the entire network, regardless of the type of location, including rural and coastal areas. Consistent and cohesive branding should also be applied online.</p> <p>Existing brands and sub-brands should live harmoniously as part of the integrated network.</p>	No	<p>This policy would not lead to development that could have an LSE on European sites.</p>

Policy	Policy Proposal	LSE	Justification
signage, design standards, and quality of service, so that there is a clear 'look and feel' of the network on routes, stops, and stations.	A prominent, unified transport network should lead to increased awareness of travel opportunities and help to increase the proportion of journeys made sustainably. This could strengthen our region's economy, environment, and the health of our people, meeting the North East CA vision and five commitments.		
22) The North East should set the highest standards for a fleet of green public transport vehicles.	The integrated network must help enable significant reduction in greenhouse gas emissions from transport. The North East should set the highest standards for a fleet of green, Zero Emission Buses operating as part of an integrated network. There should also be high quality facilities for HGV drivers, with alternative fuel infrastructure in place to support the decarbonisation of road freight.	No	This policy would not lead to development that could have an LSE on European sites.
23) People should feel a sense of pride in the network and be keen to use it again.	People should be able to provide feedback on their experience, allowing for improved passenger satisfaction and continuous improvement in service quality.	No	This policy would not lead to development that could have an LSE on European sites.
Connections between different transport types			
24) Our region should no longer consider different forms of transport as separate networks and move to one integrated and	Seamless travel across different types of transport should help people to make greener journeys depending on their personal and journey circumstances.	No	This policy would not lead to development that could have an LSE on European sites.

Policy	Policy Proposal	LSE	Justification
highly interconnected network where people can make seamless door to door journeys.			
25) The integrated network should be based around making it easier to switch between different types of transport including public transport, active travel, taxis, and other transport options such as Park and Ride, micromobility and community transport.	<p>Railway stations, bus and coach stops and stations, Metro stations, taxi ranks, mobility hubs, car parks, and cycle storage should all be places on the integrated network where seamless interchange between different types of transport take place.</p> <p>This is especially vital for services from rural areas where we need to ensure buses meet trains and vice versa for return journeys to reduce journey times and prevent lengthy wait times.</p> <p>There should also be sufficient electric vehicle charging points and bike parking at key stations and interchanges. The design and use of this infrastructure should all be planned around seamless integration.</p> <p>There should also be more infrastructure which supports journeys being made by different transport types. Physical links between different transport types should also be improved so that switching from one form of transport to another is as seamless as possible.</p> <p>Technology should enable people to automatically pass through gates with no physical interaction, ensuring fare going customers can get to and from Metro and trains more easily and comfortably.</p> <p>There should be a focus on ensuring there is strong integrated transport options for the beginning or end of an individual journey to or from a transport hub or service. Transport hubs and interchanges should be more multi-functional spaces that improve the passenger experience and ease the transition from type of transport to another. This could also support greater footfall and use of greener travel.</p>	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
26) There should be well co-ordinated public	Integrated public transport should be provided by interlinking services and timetables provided to make it easier for customers to make journeys this way.	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is

Policy	Policy Proposal	LSE	Justification
transport timetables and services which complement each other and enable seamless and smooth transfer from one type of transport to the next.	<p>More focus should be given to joining up services which should broaden their reach and enable people to get to places they want to go to by public transport.</p> <p>Active travel links should feed into key stations, mobility hubs, and interchanges with safe and secure cycle storage enabling transition onto other services.</p> <p>Timetables for different transport types should join up, creating an improved, integrated, and smooth journey experience. The public transport network linked to our key gateways such as Newcastle International Airport, and national rail services should be timetabled to reduce wait times for those travelling into and out of the North East.</p>		a potential risk of an LSE subject to design and location.
27) The Shields Ferry should continue to be a vital part of the integrated network, with even better linkages with other types of transport.	<p>The relocation of the Shields Ferry to the North Shields Fish Quay will ensure a direct sustainable river-based transport link between North and South Shields can be maintained. It should enable the transport network in this area to be fully integrated, supporting easy access to active travel routes, Metro, and bus services as well as other key locations on both sides of the River Tyne.</p>	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.
28) Park and ride provision should be comprehensive, enabling people to seamlessly switch onto fast and frequent onward journeys.	<p>There should be further development of park and ride services, better taxi ranks at railway stations, and adequate drop-off and pick up areas, recognising that the car or van may be the only option for certain journeys and personal circumstances.</p> <p>There should be more park and ride provision in more rural areas to help link communities to the public transport elements of the network.</p>	Yes	The policy may lead to improvements to transport infrastructure, therefore, there is a potential risk of an LSE subject to design and location.

C.2 Delivery Screening Table

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
Planning journeys/ Informing users/ Supporting Customers	CA10	Regional Transport Model and Monitoring package	Development of a regional transport model for analysis and decision making together with monitoring tools	2026	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	CA15	Sponsoring cycle training in schools	Sponsoring cycle training programmes in schools and available in the community with group rides	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	CA16	Improved mapping and promotion of the Active Travel network	Sponsoring the development of outward facing promotional material, including an interactive map perhaps integrated with an app development and highlighting a network of servicing locations for equipment. Also includes a common approach to monitoring and evaluating use on the active travel network, linked to a placed based management approach	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	CA17	Integrating health and transport planning with active travel prescriptions	A clear action plan for initiatives between the NHS, Public Health Directors and the North East CA including spend to save initiatives	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	CA29	Regionwide Infrastructure Mapping Application	Deliver a regional infrastructure and asset map which enables connectivity solutions to unlock further strategic growth sites (housing and employment) to be realised. This will include an online platform to enable local trade, deliveries and international exports	2026	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	CA44	North East active travel partnership board	The creation of this Board will provide a strategic steer on the direction of Active Travel in the region.	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	CA45	Accessibility Forum	The creation of an EV Infrastructure accessibility Forum, including local stakeholders and disability groups. This scheme will make sure those with disabilities and mobility issues are heard when developing the public charging network.	2025	Road	No	This will not lead to development that could have an LSE on the European Sites.
	CA46	EV Partnership Steering Group	Setting up an EV Partnership group with the public/private sector and Distribution Network Operators (DNOs) to support, build, and grow the EV charging infrastructure across the North East.	2025	Decarbonisation	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA52	Active Travel Infrastructure Design Training	Active travel route infrastructure design training for local authority officers and members	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	CA57	Influence the National NPPF Transport Working group to integrate transport	Delivering change in ensuring positive approaches to the NPPF when it comes to the integration of transport	2027	Behaviour Change	No	This will not lead to development that could have an LSE on the European Sites.

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
	CA59	North East Travel Plan Accreditation Scheme	Travel plan accreditation scheme, where businesses are encouraged to have an up-to-date travel plan in place, where they can evidence the measures in the travel plan they have accomplished. Can be based on gold, silver and bronze standards (or similar) with some sort of incentive (such as funding to provide on site cycle parking facilities, press coverage, etc	2027	Revenue	No	This will not lead to development that could have an LSE on the European Sites.
	CA60	Regionwide Travel behaviour change package and campaign	Creation of a behaviour change team within NORTH EAST CA, a regional promotional campaign for EV, EV charge points, public transport and active travel, and a gamification pilot. Also includes fares marketing, school journey planning education, Travel Plan accreditation and travel planning bond.	2027	Revenue	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA63	Real Time Passenger Information Screen replacements	RTPI screen upgrade / new screen roll out programme	2025	Information, Ticketing and Technology	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	DU01	Digitising Traffic Regulation Orders	Digitising all countywide TROs in line with government and DfT aspirations	2027	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	GA28	School Streets within Gateshead	Seeking to support Active Travel as the preferred means of travel to school - reducing growing traffic congestion around schools which adversely impacts road safety, air quality and health	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	GA32	Tyne Bridge Sustainable Maintenance (Interim Measures)	Sustainable transport measures associated with the Tyne Bridge restoration works	2027	Active Travel	No	Although this may lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.
	ST19	Traffic Signal Improvements in South Tyneside along Strategic Corridors	Traffic Signal Improvements in South Tyneside along Strategic Corridors Locations include the following - A185 / Jarrow Slake / Port of Tyne - Jarrow, A185 - Station Road - Hebburn, Station Road / Glen Street - Hebburn,	2025	Maintenance	No	Although this would lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.
	SU36	Social Prescription for Active Travel	Expansion of the self-funded Active Travel Prescribing project carried out in the city	2025	Behaviour Change	No	This will not lead to development that could have an LSE on the European Sites.
	UTMC01	Bus Priority and Urban Traffic Management and Control (UTMC) System	The UTMC operates within Tyne and Wear and Durham and requires maintenance to ensure it can continue to meet the needs of the region in managing the signals across the network and delivering bus network improvements in respect of punctuality and reliability	2027	Road	No	This will not lead to development that could have an LSE on the European Sites.
	N/A	Bus Reform	Implement findings of Bus Reform. Costs will be fully defined following scheme development.	2030	Bus and Last Mile	No	Although this would lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
	N/A	Enhancing the supply and quality of Public Transport passenger information	The scheme will deliver enhanced public transport information via a range of means utilising digital and physical means integrating with recent investments.	2030	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	N/A	Delivering more accessible public Transport Information at stations	The NE has existing Visual equipment around the region in the form of Passenger Information Displays at stations and selected stops. This will be upgraded and expanded with additional forms of audio and visual technology to maximise information for all groups in society, including wayfinding, customer and real time information.	2030	Information, Ticketing and Technology	No	Although this would lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.
	N/A	Sustainable travel projects including school streets	Active Travel and sustainable transport promotion within schools	2030	Behaviour Change	No	This will not lead to development that could have an LSE on the European Sites.
	N/A	Access to Active Travel Equipment scheme	Identifying and supporting the development of access to equipment schemes such as cycle grants or loans / cycle to work or education schemes for those not in full time employment. This includes exploring a Cycle to Work Alliance. Ensuring people have the means to travel sustainably.	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	CA32	Upgrades to the two Urban Traffic Management Control Centres for command and control of the network	Upgrades to the two Urban Traffic Management Control systems to: integrate and link with neighbouring areas and National Highways	2030	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA42	School Streets Development and Delivery across the region	School Streets as an initiative is supported within the NE Transport Plan and active travel strategy as a means of providing safer, cleaner environments outside of the school encouraging uptake in sustainable journeys.	2030	Active Travel	No	Although this would lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.
	DU46	Chester le Street ITS/light touch SCOOT	Linking signalised junctions with SCOOT infrastructure to include a bus priority provision.	2030	Information, Ticketing and Technology	Yes	This may lead to development that could have an LSE on the European Sites subject to the nature, scale and location of the works.
	DU51	Primary and Nursery secure cycle parking	Providing cycle parking facilities at schools and nurseries across the County to encourage modal shift.	2030	Active Travel	No	Although this would lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.
	DU55	Permanent counter sites	Improve pre and post intervention survey abilities with counters to establish better benchmarking to justify future interventions and to better monitor the road network	2032	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	DU56	Upgrading Pay and Display infrastructure in County Durham	Improve the pay and display offer across the County to be more inclusive and more accessible. The improved facilities will include cash, card and phone payments and consider solar powered machines.	2032	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	NE07	Newcastle Smart Corridors	North East Smart Corridors: upgrade to arterial corridors to Tyneside which would incorporate active traffic control with ANPR.	2030	Information, Ticketing and Technology	Yes	This may lead to development that could have an LSE on the European

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
			Potential to integrate with air quality sensors to have innovative traffic control and public transport priority				Sites, subject to the nature, scale and location of the works.
Ticketing and fares	CA40	Bus Service Improvement Plan - existing ticketing projects	Under 19 ticketing projects (single and daily, multi-modal cap). Adult multi-modal day ticket (zonal options as well as a region-wide ticket). Care leaver provision. Take the Kids for Free extensions.	2027	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
Safety, especially of women and girls, and other improvements in service quality	CA03	Bus Priority Infrastructure	Including 17 strategic bus corridors bus priority measures package as identified through the North East Bus Priority Measures Study.	2027	Bus and Last Mile	No	Although this would lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.
	CA11	Hotspot funding to improve conditions for active travel users on the network.	Identify and Sponsor a hotspot fund to quickly react to changing demands on the network and progress against any design faults	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	CA19	Coach Action Plan	Developing a coach action plan by 2025	2026	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	CA28	Innovation Challenge Fund for Smart Places	Creation of an innovation challenge fund to develop and trial smart place applications with SMEs, start-ups and social enterprises	2026	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	CA41	Supporting, maximising and enhancing existing bus routes and key services	Protecting existing routes and key services and delivering enhancements to the network to deliver greater frequency and accessibility across the network	2027	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA62	Active Travel Design Review Panel	The set up and running of a design review panel for the Combined Authority - to review all active travel scheme designs, ensuring they align with the latest guidance and ensuring "design for all" is considered.	2024	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	DU18	Stanley Bus Station Improvements	To improve the quality and functionality of the building, reduce the fear of crime with improved CCTV equipment and an improved facility improving bus travel. BSIP2	2027	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	DU19	Consett Bus Station Improvements	To improve the quality and functionality of the building, reduce the fear of crime with improved CCTV equipment and an improved facility improving bus travel. BSIP2	2027	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	DU20	Peterlee Bus Station Improvements	To improve the quality and functionality of the building, reduce the fear of crime with improved CCTV equipment and an improved facility improving bus travel. BSIP2	2027	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	GA20	A195 Bus Lane in East Gateshead.	The bus lane is on a section of the A195 Lingey Lane providing the main bus connection between IAMP/Follingsby and Heworth Interchange.	2027	Bus and Last Mile	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
	GA42	Modelling, surveys and analysis	Need for robust data and modelling to inform scheme identification and development.	2027	Revenue	No	This will not lead to development that could have an LSE on the European Sites.
	NE08	Scotswood Road Bus Priority	Bus lanes and priority for Scotswood Road in conjunction with any new strategic crossing in the West	2027	Bus and Last Mile	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	NO08	New Blyth Bus Station	Construction of a new fit for purpose Bus Station and associated facilities.	2027	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NO15	Enhanced service between Berwick and Newcastle	The proposal is for a new hourly service to serve stations between Newcastle and Berwick-upon- Tweed on the East Coast Mainline.	2027	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NO18	Average speed camera initiative	Improving road safety for pedestrians and cyclists by reducing excessive speeding	2027	Road	No	This will not lead to development that could have an LSE on the European Sites.
	NT05	Coast to Airport through train - Metro service	Operate through Metro services	2027	Revenue	No	This will not lead to development that could have an LSE on the European Sites.
	NX04	Regent Centre Interchange Upgrade	The preferred scheme will see the existing multi-storey car park will be updated, refurbished and repurposed for a wider range of uses. This will involve making the building brighter and safer for all users, and focusing on improved facilities for cyclists, Blue Badge users and EV users. The facility will be promoted to offer local park and ride facilities for people using retail and leisure facilities along Gosforth High Street which is an area with poor local air quality. The bus station will benefit from removal of the overbearing entrance canopy and from new shelters and information provision. The Metro station elements of the scheme will improve the user experience for all customers.	2027	Metro	No	This will not lead to development that could have an LSE on the European Sites.
	ST14	The Nook Strategic Junction Improvements	Delivery of strategic junction improvements to benefit public transport and active travel users, at a key congested junction.	2025	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU28	Chester Road (A183) Bus Corridor Improvements Springwell Road Junction	Improvement of an existing section of Chester Road (A183) to the east of the A19. Provides journey time saving and facilitates access to the A19 and city centre promoting development and economic growth in the area. Scheme includes signalisation of junctions and construction of direct access to regeneration sites. Provide Public Transport and Cycle priority at junctions	2027	Bus and Last Mile	No	The scheme is over 4.5 km from the closest European Site and would, therefore, be unlikely have an LSE.

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	SU39	Sunderland Station Central Entrance.	Central Entrance to Sunderland station delivered to connect with Sunderland Riverside	2027	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA05	Small scale local rail reliability measures networkwide	Through line of route improvements plans implement small scale improvements to improve service reliability.	2030	Heavy Rail	No	This will not lead to development that could have an LSE on the European Sites.
	DU38	Newton Aycliffe bus station and surface car park	Demolish existing MSCP and replace with a bus station and surface level car park in the town centre.	2030	Bus and Last Mile	No	The scheme would be in excess of 9 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU53	Bus stop improvements: County wide (road markings refresh, replace timetable casings)	Improve the bus stop infrastructure along various routes and corridors across the County.	2030	Bus and Last Mile	No	Although this may lead to development it would be very minor in nature and unlikely to have an LSE on the European Sites.
	DU54	Balance bikes for road safety	Procurement of balance bike equipment.	2032	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	EX12	Addressing the severance of major infrastructure working with infrastructure providers;	Addressing the severance of major infrastructure working with infrastructure providers 1b) Continuing to mitigate the impacts of major infrastructure schemes through a clear package of designated fund schemes	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	GA23	Bus Service Improvement Plan Corridor Improvements in Gateshead	Bus Priority on identified corridors as included in the BSIP	2028	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	GA35	Stella Road bus lane in Blaydon	Bus priority measures around Blaydon	2028	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	GA38	Bus priority measures in Gateshead	This project will provide bus priority infrastructure in locations throughout Gateshead and extends the BSIP programme.	2030	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	GA41	Speed Management Interventions in Gateshead	Reducing inappropriate speed and speed-related incidents on the road, creating a safer and more pleasant environment for all road users		Road	No	This will not lead to development that could have an LSE on the European Sites.
	NO05	Cramlington Station improvements	Infrastructure improvements required to facilitate improved frequency of service from station and better station facilities.	2030	Heavy Rail	No	The scheme would be in excess of 7 km from any European Sites and, therefore, development would be unlikely to have an LSE.

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	NO07	New Alnwick Bus Station	Construction of a new fit for purpose Bus Station and associated facilities.	2028	Bus and Last Mile	No	The scheme is over 4.5 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NT11	Killingworth underpass	Provision of route crossing the A19 to better link strategic housing development into the local transport network	2030	Active Travel	No	The scheme would be in excess of 7 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	NX01	Gateshead Interchange Refurbishment	Demolition of the whole interchange site and the redevelopment of a bus station on a smaller footprint, redesigned to address safety and security limitations, new retail, office and accommodation space, reconfiguration of the Metro station to make better use of the space and create better integration between public transport and the retail	2032	Bus and Last Mile	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	NX02	Upgrading Heritage Stations on Tyne and Wear Metro	Upgrading of Cullercoats, Whitley Bay, Monkseaton and West Monkseaton Metro stations with a distinctive historical lineage dating back to the North Eastern Railway/LNER.	2032	Metro	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NX03	Monument Metro Station Refurbishment	Redesign and expansion of the station footprint, including improved accessibility, greater connectivity with the public realm, integration with adjacent leisure and retail, new leisure and retail opportunities. Improved step free accessibility, improved passenger facilities	2032	Metro	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	NX08	Small Metro Station Upgrades systemwide	Comprehensive station refurbishment, improving the customer experience, including information and waiting facilities, addressing accessibility and where necessary installation of gatelines	2030	Metro	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NX10	Airport Metro Station Refurbishment	Comprehensive refurbishment of the existing station at its current location with the emphasis on accessibility and the establishment of a signature building at this important regional gateway.	2032	Metro	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	NX24	Four Lane Ends Interchange redevelopment	Redevelop the full site to maximise the available space. This would help fully utilise the interchange as key PCR site for both Metro and Bus.	2032	Metro	No	The scheme would be in excess of 9 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	SU29	A183 Royalty Junction	Removal of the existing gyratory layout for buses to allow two-way movement for public transport	2030	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	SU34	Wearmouth Bridge NMU resurfacing	The shared footway/cycleway on Wearmouth Bridge is in poor condition due to high volume of pedestrians and cyclists. To encourage use and to improve safety standards a full resurface of both sides is required	2030	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.

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	EX11	Local rail Diesel fleet replacement – regional	Support Northern in bid to secure funding for carbon zero fleet	2035	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA04	Short term Timetabling amendments Introducing earlier and later local rail services systemwide	Delivering timetable amendments to deliver greater connectivity including first and last train times to ensure they meet user needs	2035	Heavy Rail	No	This will not lead to development that could have an LSE on the European Sites.
Reach and resilience of infrastructure	CA07	Fund replacement and upgrade of existing EV infrastructure	Plug funding gap to replace and or upgrade EV legacy equipment.	2027	Decarbonisation	No	This will not lead to development that could have an LSE on the European Sites.
	CA35	Creation of a North East road and highways strategy for all users	Create a regionwide road strategy and road safety strategy for the Strategic, Major and Key Road networks	2027	Road	No	This will not lead to development that could have an LSE on the European Sites.
	CA36	Increasing Strategic Maintenance budgets	Secure additional strategic highways maintenance budget harnessing technology to monitor, deliver targeted improvements to keep the network operating smoothly for all	2027	Road	No	This will not lead to development that could have an LSE on the European Sites.
	DU05	Bishop's Gateway	Create a link road from A688 to Jocks Bridge which will facilitate parking associated with tourism events.	2027	Road	No	The scheme would be in excess of 8 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU06	Capacity Improvements to Tindale Triangle	Improve capacity around the Tindale Triangle area to allow a second phase of development to come forward.	2025	Road	No	This will not lead to development that could have an LSE on the European Sites.
	DU07	Durham Digital Twin	Utilise data collection technology including cameras and traffic signals to improve public transport reliability and air quality and reduce congestion and environmental impact.	2030	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	DU08	Road safety, capacity and pedestrian connectivity improvements at J60 A1(M)	Road safety, capacity and pedestrian connectivity improvements at J60 A1(M)	2027	Road	No	The scheme would be in excess of 8 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU09	Improvements to the National Cycle Network Route 1 in County Durham	NCN1 Improvements in Durham - a series of works to improve the quality of the route including upgrading to take into account biodiversity and appearance of a section of National Cycle Network Route 1 which runs between Seaham and Stockton.	2025	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	DU10	Active mode connectivity, public transport reliability and capacity improvements at A693 Stanley	The proposal focuses on improvements to the A693/Oxhill and A693/Asda junctions. The junctions adjoin the Stanley A693 Bypass, which is a 40-mph dual carriageway, through the town. The A693 links North West Durham (including the settlement of Consett) and the A1M (J63) at Chester-Le- Street, offering a key	2027	Road	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.

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			west to east link. A693 from Oxhill signal junction to Asda roundabout, which would be signalised and include a pedestrian phase across roundabout, negating use of subways. Includes active travel linking to C2C route.				
	DU12	Junction 63 A1(M) capacity improvements	Improve capacity on the northbound merge and southbound diverge lanes at J63, Chester Le Street to safeguard future developments and to reduce the impact on surrounding DCC highway network. Regional benefits.	2027	Road	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU14	Toft Hill and High Etherley Bypass	Create a new bypass between The Smiths Arms and High Etherley by re-routing the A68 and creating a new bypass to divert large HGV % of traffic away from Toft Hill Village bringing environmental benefits in terms of air, noise, dust and vibration	2027	Road	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU15	A689 Sedgefield to Wynyard active mode route improvements	Upgraded/new off carriageway track connecting Sedgefield and Wynyard growth area	2027	Active Travel	No	The scheme would be in excess of 5 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU16	A177 cycling improvements, linking Coxhoe with Net Park	A177 cycling improvements, linking Coxhoe with Net Park employment site and Sedgefield	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	DU17	Belmont to Newton Hall active mode route improvements	Cycling route improvements via Belmont Viaduct, linking North and east Durham employment sites	2027	Active Travel	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU21	A690 Stabilisation	Planned: Maintain the A690 from Gilesgate Roundabout to A1(M), a key commuter route into and out of the City.	2025	Maintenance	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	DU23	Electrification of PCR fleet	To reduce vehicle emissions within the city, it is proposed to convert Durham County Council's Park C Ride bus fleet from diesel to electric.	2027	Decarbonisation	No	This will not lead to development that could have an LSE on the European Sites.
	DU24	Bishop Auckland EV Charging Station	EV charging opportunity relating to visitors	2030	Decarbonisation	No	This will not lead to development that could have an LSE on the European Sites.
	DU25	Net Park Sustainable Infrastructure.	Create and improve sustainable access to Net Park	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	DU26	Bishop Auckland Walking C Cycling Improvements	Create and improve an active travel route from West Auckland to Bishop Town Centre routing through the town centre, passing multiple key employment and retail areas.	2027	Road	No	This will not lead to development that could have an LSE on the European Sites.

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	DU28	A167/A690 Durham City Capacity Improvements	SCOOT and ITS - A167/A690 UTMC roll out on all approaches from the north and west of the City, linking to existing ITS/SCOOT systems. Systems to include pedestrian and cycle crossing connectivity, signalling Sniperley roundabout and introduce SCOOT from A690 Stonebridge through A167 Nevilles Cross and A690 Crossgate to A690 North Road roundabout, creating an improved public transport corridor.	2027	Road	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	GA02	Small scale cycling improvements (Gateshead)	Package of small scale improvements and additions to the cycle network across Gateshead assisting to deliver the Council's Cycling Strategy.	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	GA08	Highway structures major maintenance	Major maintenance works to highway structures across Gateshead	2027	Maintenance	No	This will not lead to development that could have an LSE on the European Sites.
	GA12	High Spen to Greenside cycle route	Provision of 3m wide off road shared use path between High Spen and Greenside alongside Spen Lane to provide sustainable transport routes in the outer west	2027	Active Travel	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	GA17	Derwent Cycle Route Improvements	Various cycle improvements linked to housing development in west Gateshead	2027	Active Travel	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	GA21	Road network maintenance including on unclassified roads.	Unclassified roads make up over 85% of the overall road length in Gateshead, with a total of 782 kilometres to be maintained. This is a maintenance package.	2027	Maintenance	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	GA27	Birtley town centre active travel improvements	Provision of walking and cycling facilities up to LTN 1/20 standards.	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	GA29	Askew Road West cycleway	Askew Road (between the Redheugh Bridge junction and the junction with West Central Route) is presently urban dual carriageway. The scheme would repurpose one of the carriageways for use as a dedicated two way cycle route with the other side being converted to standard single way carriageway in either direction.	2027	Active Travel	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	GA30	A694 corridor improvements	Changes are needed to several junctions, the bus lane and cycling facilities along this corridor due to housing development in Core Strategy (South Chopwell).	2026	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	GA33	Albany Road widening and active travel	Increased capacity to ensure the safe and efficient flow of vehicular traffic to and from the new arena complex. This scheme specifically makes provision for pedestrians and cyclists with segregated facilities along the length of the road	2027	Road	No	The scheme would be in excess of 10 km from any European Sites and,

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							therefore, development would be unlikely to have an LSE.
	NE15	Delivery of local walking and cycling improvements across Newcastle	Investment in top priority LCWIP routes and junctions	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	NE16	Coast Road	Consideration of the potential for active and sustainable solutions on the Coast Road	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NO03	Critical Rural Road (U and C Class) Maintenance Programme	To repair and strengthen key roads underpinning the rural and regional economy including access to key tourist destinations (Hadrian's Wall World Heritage site, Northumberland National Park including International Dark Skies Park) , timber extraction and quarrying.	2027	Maintenance	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NO13	Northumberland LCWIP	Capital investment targeted at improving the walking and cycling networks in the 12 main towns of Northumberland. Proposed schemes will vary from town to town and would involve physical segregation of road users; traffic calming and road safety measures; providing dropped kerbs and tactile paving and improved crossing facilities, essentially improving the safety and convenience of walking and cycling and supporting a shift in the way we travel.	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NT01	Improvements to key sustainable routes in North Tyneside	Sustainable improvements at various locations on key strategic sustainable routes within the borough	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NT04	A191 all user improvements	Improvements for all users in the A191 corridor in North Tyneside	2027	Active Travel	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	ST02	Highway Maintenance Resurfacing Backlog in South Tyneside	The council's Highway Asset Plan indicates a backlog of maintenance of over £80m, in order to improve this position and to reduce the backlog further investment is required.	2025	Maintenance	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	ST03	Commercial Road Multi-Modal Corridor Improvements	Strategic Transport Improvements throughout Commercial Road to facilitate development at Holborn Riverside.	2025	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	ST04	A185 upgrade to support the Port of Tyne	Congestion relief at Howard Street at A19 entry. This will improve severe congestion at the A19/Tyne tunnel especially during peak times.	2025	Road	No	The scheme would be in excess of 10 km from any European Sites and,

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							therefore, development would be unlikely to have an LSE.
	ST05	A19 Southbound Lane Gain / Lane Drop	Introduction of an additional carriageway between the A185 and A194 junctions on the A19 Southbound to alleviate congestion. This scheme also benefits Non Motorised Users and is intrinsically linked to the operation and performance of Port of Tyne and IAMP.	2025	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	ST06	A185 / Howard Street Multi Modal Corridor Improvements	Consideration to strategic junction improvements at the Howard Street / Tunnel Portal to improve traffic movements.	2025	Road	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	ST09	Strategic Corridor Improvements between Testo's and Boldon Asda junctions	Scheme will involve the significant remodelling of the junction and some of the wider area in order to prioritise bus movements and journey times. Additional effects will include improved road safety and general journey time optimisation.	2026	Road	No	The scheme would be in excess of 5 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	ST10	Abingdon Way / Hedworth Lane Multi Modal corridor improvements	Abingdon Way / Fellgate Avenue / Hedworth Lane Junction Improvements	2025	Road	No	The scheme would be in excess of 5 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	ST11	A194 Multi-Modal Corridor Improvements	The A194 is the major access road to South Shields Town Centre. The purpose of this scheme will be to local at multi-modal improvements along the A194 between the junction with West Way and Crossgate, South Shields to deliver improvements to all modes.	2025	Active Travel	No	The scheme would be in excess of 10 km from any European Sites and, therefore, development would be unlikely to have an LSE.
	ST12	A1018 Multi-Modal Corridor Improvements	This scheme will focus on the A1018 between South Shields and Sunderland. It will involve a corridor approach in order to deliver multimodal improvements with a view to improving accessibility for sustainable transport.	2026	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	ST13	A183 Strategic Transport Corridor (NCN 1 - Phase 2) - Connecting to Sunderland Boundary - Souter to Whitburn	This scheme will complete the upgrade of NCN1 from South Shields to Sunderland. Focussing specifically on a section through Whitburn. We will upgrade to LTN1/20 standard a route to allow seamless, long distance and cross boundary travel.	2026	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	ST16	Major Highway Structural Maintenance Improvements (Heugh Street, Newcastle Road, Jarrow Slake).	Significant Capital Investment is required to ensure that the Bridge Assets are maintained to the expected requirements.	2025	Maintenance	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	ST18	National Cycling Network - Route 14 Improvements	This scheme will complete the upgrade of NCN14 from South Shields to Gateshead. Focussing specifically on a section through Hebburn and Jarrow. We will upgrade to LTN1/20 standard a route to allow seamless, long distance and cross boundary travel.	2026	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.

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	SU01	Sunderland Strategic Transport Corridor SSTC4 - Upgrades to Wessington Way / A19 junction	The scheme consists of improvements to the A1231 between the north bridgehead of the Northern Spire Bridge (Sunderland Strategic Transport Corridor Phase 2) and the junction with the A19, developing interface improvements with the Highways England network. This will include upgrading of existing roundabouts with traffic signals and the creation of additional capacity at the current A19/A1231 junction. The scheme will also add new provision for non-motorised users.	2026	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU03	St Michael's Way/High Street West journey time improvement and congestion pinch-point relief to improve road safety, bus priority and improve pedestrian safety	Removal of congestion pinch point on St Michaels Way, providing journey time saving and congestion relief.	2027	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU09	Improving Strategic Cycle Networks in Sunderland A690 - City centre to Silksworth	To deliver a 4.23 km route, comprising of a combination of improvements to existing route and new sections of route forming connections. New crossings will be provided.	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU10	SSGA to Ryhope Village Cycle Route	Potential for a high-quality connection between SSGA/Ryhope and Hendon/City Centre, with scarcely interrupted journeys and exit points to key junctions along the route; Wide new road with long straight sections lends itself to dedicated cycle Lane provision; South end of this route taps into the eastern end of the major housing development of the city including doorstep market to the South of Saint Nazaire Way, and Cherry Knowle housing development; This link runs parallel to the rural coastal band of South Sunderland, which includes the 'England Coast Path' National Trail on the Durham Heritage Coast.	2025	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU25	Inner Ring Road Western Section St Michael's Way/Chester Road Junction	Remodelling of the existing junction and replacement with a new signalised junction utilising C-ITS technology which will link to adjacent junctions with new bus priority lanes and new, improved crossing facilities for non-motorised users.	2027	Bus and Last Mile	No	The scheme is over 4 km from the closest European Site and would, therefore, be unlikely have an LSE.
	SU26	Inner Ring Road Western Section Park Lane Interchange Entrance from Stockton Road	The scheme provides bus priority on a key corridor approaching Park Lane Interchange. The scheme will include a new signalised junction and improved approaches which will improve journey time consistency for all users. The scheme will improve access for non-motorised users by providing new crossing facilities. The new access and route into the Interchange will lead to the removal of buses on heavily pedestrianised areas in the city centre which will improve safety and should lead to increased footfall in the city centre.	2027	Bus and Last Mile	No	The scheme is over 4 km from the closest European Site and would, therefore, be unlikely have an LSE.
	SU31	Improving Strategic Cycle Networks in Sunderland – Ryhope Road Strategic Cycle Route	A 2.12km section of fully segregated cycleway linking the Grangetown area to the south and the city centre to the north	2026	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.

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	SU32	Improving Strategic Cycle Networks in Sunderland A690 - City centre to Silksworth Phase 2	To deliver a 924m route, connecting the proposed comprising of a combination of improvements to existing route and new sections of route forming connections. New crossings will be provided.	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA22	Transport and Future Energy Solutions across the region	A regional energy package focused on generating energy on our transport assets, depots, stops and stations	2030	Decarbonisation	No	This will not lead to development that could have an LSE on the European Sites.
	CA33	Addressing Severance of the Road network through targeted approaches	Targeted approaches to reduce the severance of the road network. Linked to severance and active travel initiatives look to undertake a review of crossing facilities and a package of Designated Fund measures	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	CA34	Integrate taxi services with other public transport provision	Integrating taxi services with other public transport provision	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	CA37	Freight consolidation	Freight consolidation to reduce duplicated road miles and promote alternatives road freight distribution	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	CA38	Increased Lorry Parking and Servicing opportunities across the region	Work with Highways England to study the need for more service provision, including lorry parking, on or adjacent to the region's Strategic Road Network	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	DU32	Delivery of improved active travel infrastructure, signals upgrades and measures on the A692 in Durham and Gateshead	Corridor based improvement work along the A692 in Gateshead and Durham to improve safety	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	DU33	Delivery of improved active travel infrastructure, signals upgrades and bus capacity on the A694 in Durham and Gateshead	Corridor based improvement works along the A694 in Gateshead and Durham comprising a package of small scale measures aimed at relieving congestion, improving road safety and improving sustainable transport movement.	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	DU34	Corridor based improvement works along A167 in Durham and Gateshead to deliver improved access to housing development by sustainable modes, enhanced active travel infrastructure, bus lane extensions and signals upgrades.	Corridor based improvement works along A167 Durham Road between Gateshead and Chester le Street with the principle aim of improving sustainable transport movement along the corridor.	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU35	Walking and cycling improvements countywide	Because of the rural nature of the county, upgrading or providing new active mode links to the network enables more people to walk and cycle more often everyday giving better transport options to residents enabling them to travel actively and sustainably for both work and leisure purposes. 11 adopted Local Cycling and Walking Investment Plans	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.

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	DU36	Durham City Park C Ride Expansion	Extend Durham City's offer for PCR including a potential new site.	2030	Park and Ride	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU37	Great North Cycle Route improvements in County Durham.	A167 from Blyth to Darlington is being delivered piecemeal given its length to create a continuous route through Durham.	2030	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	DU40	Three towns active mode improvements	Lack of active mode infrastructure: Limited infrastructure for active modes in the Three Towns is inhibiting mode choice for residents who wish to travel between Willington, Crook and Tow Law. Current provisions are intermittent, and there is limited access to the NCN, which provides connectivity further afield to places like Bishop Auckland and the City of Durham. This project will seek to connect the towns with high quality active mode networks.	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	DU41	North West Durham active mode improvements.	Improved active mode connectivity in North West Durham	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	DU47	Bishop Auckland Attraction Electric Bus	Fleet of electric buses to connect tourism sites	2030	Decarbonisation	No	This will not lead to development that could have an LSE on the European Sites.
	DU48	Electrification of subsidised fleet	Introduce EV to subsidised contract fleet	2030	Decarbonisation	No	This will not lead to development that could have an LSE on the European Sites.
	EX13	Autonomous vehicle tests on the strategic network	Autonomous vehicle tests on the strategic network	2030	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	EX14	Enhancing the Electric Vehicle offer on the strategic road network	Enhancing the EV offer on the strategic road network	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	EX16	A66 Dualling	Dualling of the A66 between Scotch Corner and Penrith	2030	Road	No	The scheme is over 5 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA01	Future of Gateshead Bridgeheads	To address active travel, bus and vehicle routing for river crossings .	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	GA03	Gateshead Central Integrated Transport Improvements	Reconfiguration of road network in and around Gateshead town centre to reduce severance and dominance of road traffic	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.

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	GA40	Access to Tyne Marshalling Yards	To address potential active travel and road access issues for the Tyne Marshalling Yard	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	GA05	Traffic signals repair across Gateshead	Traffic signals across the network are in need of repair	2028	Maintenance	No	This will not lead to development that could have an LSE on the European Sites.
	GA07	West Tyneside cycle route (bridge over ECML)	New bridge over East Coast Main Line between Chowdene and Team Valley	2030	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA09	Gateshead Local Cycling and Walking investment proposals	Corridor upgrades for walking, wheeling and cycling	2028	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA10	Portobello to Washington footbridge access improvements	Improve approaches to the bridge on both sides of the A1 to make the route more open and inviting to users, whilst also providing a ramped access for cyclists and street lighting	2030	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA13	Upgrading the National Cycle Routes in Gateshead	Upgrading of NCN cycle routes to meet current standards	2030	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA15	A195 Follingsby Roundabout Improvements	Improvements to ensure access for all users to the employment area at Follingsby, including potential future park and ride	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA18	New Bridges to remove severance e.g. Blaydon / Newburn, A194M/Follingsby, A1 Coalhouse	New Bridges over key motorway / A road infrastructure	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA19	Small Scale Highways Improvements / Junctions	Measures are aimed at relieving existing problems on the network associated with existing junctions. These will provide benefits to general traffic, but are targeted at relieving identified problems for bus operation and also cycle and pedestrian movement	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.
	GA22	EV Charging Improvements	Provision of convenient EV charging facilities in car arks owned by Gateshead Council	2028	Decarbonisation	No	This will not lead to development that could have an LSE on the European Sites.
	GA24	Coatsworth Road improvements	Enhancements in area around Coatsworth Rd	2028	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NE02	Maintenance to Urban Core Distributor Route and all user improvements	Package of maintenance and junction improvements to roads on the Urban Core Distributor Route.	2030	Maintenance	No	This will not lead to development that could have an LSE on the European Sites.

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	NE03	Ponteland Road Corridor sustainable and housing improvements	Upgrades to junctions on key roads to West of Newcastle in order to enable development	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NE04	Scotswood Bridgehead accessibility improvements in Newcastle	Upgrades to northern end of Scotswood Bridgehead	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NE05	Rotary Way junction upgrade and cycling improvements`	Investment and upgrade around the A1-Rotary Way- Great North Road junction to enable local plan development	2030	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NE06	Newcastle Station : Enhanced capacity and Links	Investment to unlock the potential around Newcastle Central Station, including access improvements to Stephenson Quarter (Southern Entrance)	2030	Heavy Rail	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NE10	Skinnerburn Road Maintenance	Structural Maintenance scheme on Skinnerburn Road	2028	Maintenance	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NE12	Flood and Climate Resilience (Newcastle citywide)	Maintenance of highway structure, gullies and culverts to provide greater resilience to climate change	2030	Maintenance	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NE13	A696/A167 and Airport Junction upgrade	Improvements to junctions to account for growth at Airport and nearby housing sites	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NO06	Delivering improved all user connections on this route (A1068 Fisher Lane) between South East Northumberland and Tyne and Wear.	The scheme involves the upgrading of the remaining single carriage section of the A1068 Fisher Lane (approximately 1 mile) to dual carriageway standard between the C366 Blagdon Lane and the A19 Seaton Burn junction, a segregated cycleway from Seaton Burn to Cramlington linking to the new development areas, cycleways and a new roundabout at the A1068/Blagdon Lane junction, removing a congestion pinch point on this key strategic route into Tyne C Wear, improving cycle provision, bus journey time reliability and access at the A1068/Blagdon Lane junction.	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NO16	Future extensions for the Northumberland Line	Improving accessibility to South East Northumberland by rail.	2032	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NT02	River Tyne Economic Corridor (NEIZ) Enabling Works	Bridge strengthening works and works such as removal of highway obstructions and barriers to improve highway resilience and capacity		Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.

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	NT08	Local sustainable routes in North Tyneside	Improvements within and around town and district centres to sustainable routes with a focus on 'last mile' connectivity into town centres		Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NT09	A193 Wallsend Road Bridge deck replacement and repairs	A193 Wallsend Road bridge forms a crucial component in the local strategic highway network, linking North Shields and Tynemouth to the A19.	2030	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NT13	Sustainable access improvements North West of North Tyneside	Improvements to public realm and infrastructure for cycling, walking, wheeling and horse riding to support accessibility as part of the regeneration of the North West of North Tyneside.	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	NT15	Weetslade Bridge – major concrete repairs and re-waterproofing	Major maintenance, principally concrete repairs and re-waterproofing	2030	Maintenance	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NT16	Highway and structural maintenance work to address the maintenance backlog	Expand the delivery of highway and structural maintenance works in accordance with the North Tyneside HAMP to stabilise the highway maintenance backlog	2030	Maintenance	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NX07	Car Park Maintenance Programme	Park and Ride and car park maintenance and improvements are key components of the recovery plans to attract customers back and to forge new markets. 'Consideration to extending park and ride facilities at multi-modal interchanges across the North East region. Not just limited to metro stations, but also bus / train stations. With improvements required at Hebburn, Tyne Dock, East Boldon and Fellgate within South Tyneside.	2028	Park and Ride	No	This will not lead to development that could have an LSE on the European Sites.
	NX11	Creating Electric Vehicle charging points across Nexus car parks	Proactively identify site suitable for charging points and install a comprehensive network, aligned to the wider regional strategy	2027	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	NX12	Installing Solar panels at Nexus infrastructure	A comprehensive, integrated programme of PV installations across the Metro network at locations of maximum efficacy and where power can be best redistributed for Nexus' use.	2027	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	NX23	Howdon Viaduct	Replace the current track support system with a ballasted construction. Ensure the viaduct is suitably strengthened to accommodate the additional loading of ballast and concrete sleepers.	2027	Metro	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	RTS01	North East Traffic Signals Resilience and Decarbonisation	Delivering the latest signal technology across the North East. 1/ Climate change targets have lead to Tungsten Halogen (TH) lamps used in the traffic signals industry becoming obsolete. This will eventually lead to equipment becoming obsolete. 2/ To reach net zero targets, more energy efficient systems will be deployed.	2030	Road	No	This will not lead to development that could have an LSE on the European Sites.

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	ST17	Mill Lane Metro Station	This scheme, subject to design will provide a new Metro Station at Mill Lane	2030	Metro	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	SU02	A690 all user highway improvements including at North Moor Lane Barnes Gyratory Grindon Lane and B1286 junction	To provide bus priority measures, improve journey times and reliability, and reduce junction delays.	2030	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	SU06	Continued improvements to access the IAMP area including off- road cycle facilities to accommodate expected increase in traffic and stimulate economic development (IAMP Infrastructure Phase 2)	Additional highway infrastructure to accommodate growth. New road layouts, junctions and public transport infrastructure will be required Road bridge over the A19 may be required depending on modelling outcomes Road bridge over Leamside line may be needed to facilitate growth to the north west of the site.	2030	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU08	Upgrading existing traffic signals in Sunderland	Deliver modern, intelligent, networked equipment and design, there would be substantial gains in efficiency for highway users by reduction of delays/stopping/speed alterations. Additionally, modern LED aspects use substantially less energy, leading to reduced revenue costs as well as measurable carbon savings.	2030	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	SU11	A183 Whitburn Road Roker Ravine Cycle bridge	Improving the pedestrian and cycle route and reduce their conflicts on existing section of shared use area on Roker Ravine bridge. To improve the shared section and bring it up to LTN 1/20 standards for Active Travel purposes.	2030	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU12	Active Travel Improvements in Sunderland - Route 2 - Newcastle Road	Segregated Cycle lane from Wearmouth Bridge Northern Bridgehead travelling along A1018 Newcastle Road towards boundary with South Tyneside	2028	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU13	Active Travel Improvements in Sunderland - Route 3 - West (Barnes Park Greenway)	Two- way cycle route heading into city centre from the west, starts to the east of the A19 and runs through residential areas and schools Upgrade of existing facilities Includes new street lighting and CCTV Downgrade speed limits and reconfigure road layout on Springwell Road	2028	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	SU14	Active Travel Improvements in Sunderland -Route 4.1 - SSGA to Spire Bridge	Narrow traffic lanes and repurpose existing footway to provide segregated uni directional cycle facility with floating bus stops. Road roundabout layouts to be reconfigured to provide continuous cycle facilities along the route. Tie into proposed active travel scheme on European Way.	2028	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	SU15	Active Travel Improvements in Sunderland - Route 4.2 - Route 3 to South Hylton Metro	Two way cycle route connecting Route 3 from the south to South Hylton Metro station to the north	2028	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.

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	SU16	Active Travel Improvements in Sunderland - Route 5.1 - SSGA Link to Nissan IAMP	Widening existing tracks where applicable, improving the route adjacent to the A19 and a new access to an improved crossing point over the River Wear	2029	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	SU17	Active Travel Improvements in Sunderland - Route 5.2 - NC70 to North	New Cycle route in residential area connecting National Cycle Network Route 70 in the south to Route 5.1 and Route 3 to the north	2029	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	SU18	Active Travel Improvements in Sunderland - Route 6 - West Link Hetton to Nissan/IAMP	Widening existing tracks where applicable, combined with new routes improving the route adjacent to the from Hetton Town Centre, through Houghton le Spring and an improved crossing point over the River Wear into Washington and onwards towards Nissan/IAMP	2029	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	SU24	Sunderland Inner Ring Road Western Section St Mary's Boulevard / St Michael's Way roundabout Junction improvements	Removal of congestion pinch point on St Michaels Way, providing bus priority on route to Park Lane Interchange, journey time saving for all users	2028	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	SU27	Sunderland Inner Ring Road Western Section - Esplanade Gyratory	The scheme intends to replace the existing gyratory with a new two-way system with new crossing points, new footways installed and existing footways widened. A new bus priority lane will be included for southbound buses leaving Park Lane Interchange.	2030	Bus and Last Mile	No	This will not lead to development that could have an LSE on the European Sites.
	NE01	Airport access upgrades to facilitate housing growth and the onward success of the airport	Development of a link road to Newcastle Airport between A696 and Brunton Lane, to enable development of Newcastle Airport Enterprise Zone and Newcastle housing sites	2035	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	CA25	Freight Gauge Clearance	Freight gauge clearance -Work closely with Network Rail and private sector to improve line speeds along freight routes	2035	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA27	Transport Maintenance	Continued transport maintenance funding and targeting decarbonisation solutions and maximising technology for asset management;	2035	Revenue	No	This will not lead to development that could have an LSE on the European Sites.
	DU57	Bishop Auckland to Barnard Castle active mode route improvements	Upgraded/new off carriageway track connecting Bishop Auckland and Barnard Castle Feasibility study only to review opportunities to reopen the former railway line between Barnard Castle and Bishop Auckland as an active mode route.	2040	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	DU58	Barnard Castle Local Traffic Improvements	Measures in and around Barnard Castle, discouraging non essential traffic away from the Town Centre bringing associated environmental, road safety, and air quality benefits to the Town.	2040	Road	No	This will not lead to development that could have an LSE on the European Sites.
	DU59	Public transport connectivity improvements between Consett and Tyneside	Connectivity improvements along the Derwent Valley Line. Connectivity improvements between Consett and Newcastle, the highest performing option of the SOBC identified the former Sunderland Line having best patronage and links to tourism (Beamish), retail (Team Valley) and employment (Newcastle).	2040	Heavy Rail	No	This will not lead to development that could have an LSE on the European Sites.

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	DU60	Weardale Railway - commercial passenger route from BA to Stanhope	Opening the tourist Bishop Auckland Railway Line for commercial passenger travel from Darlington to Eastgate, considers a new spur to Crook. Include upgrades and improvements to Bishop Auckland Railway Station	2040	Heavy Rail	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU61	Leamside Line	Reopening the Leamside Line, improving East Coast Mainline capacity and creating Tyne to Tees and Sunderland to Durham connections.	2035	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	DU62	West Auckland Bypass	Potential second phase of Toft Hill scheme from Spring Gardens to A68.	2035	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	EX06	A1(M) Barton to Chester-Le-Street widening (J56-J57 and J60-J63)	Requires further studies but looking at capacity improvements on the A1 between Barton and Chester Le Street	2035	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	EX15	Ensuring targeted investment in digital connectivity when making physical alterations to works	Ensuring targeted investment in digital connectivity when making physical alterations to works	2035	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	GA16	New Derwent Walking and Cycle Crossing at Metrogreen	New crossing of River Derwent at Metro Green	2035	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NE14	New PT Route delivered to the West of Newcastle	New Westbound public transport from Central Station/St James, either using Forth Banks alignment or any other	2040	Metro	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NO01	Facilitating growth of Ponteland and addressing congestion	The A696 is part of the Primary Road network in Northumberland. The scheme objectives are to provide an alternative route for through traffic including heavy goods vehicles thus reducing delay to traffic through the village.	2040	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NO09	Facilitating the growth of Newbiggin and Ashington, improving public and active travel routes, capacity and addressing congestion	Road network improvement scheme - provision of a new link road between Newbiggin and Ashington	2035	Road	No	The scheme is over 6 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NO10	Facilitating the growth of Morpeth, improving public and active travel routes, capacity and addressing congestion	Limited east west connectivity through Morpeth resulting, specifically in capacity constraints at A197/A192 Mafeking roundabout. This has a significant impact on journey time reliability on what is a key strategic bus route	2035	Road	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NO11	Facilitating the growth of Cramlington, improving east west public and active travel capacity and addressing congestion	Proposed route consists of two separate lengths of road the north of the town centre which would complete the link from Station Road roundabout in the west to the B1505 or A189 Spine Road in the east. This can link into the existing extensive network of cycle connections across the town.	2035	Road	No	The scheme is over 5 km from the closest European Site and would, therefore, be unlikely have an LSE.

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	NO12	Facilitating the growth of Cramlington, improving public and active travel capacity and addressing congestion	Road network improvement scheme- provision of a new link road at Lancastrian Road Cramlington.	2035	Road	No	The scheme is over 5 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NO14	Belford Station	The proposal is to construct a new station to serve the village of Belford and the surrounding catchment area of north Northumberland.	2036	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NT12	New rail station on East Coast Main Line - North West of North Tyneside	Provision of a rail station on the East Coast Main Line in the North West of North Tyneside, and associated infrastructure	2035	Heavy Rail	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NX16	South Shields Ferry Landing Renewal and Replacement of both vessels	Renewal of the South Shields ferry landing, replacement of the Pride of the Tyne with an ultra- low/zero emissions vessel, longer-term replacement of Spirit of the Tyne or retrofitting to ensure improved environmental performance	2035	Ferry	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU05	Kier Hardie Way All user improvements	As above, intervention has not been fully finalised as of Spring 2024. However, the intention is to convert the A1290 Kier Hardie Way running from the Camden Street gyratory in the west to the junction with the A1018 in the east into a dual carriageway.	2035	Road	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU07	Queen Alexandra Bridge (A1231) / Camden Street Gyratory improvements. To provide congestion relief and bus priority	Removal of gyratory system and replaced with a new two-way system between Wessington Way and Kier Hardie Way Improvements to non-motorised user route that runs adjacent to the route.	2035	Information, Ticketing and Technology	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU19	Inner Ring Road Eastern Section Southern bridgehead Junction	Remove roundabout and install new signalised junction to accommodate changes in traffic flows and use	2035	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU20	Inner Ring Road Eastern Section High Street West junction	New signalised junction with dual carriageway approach	2035	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU21	Inner Ring Road Eastern Section Borough Road Junction	New signalised junction with dual carriageway approach	2035	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU22	Inner Ring Road Eastern Section Hendon Road/Lawrence Street junction	New signalised junction with dual carriageway approach	2035	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.

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	SU23	Inner Ring Road Eastern Section - A1018 / A1231 Junction	Replacing existing roundabout at A1018/A1290 junction with a new signalised junction with bus priority and new crossing facilities for non-motorised users. Increase lane width on approaches.	2035	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
Connections between different transport types	CA24	Customer Experience Strategy and delivery of measures to support an integrated network	To help our residents and visitors undertake integrated journeys we need an integrated transport network which meets users' needs and is attractive. A integrated transport network which is simple and easy to use, affordable and gets people to where they need to be will key in encouraging people to travel sustainably where possible, freeing up the road network for essential journeys that need to be made by car or van. This customer support strategy will set out measures to support customers at each stage of their journey, from the point of deciding to travel right through to arriving at their end destination and a series of first phase measures that will be invested in.	2026	Behaviour Change	No	This will not lead to development that could have an LSE on the European Sites.
	DU02	Walking C Cycling Improvements in Durham City	Creating and improving links to key employment, education and tourism sites across the City and to wider urban settlements to create a feasible alternative to a private car journey.	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	DU03	County Durham Accessible Routes	Improvements to walking and wheeling routes across the County	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	DU04	Aykley Heads Connectivity	Connecting Aykley Heads to wider transport (bus stops, cycle links and railway station links) as well as making existing routes fully accessible.	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	DU11	Horden Active Mode streetscape improvement in residential areas.	Active mode improvements in the Horden Area with public realm and landscaping improvements.	2027	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU27	Durham City Approaches: Bus Priority Measures.	Considers bus priority measures to improve key radial commuter routes into Durham City to improve the reliability of the bus services and encourage a modal shift. Includes: A177 Shincliffe, A181 Gilesgate and A690 Nevilles Cross	2027	Bus and Last Mile	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU29	Funding for development and potential DCC match swap	A fund to safeguard current major projects.	2027	Revenue	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU30	Durham Northern Approaches. (Active Travel)	New College Durham to Arnison Centre in 2 phases (Rotary Way then Framwellgate Front Street) making the current arrangements permanent	2025	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU31	Baths Bridge - Create an active mode link across the Wear linking residential, employment and education sites.	Replace the footbridge over the Wear for pedestrians and cyclists.	2027	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.

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	GA26	Mobility Hubs	Across the funding period will install 5 multi-modal mobility hubs, strategically integrated into the public transport network	2027	Behaviour Change	No	This will not lead to development that could have an LSE on the European Sites.
	GA31	MetroGreen Intermediate schemes	Facilitating development in the area action plan area of Metro Green through sustainable transport improvements	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	GA37	Gateshead Quays (masterplan outcome measures and active travel infrastructure)	Further transport infrastructure is required in the Quays area to support the regeneration of the area	2027	Active Travel	No	The scheme is over 8 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA39	Traffic monitoring infrastructure	There is an established need for data collection and monitoring of vehicular traffic and the use of active modes across the North East. This requires counters to be installed and maintained at strategic points on the network. These counters regularly need to be updated and renewed.	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	NE09	Connected Communities	Delivery of community based active travel opportunities	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	NE11	Central Newcastle - Walking, Cycling and Public Transport improvements	Investment in public transport, walking and cycling to enable a zero carbon central Newcastle	2027	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	NO19	Blyth to St Mary's Active Travel Scheme	Delivering a segregated high quality active travel route from Blyth to the North Tyneside border	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NO17	Recreational cycle network development in Northumberland	Capital investment targeted at improving the walking and cycling networks in Northumberland to support greater opportunities for recreational cycling and accessing the visitor attractions across the county by active modes.	2028	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	NO20	Connected Stations - Delivery of elements in Northumberland.	1. Bedlington - Bus connectivity, sympathetic to the LUF walking and cycling corridor. 2. Station signage - All stations, improved signage for onward connectivity, details on bus connections, walking and cycling routes. 3. Morpeth and Hexham - Brompton e bike storage. 4. Cycle storage - Morpeth, Prudhoe, Haltwhistle. 5. Station facilities audit - Station audits, a research study.	2027	Heavy Rail	No	This will not lead to development that could have an LSE on the European Sites.
	NT03	Delivery of the transport elements of the North Shields Fish Quay Plan	Improve sustainable links between Fish Quay, town centre and active travel routes and complement wider regeneration	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
	NT06	Improving Wallsend town centre public realm delivery and improve accessibility for all users	Improve public realm and accessibility in the Wallsend town centre area, building on earlier regeneration work	2027	Active Travel	No	The scheme is over 6 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NT07	Improving Whitley Bay town centre public realm delivery and improve accessibility for all users	Improve public realm and accessibility in the Whitley Bay town centre area, complementing wider regeneration work	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	NX21	Callerton Park and Ride Extension	Expand Car park and improve all facilities	2027	Park and Ride	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	ST01	Improved Cycling Links to Tyne Pedestrian Tunnel	Improved connections on both the South and North side of the Tyne Pedestrian Tunnel	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	ST15	Micro Mobility Hub	Delivery at South Shields Interchange of a 16 bay automated bike hire machine.	2025	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	ST20	South Shields Town Centre Active Travel Route	The proposed route would provide a direct and dedicated route over 1.4km between the Ferry Landing to the South Shields Foreshore along King Street providing seamless access to South Shields Town Centre, Public Transport Interchange and Ferry Terminal. This is in addition to providing access for the proposed South Tyneside college relocation into the Town Centre.	2027	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA23	Demand Responsive Micromobility Transport trials	Innovation - Demand Responsive Transport – investigating and testing micromobility solutions with New forms of last mile connectivity integrated into our transport network	2030	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	CA39	Park and Rides	Proposed package of strategically placed, Park and Ride sites to make it easier for people to join the bus and rail network. Sites will be identified by LAs in both suburban and rural areas and will act as hubs for connections between new Demand Responsive Services and the wider bus network.	2030	Bus and Last Mile	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	DU39	Newton Aycliffe active mode improvements	The project would enhance and improve cycling and walking routes across Newton Aycliffe linking the town centre with key employment locations, rail and bus infrastructure, green open space and residential areas by delivering the priority phases of the Local Cycling and Walking Infrastructure Plan for Newton Aycliffe.	2030	Active Travel	No	The scheme is over 6 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU42	Park and Pedal	Car parks on the radial routes to the City within a 5 mile radius to allow users to park and then cycle into the City.	2030	Park and Ride	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU43	Cycle super routes (5miles radius of Durham City)	Improve active mode offer on key commuter routes into the City Centre (A167 Chester le Street, A691 Langley Park, Witton, Consett, A690 Meadowfield etc)	2030	Active Travel	No	The scheme is over 8 km from the closest European Site and would, therefore, be unlikely have an LSE.

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
	DU44	Pop up PCRs	Improving or creating small car parks near key residential areas, close to public transport infrastructure to encourage the 'last miles' into the City via bus.	2030	Park and Ride	No	The scheme is over 8 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU45	Milburngate Footbridge	Introduce a footbridge over the River Wear between Penny Ferry Bridge and Milburngate Bridge, linking Freemans Reach and Framwellgate Waterside.	2030	Active Travel	No	The scheme is over 8 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU49	Secure cycle parking across the DCC building sites.	Improving the cycle storage offer at DCC buildings across the County.	2030	Active Travel	No	The scheme is over 8 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU50	Connectivity for stations and secure cycle parking (Chester le Street)	Provide and improve cycle storage facilities at existing and future Railway Stations.	2030	Active Travel	No	The scheme is over 8 km from the closest European Site and would, therefore, be unlikely have an LSE.
	DU52	Bus priority pinch points.	Undertake a detailed design and cost plan for public transport pinch points across the County as identified in coordination between bus operators and DCC public transport.	2028	Bus and Last Mile	No	The scheme is over 8 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA25	Park and Ride	Continued congestion through central Tyneside caused by traffic accessing the key employment, shopping and leisure opportunities in the area. Three potential bus-based PCR schemes are identified in the Council's Local Plan and also promoted by the Council through the BSIP process.	2030	Bus and Last Mile	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA34	Liveable neighbourhoods	Lack of alternatives to car use for certain communities to access essential services	2028	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA36	Riverside Park transport improvements	Riverside Park (between Askew Road and the River Tyne in the area around the Redheugh Bridge, extending to Dunston Staithes and also on to the Derwent Walk in future phases) is identified in the urban core strategy as an area requiring stronger links through to Windmill Hills and beyond to Gateshead town centre and the Quays, and links to the riverside/Keelmans Way cycle route with good links to Newcastle Quayside. Objectives would be to improve connectivity and environment for active travel, improve permeability by bus with stops and to make this a destination.	2028	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NE17	Sustainable permanent mitigations for the Tyne Bridge	Access arrangements at Cowhill, Jesmond, New Bridge Street and Pilgrim St for Buses, cyclists and pedestrians.	2030	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NT14	Coastal Connectivity	Extension of high quality active travel links and public realm enhancements linking to local district and town centres	2030	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.

Policy Type	Scheme ID	Scheme name	Scheme description	Delivery Year	Scheme Type	LSE	Justification
	NX13	Cycle Parking C Hubs at Nexus sites	A network of secure cycle lockers that are smart enabled across Metro stations, bus interchanges and rail stations. Development of a series of secure cycle hubs at public transport interchanges/Metro stations	2030	Active Travel	No	This will not lead to development that could have an LSE on the European Sites.
	SU30	Riverside Sunderland footbridge approach improvements	New footbridge over a ravine to form a closer link with Sheepfolds developments and the Stadium of Light area New connecting cycle links from the near Wear footbridge to Newcastle Road and the Dame Dorothy Street cycle route (under construction)	2030	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	SU33	Mobility Hubs in Sunderland.	To provide mobility hubs at a proportionate scale in Sunderland city centre, Sunderland North, Sunderland West, Washington and Coalfields areas	2030	Behaviour Change	No	This will not lead to development that could have an LSE on the European Sites.
	SU35	St Mary's Boulevard - Bus Priority and Pedestrian movements	A number of new developments are planned or in the process of delivery on the Riverside Sunderland site. To reduce severance for pedestrians between the city centre and the Riverside Sunderland site it is proposed to realign the existing St Mary's Boulevard to a more pedestrian friendly arrangement.	2030	Active Travel	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.
	CA31	Regional Autonomous Vehicles testbed	Increase regional capability and capacity in data analytics to support data-led connectivity initiatives including an autonomous vehicle testbed	2035	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	CA51	Unified open data for regional transport	A unified open data operation for regional transport so it is fully accessible to all and do data provided for different types of transport is in a similar format	2035	Information, Ticketing and Technology	No	This will not lead to development that could have an LSE on the European Sites.
	GA04	Blaydon station to town active travel link	Potential improvements at Blaydon rail station.	2035	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	GA11	Bill Quay pedestrian link to a future Metro Station	Pedestrian link from Gullane Close in Bill Quay to proposed Metro Station at Mill Lane	2040	Active Travel	No	The scheme is over 10 km from the closest European Site and would, therefore, be unlikely have an LSE.
	NX20	Ferry - Royal Quays Landing study	To explore a Ferry Landing at Royal Quays	2035	Ferry	Yes	This may lead to development that could have an LSE on the European Sites, subject to the nature, scale and location of the works.

AtkinsRéalis



Ecology
AtkinsRéalis
Chadwick House
Warrington
Cheshire
WA3 6AE

Tel: +44 (0)1925 238000

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AtkinsRéalis



AtkinsRéalis
AtkinsRéalis UK Limited
The Vantage
32-36 Great Victoria Street
Belfast
BT2 7BA

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