

TfN Strategic Transport Plan Independent Integrated Sustainability Assessment

Post Adoption Statement

Transport for the North (TfN)

February 2019



Notice

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Contents

Chapter	Page
1. Introduction	4
1.1 Background	4
1.2 Post Adoption Statement	4
1.3 TfN's Strategic Transport Plan	5
2. Consultation in the ISA process (incorporating SA/SEA, HIA, EqIA and CSA)	6
2.1. Scoping Report	6
2.2. ISA Report	6
3. Overview of ISA Process - Role of SEA in developing STP	7
3.1. Scoping Stage	7
3.2. Compatibility Assessment between ISA Objectives and STP Objectives	7
3.3. Consideration of Strategic Alternatives	8
3.4. Assessment of Final STP	10
4. Conclusions	25
5. Monitoring requirements	28
Appendix A. Scoping Report Consultation Comments	34
Appendix B. ISA Report Consultation Responses	46
Appendix C. Changes to Final STP	88
Tables	
Table 3-1 Alternative Scenarios	9
Table 3-2 Consideration of ISA Recommendations	11
Table 4-1 Assessment Summary for the Final STP (2019)	26
Table 4-2 Assessment Summary for the Draft STP (2018)	27
Table 5-1 Monitoring programme	29

1. Introduction

1.1 Background

Transport for the North's (TfN) Strategic Transport Plan (STP) was adopted as a statutory plan by its Board in February 2019. As part of the preparation of STP, an Independent Integrated Sustainability Assessment (ISA) has been undertaken incorporating Sustainability Appraisal (SA)/ Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA), Equality Impact Assessment (EqIA), Community Safety Assessment (CSA) and Habitats Regulation Assessment (HRA).

Due to the potential for the STP, and accompanying Investment Programme, to prioritise and promote schemes which will require an Environmental Impact Assessment, it is a statutory requirement that SEA is undertaken under the European Directive 2001/42/EC 'on the assessment of certain plans and programmes on the environment' (the 'SEA Directive'). The SEA has been integrated within a wider SA process as per Department for Communities and Local Government (DCLG) guidance covering the environmental, economic and social dimensions of sustainability.

While there is no statutory requirement to undertake an HIA in relation to the STP, it was recognised that it provides a useful way to support efforts to improve health of individuals and communities and help address health inequalities.

An EqIA has been undertaken of the STP, as it fulfils the statutory duties of public bodies to ensure the promotion of equalities under the Equality Act 2010 and subsequent Public Sector Equality Duty.

A CSA was undertaken to ensure that the STP does not have a detrimental impact on community safety (including crime and road safety) and where possible improves the existing situation.

HRA is a parallel and separate process to SA/SEA and informs the SA/SEA regarding effects on international sites. HRA is required by Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

The ISA for the STP began in October 2016. This Post Adoption Statement (completed in January 2019) is the last of three documents that have been produced as part of the ISA process, the first being the Scoping Report (published in January 2017, with consultation until March 2017) and the second being the ISA Report (published in January 2018, with consultation until April 2018). Two other separate documents informed the ISA: Habitats Regulations Assessment: Stage1 – Screening Report (published in January 2018) and Habitats Regulations Assessment: Stage 1 Screening and Stage 2 Appropriate Assessment (completed in January 2019).

The ISA process for the STP has been carried out independently by Atkins Ltd for TfN.

1.2 Post Adoption Statement

Article 9 of the SEA Directive requires that information on the STP, as well as how the SEA was taken into account, should be published. The purpose of the Post Adoption Statement is thus to describe:

- How environmental considerations have been integrated into the STP;
- How the ISA Report has been taken into account in preparation of the STP;
- How the opinions expressed in the consultation on Scoping Report and the ISA Report have been taken into account;

- The reasons for choosing the Final STP as adopted, in the light of other reasonable alternatives considered; and
- The measures that are to be taken to monitor the significant environmental effects of the implementation of the Final STP.

It should be noted that this Post Adoption Statement also considers social and economic considerations. The Post Adoption Statement for the STP should be read together with the ISA Report published in January 2018.

1.3 TfN's Strategic Transport Plan

The STP sets out the case for investment in a pan-Northern transport network through to 2050 in support of long term, sustainable economic growth across the North. The STP applies to an area of the North of England comprising the combined overall geographical extents of 20 local transport authorities as set out in the STP.

The requirements for the transport strategy of a Sub-National Transport Body (STB) are set out in the Cities and Local Government Devolution Act 2016 (sub-section 102I).

It states that the transport strategy of an STB (in TfN's case the Strategic Transport Plan) is a document containing the STB's proposals for the promotion and encouragement of sustainable, safe, integrated, efficient and economic transport facilities and services to, from and within the area of the STB.

The transport strategy should also consider the transport facilities and services mentioned in sub-section 102I, including those required to meet the needs of persons (including pedestrians) living or working in, or visiting, the area of the STB, and those required for the transportation of freight. An STB may include in its transport strategy any other proposals it considers appropriate that relate to transport to, from or within its area.

Through the regulations, TfN was required, in preparing the STP, to undertake a public consultation, which took place between January and April 2018.

In preparing or revising its transport strategy, TfN must (among other matters) have regard to:

- the promotion of economic growth in its area;
- the social and environmental impacts in connection with the implementation of the proposals contained in the strategy;
- any current national policy relating to transport that has been published by or on behalf of Her Majesty's Government; and
- the results of the public consultation.

For the Government, the Secretary of State must have regard to proposals contained in the transport strategy of an STB that appear to the Secretary of State to further the objective of economic growth in the area of the STB in determining:

- national policies relating to transport (so far as relevant in relation to such proposals); and
- how such policies are to be implemented in relation to the area of the STB.

For the North's 20 local transport authorities, they must exercise transport functions with a view to securing the implementation of the proposals contained in the STB's transport strategy.

On adoption, the STP is accompanied by an initial Investment Programme which comprises TfN's statutory advice to the Government on what the long term, multi-modal priorities for enhanced pan-Northern connectivity are. This Investment Programme builds on the strategic rail and road schemes previously announced, and draws on the

Integrated and Smart Travel programme, the Long Term Rail Strategy, the Strategic Outline Business Case for Northern Powerhouse Rail, the Major Road Network for the North, and the work done to date on the Strategic Development Corridors identified in the STP. The Investment Programme will be an evolving document, with future iterations setting out progress in delivering the interventions, as well as including additional interventions if further evidence provides the case for such. Each intervention work programme will need to develop its own specific strategic programme-level business cases, context and objectives, which support the pan-Northern transport objectives and evidence base set out in the STP. The sustainability impacts at a programme-level and subsequently for individual interventions will also be considered, ensuring they support the policy positions set out in the STP. It should be noted that the Investment Programme has not been the subject of ISA and is therefore not covered by this STP Post Adoption Statement.

2. Consultation in the ISA process (incorporating SA/SEA, HIA, EqIA and CSA)

Two consultation periods are required by the SEA Regulations. The first, for the Scoping Report, involves consulting the statutory consultation authorities comprising the Environment Agency, Natural England and Historic England. The second, for the ISA Report (including the Environmental Report), involves consulting those same organisations and the wider public. Further information is provided below:

2.1. Scoping Report

The Scoping Report was the subject of consultation between January and March 2017. The report detailed:

- The plans, policies and programmes relevant to the STP.
- Environmental, economic, social and health baseline information.
- The key environmental, economic, social and health issues and problems facing the area.
- A framework of objectives and indicators based on the tasks above, to be used in the ISA assessment process (“The ISA Framework”).

Comments were received from a number of consultees. Appendix A summarises the main consultees’ comments on the Scoping Report and indicates how these comments were addressed in the preparation of the Draft STP and ISA Report.

2.2. ISA Report

The ISA Report was published alongside the Draft STP for public consultation from January to April 2018. The ISA Report, which included the information contained in the Scoping Report, indicated how the Scoping Report consultation responses were considered, presented the assessment of effects of the STP strategic alternatives and of the STP preferred strategy, proposed mitigation measures and recommendations to improve the sustainability performance of the STP and proposed a monitoring programme for the significant effects identified by the ISA.

Comments were received from a number of consultees on the ISA Report. These were compiled by Ipsos MORI who were commissioned to undertake the public consultation on

the STP and ISA independently. Appendix B summarises the main consultees' comments on the ISA Report and indicates how these comments have been addressed in the preparation of the Final STP and this Post Adoption Statement.

3. Overview of ISA Process - Role of SEA in developing STP

3.1. Scoping Stage

The ISA started as the preparation of the STP began and it has progressed concurrently, in an iterative manner, in order to feedback environmental and sustainability objectives and policies into the plan making process. The ISA has been used as a tool for improving the STP formulation process from inception through production to adoption of the solutions included in the STP.

Initially, work undertaken for the Scoping Report established the sustainability baseline, identified key environmental, economic and social, including health and equalities, issues in the Northern region and identified opportunities and relevant sustainability themes. This had implications for the development of the STP and played a key role in developing a framework set of objectives and guide questions known as the ISA framework which was used to assess the STP's proposals.

3.2. Compatibility Assessment between ISA Objectives and STP Objectives

At the initial stages of developing the Draft STP an analysis was undertaken to identify to what extent the Draft STP objectives were compatible with the ISA objectives contained in the ISA framework. This is detailed in Section 2 of the ISA Report which should be read in conjunction with this Statement.

The assessment took place in two occasions (March and October 2017) prior to the public consultation.

The initial assessment showed that while there were a number of areas where there was a degree of compatibility between the two sets of objectives, overall it was concluded that there was a considerable level of uncertainty / unclear outcomes relating to overall compatibility.

It was therefore recommended that there were three areas where the STP Objectives could be strengthened to ensure sustainability was more comprehensively established. In particular, it was noted that the STP could be strengthened significantly in relation to GHG emissions, air quality and protection of the natural and built environment. The three broad areas for identified for improvement were:

1. More commentary on sustainability within the objectives and supporting commentary;
2. Within the objectives, greater acknowledgement and more discussion on the key sustainability issues of GHG emissions, air quality and protection of the natural and built environment; and
3. Greater clarity on the geographical focus of the STP investment plans, in particular in relation to prioritisation of support for economic transformation.

Overall, it was proposed that the STP would benefit strongly from more detail, or a more focused commitment, on how it is intended that each STP Objective will address issues of sustainability.

Following further development of the STP and consideration of the ISA findings above, greater clarification was introduced in the draft STP as to how the plan would ensure that each STP Objective was fulfilled. The October 2017 assessment of the updated STP indicated that there was a substantial degree of compatibility between the two sets of Objectives, with only a very small number of areas of potential conflict indicated.

The vision consulted upon in the Draft STP was:

‘A thriving North of England where modern transport connections drive economic growth and support an excellent quality of life’

The Objectives consulted upon in the Draft STP were as follows:

- Increase efficiency, reliability, and resilience in the transport system
- Transforming economic performance
- Improve access to opportunities across the North
- Promote and support the built and natural environment

Some further changes have been made to the last two STP Objectives in the final STP following public consultation. It is considered that these changes further strengthen the objectives concerning the environment and human health and social inclusion by strengthening the need to protect and enhance the built, historic and natural environment and recognising the importance of improving access to key opportunities in a context of equality in accessing those opportunities and improvement of the health for all citizens.

The updated vision for TfN is now:

‘A thriving North of England where world class transport supports sustainable economic growth and improved health and opportunities for all.’

Overall, the final STP objectives (as listed below) are highly compatible with the ISA objectives:

- Increasing efficiency, reliability, integration, and resilience in the transport system
- Transforming economic performance
- Improving inclusivity, health, and access to opportunities for all
- Promoting and enhancing the built, historic, and natural environment

3.3. Consideration of Strategic Alternatives

The ISA played a key role in identifying the reasonable alternatives considered in the development of the Final STP. Chapter 10 of the ISA Report considers the analysis of alternatives and should be read in conjunction with this Statement.

In developing the Draft STP, four scenarios within which the STP could be implemented were considered as in Table 3-1.

Table 3-1 Alternative Scenarios

Scenario 1 – Compact and Digital
<ul style="list-style-type: none"> • Urban areas are ‘Compact’, with brownfield development in the cores. • Local transport systems focus on serving radial movements. • Technological development has led to a preference for ‘Digital’ rather than physical connectivity. • Energy costs and therefore travel costs are high. • 192% Rail growth • 26% Road growth
Scenario 2 – Compact and Travel Friendly
<ul style="list-style-type: none"> • Urban areas are ‘Compact’, with brownfield development in the Cores • Local transport systems focus on serving radial movements • Technological development has led to advances in ‘Travel Friendly’ connectivity options • Energy costs and therefore travel costs are low • 327% Rail growth • 52% Road growth
Scenario 3 – Dispersed and Digital
<ul style="list-style-type: none"> • Urban areas are ‘Dispersed’, with mixed greenfield and brownfield development in the suburbs and urban fringes • Local transport systems provide for all types of cross district movement • Technological development has led to preference for ‘Digital’ rather than physical connectivity • Energy costs and therefore travel costs are high • 60% Rail growth • 27% Road growth
Scenario 4 – Dispersed and Travel Friendly
<ul style="list-style-type: none"> • Urban areas are ‘Dispersed’ with mixed greenfield and brownfield development in the suburbs and urban fringes • Local transport systems provide for all types of cross-district movement • Technological development has led to advances in ‘Travel Friendly’ connectivity options • Energy costs and therefore travel costs are low • 136% Rail growth • 54% Road growth

These alternative scenarios were assessed against the ISA Objectives. In addition to the above scenarios, a Business as Usual scenario was developed to allow comparison to be made in the assessment with the anticipated evolution of the environment in the absence of the STP.

From an overall sustainability perspective, it was found that Scenario 1 (Compact & Digital) performed best. In this Scenario, as with all the other scenarios, there is one key area of uncertainty which relates to the need to protect sites designated for nature conservation. This uncertainty relates to the fact that at this stage of Plan development, in the absence of more detailed information, it was not possible to ascertain the nature of potential effects, as this will depend upon the type and location of interventions. Performance against all other ISA Objectives under Scenario 1 is anticipated to be either slight beneficial or moderate beneficial.

Environmentally, Scenario 1 benefits particularly from the compact urban form which allows greater opportunities for walking and cycling, an expected uptake of Low/Zero Emission Vehicles (LZEVs), reduced greenfield land take (and therefore less disturbance

to habitats, soils, the water environment, etc.), and the minimisation of waste and use of resources, and allows easier enhancement of lower carbon, affordable transport choices.

3.4. Assessment of Final STP

Following the appraisal of the strategic alternatives, the preferred option for the STP was developed by TfN during the preparation of the Draft STP. The preferred option is largely based on the realistic scenario that was assessed at the Strategic Alternatives stage, along with some interventions that were part of the optimistic scenario and some additional interventions that were not assessed at the Strategic Alternatives stage. The Draft STP was assessed by the ISA in 2017/18 and the results reported in the ISA Report. Sections 4 and 5 of the ISA Report provide the assessment results of the Draft STP and should be read in conjunction with this Statement.

Following public consultation on the Draft STP and ISA Report, TfN took on board the comments arising from public consultation in the preparation of the Final STP (see Section 2) and this resulted in changes to the STP. The extent of these changes and the implications for the ISA in terms of further consideration are set out in Appendix 3.

In addition, the ISA made a series of recommendations aimed at improving the overall sustainability performance of the Draft STP in relation to the ISA Objectives. These were considered by TfN at the time of drafting the Draft STP but not necessarily addressed in full. These ISA recommendations provide the framework for the assessment of the Final STP presented in this Statement.

Table 3-2 lists the ISA recommendations and how these have been considered and/or incorporated into the Final STP.

Table 3-2 Consideration of ISA Recommendations

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
General recommendations			
STP Vision	No recognition of sustainability within the STP Vision.	The Vision needs to be reworded to give due recognition to the need for economic growth to be set in the context of acceptable social and environmental parameters.	The Vision has been expanded to include a reference to improved opportunities for all together with excellent quality of life. The latter reference is closely linked to environmental quality and the new reference with social acceptability. “A thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all.”
STP Objectives	There is recognition of some aspects of sustainability and the need to ‘Promote and support the built and natural environment’ through its inclusion as an enabling objective.	This enabling objective and supporting text needs to more overtly address the sustainability agenda set out in the ISA.	The objective has been modified to “Promoting and enhancing the built, historic, and natural environment” better reflecting the sustainability agenda set out in the ISA. It covers a whole range of issues, including the need to provide more sustainable travel choices for the movement and people across the North, reducing air pollutant and carbon emissions from transport and making the best use of existing transport infrastructure before investing in new capacity. It also ensures that new infrastructure is designed to minimise the negative impacts on the natural, historic and built environment, including on biodiversity and, where possible, result in net environmental gains.
STP Principles	Section 3.2.2 addresses ‘Principles for Sustainable Strategic Transport Infrastructure’ but notes these will be developed over time.	These principles should be better defined at this stage. As it stands, the three principles listed do not cover the sustainability agenda identified in the ISA.	The Final STP now defines a set of Principles which will inform the development of the Investment Programme and which cover the sustainability agenda identified in the ISA. The aim is to ensure that the Investment Programme becomes an exemplar in how it: <ul style="list-style-type: none"> • Defines a broad set of infrastructure requirements that will seek to deliver high quality

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
			<p>travel with associated high quality environmental mitigation, to create an attractive, inclusive, and accessible environment to live, work and invest, for a healthier, safer, more inclusive strategic transport network across the North.</p> <ul style="list-style-type: none"> • Acts as a catalyst for future transport technologies that will enable environmentally and efficient travel, contributing to the Government's target to reduce carbon emissions. • Ensure that improvements to the strategic transport networks support inclusive growth, reduce social isolation, have health and wellbeing benefits, and provide affordable access to key opportunities. • Promotes confidence in businesses to invest in a skilled labour market to deliver the transport infrastructure required, as well as supporting wider opportunities. • Explores opportunities for green and blue infrastructure to enhance landscapes, ecosystems, and habitats and support a net gain in biodiversity.
Section 4.1	No note of the requirement for schemes to be assessed in terms of Social and Environmental issues as well as Economic.	The graphic in Section 3.5.1 could perhaps be amended (for example with a bar across the bottom of the graphic) to show that there will be environmental (and other) considerations made as part of the Staged assessments of schemes. This could include WebTAG and or EIA etc. It would also be worth noting that many improvements will find their way into LTPs, which are subject to SEA as well as HE and NR investment programmes. These are increasingly subjected to environmental appraisal at a strategic level (i.e. beyond individual schemes). This STP should be setting the framework within which the environmental impact	<p>A more developed section describing the appraisal process is now present in the Final STP as follows:</p> <p>Any interventions set out in the Investment Programme will be the subject of environmental and social sustainability assessments to the highest regard, including what carbon and air quality benefits the interventions will bring.</p> <p>In developing and delivering TfN's Investment Programme, a two-stage sustainability appraisal</p>

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
		<p>of these transport interventions should be evaluated.</p>	<p>approach will be carried out. For the Strategic Development Corridors, an Environmental Assessment Report is being undertaken as part of the Strategic Programme Outline Case, and the Strategic Outline Business Case for Northern Powerhouse Rail includes a sustainability assessment. These form Stage 1 assessments, helping to shape interventions for inclusion in the Investment Programme. Stage 2 will ensure that in the development and design of the interventions, further detailed sustainability assessments are undertaken to inform final funding decisions and approvals.</p> <p>Stage 1 will involve checking the degree of alignment of the interventions with the sustainability principles and ambition for developing the Investment Programme, as set out in the Strategic Transport Plan.</p> <p>Stage 2 will require a more detailed WebTAG compliant appraisal, and an enhanced TfN appraisal, undertaken prior to seeking final approval for funding. Interventions will be specifically assessed for their impact on environmental and social sustainability. Environmental Assessment Reports will be first prepared, and further sustainability analysis of each proposed intervention will be undertaken as part of the development of the business cases, with TfN working with Partners and stakeholders.</p>
Section 4.5	Short section on the Future of Transport (Section 4.5) deals with 'Environmental: Climate Change,	It is considered that further detail on these issues could (and should) be provided in the STP. In addition, the section mentions carbon emissions,	Two new sections have been added to the Final STP 'Why' chapter to provide the environmental and social context of the Plan alongside the

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
	<p>Environmental Pollution and Resource Constraints'. This section raises (at a very high level) some of the anticipated issues, but there is no recognition of how the STP will address these other than 'these factors... will be considered during the review process as well as in the development of specific investment projects'.</p>	<p>air quality and climate change as key issues, but the text following the bullets only focuses on climate change adaptation.</p>	<p>economic context. These sections set out the current situation in the region and how the STP proposals could affect them.</p> <p>In addition, a new section on 'Inclusive and Sustainable Growth' has been added to the Final STP 'Why' chapter providing clear policy direction on addressing several social and environmental aspects:</p> <ul style="list-style-type: none"> - People and the transport network - Safety on the transport network - Transport and health - Transport and the environment - Biodiversity, and the natural and historic environment - Adaptation to climate change - Use of resources - Protection of soils - Reducing air pollution from transport - Decarbonisation of transport
Recommendations by ISA Objectives			
<p>Reduce greenhouse gas emissions from transport overall and particularly from road and aviation</p>	<p>Reduction of greenhouse gases were noted in Section 4.5 which deals with 'The future of transport', which notes the need to review and understand future trends. Greenhouse gases were discussed in relation to a reduction due to new technologies.</p> <p>Emissions in general were noted in Section 3.2.2, but again, this was in the context of future transport technologies.</p>	<p>While it is good that greenhouse gases (and emissions in general) are acknowledged in the plan, this could go further. In particular, its inclusion as part of future knowledge and trends which will be considered as part of future revisions of the plan and in the development of specific investment projects, does not address this pressing issue on Day 1 of the Plan. The issue of Greenhouse Gas emissions was raised repeatedly during the consultation process.</p>	<p>A whole new section has been added to the Final STP which deals with decarbonisation of transport. A top line commitment has been set to reduce carbon emissions in line with the 80% by 2050 from 1990 levels of national carbon emissions, from all sources, in alignment with government policy.</p> <p>The STP sets out that TfN supports the series of Government policies and proposals to meet the UK's legislated emission reduction targets as set out in the Road to Zero Strategy and Clean</p>

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
		<p>The STP should also be setting a 'topline' goal commitment to reducing Greenhouse Gas emissions (from current levels) and where possible in line with Government commitments. The actual specifics on how this is done would be derived from the context of this top line goal. In the immediate phase, there are numerous methods by which the STP could encourage a reduction in Greenhouse Gases and general emissions, with immediate effect – for example by encouraging walking and cycling, reduction in car use etc.</p>	<p>Growth Strategy, with the latter setting out a series of policy measures focussed on accelerating the shift to low carbon transport.</p> <p>Commitments have also been made to achieve the more stringent trajectory recently set out by the Committee on Climate Change. This includes assessing the impacts of a reduction in transport emissions of 46% from 2017 to 2030 and an end to sale of all new conventional petrol and diesel cars and vans by 2035 as opposed to 2040 as set out by government.</p> <p>Building on this, the STP now sets out policy positions and approaches regarding the following topics:</p> <ul style="list-style-type: none"> - Decarbonisation of rail by 2040 - Zero public transport by 2050 - Rapid uptake Ultra Low Emission Vehicles - Rapid roll out of Electric Vehicle Charging Infrastructure - Autonomous Vehicles - Zero Emissions Zones - Spatial Planning and Digital Infrastructure - Emissions from vehicles already on the road - Emissions from trucks - Emissions from rail - Emissions from aviation - Low carbon alternative transport

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
			<p>In the new section Pathway to 2050, TfN commits to identifying the most appropriate trajectory for the North, working collaboratively with Partners, recognising that TfN cannot achieve a carbon reduction on its own.</p> <p>TfN’s Investment Programme, the proposed Inclusive and Sustainable Growth Framework, and supported by complementary investment and interventions at a local level, will set out a clear programme of phased introduction and implementation of key policies and measures through the interventions promoted, and their projected contribution to meeting carbon budget through to 2050 (‘Pathway to 2050’).</p> <p>TfN’s preliminary carbon analysis, as set out in the evidence base, demonstrates that total emissions will need to fall further and quicker as future interventions are delivered, in particular in the next two carbon budget periods. In order to address this challenge, further carbon analysis work to define the ‘Pathway to 2050’ as part of TfN’s Inclusive and Sustainable Growth Framework will be undertaken by 2020.</p>
Protect and enhance biodiversity, geodiversity and healthy ecosystems and ecological networks,	Biodiversity, geodiversity, ecosystems, ecological networks were not noted in the draft STP.	<p>The STP needs to acknowledge the potential for a direct physical loss of species and habitats from the implementation of the Plan, as well as other issues such as severance. These types of issue were raised in the consultation responses received.</p> <p>The Plan should also recognise that there may be opportunities for habitat enhancement or</p>	The revised STP objective “Promoting and enhancing the built, historic, and natural environment” is aimed at ensuring that through collaboration with TfN’s Partners, stakeholders and communities, transport interventions across the strategic transport system protect and enhance the natural, historic and built environment, making sure that the North’s strategic transport system is as sustainable as possible. It covers a range of

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delivering a net gain for nature		<p>protection, the development of wildlife corridors, removal of Invasive / Non-Native species etc.</p> <p>As with Greenhouse Gas emissions, there should be a 'topline goal' commitment to no net loss of biodiversity and the specifics of how this is done would be derived from this level of commitment.</p>	<p>issues which include ensuring that new infrastructure is designed to minimise the negative impacts on the natural, historic and built environment, including on biodiversity and where possible result in net environmental gains.</p>
<p>Conserve and enhance the international sites (HRA specific objective)</p>	<p>The draft STP did not note sites designated for nature conservation purposes – in particular those International sites such as Natura 2000 (SACs, SPAs, Ramsar), nor did it provide detail on potential impacts and how these may be mitigated</p>	<p>In order for the HRA to assess potential effect of the STP, more detail on individual schemes, their mode and their locations needs to be provided. Without this information, the HRA will not be able to determine the likely significance of effect on the designated sites, with a potential risk that Statutory consultees such as Natural England will not agree to the findings and will challenge the STP.</p> <p>It should be noted that, as with overall biodiversity, a goal commitment should be set in relation to the protection of designated sites.</p>	<p>A new section on “Biodiversity, and the natural and historic environment” has been added to the Final STP. This section clarifies the STP’s fundamental aim of protecting and enhancing, where possible, the natural and historical assets of the northern region and recognises the importance of landscapes, townscapes, historic assets, rivers and the rich biodiversity and habitats. It sets out the approach for international sites as follows:</p> <p>Prime among these sites are Special Areas of Conservation and Special Protection Areas, which form the Natura 2000 European network of core breeding and resting sites for rare and threatened species, along with some rare natural habitat types. It is the aim of this network to ensure the long-term survival of Europe’s most valuable and threatened species and habitats, listed under the European Commission’s Habitats and Birds Directives. In addition to the Natura 2000 sites, there are also internationally important wetlands designated as Ramsar sites.</p> <p>Any potential direct or indirect impacts on these sites that may arise from new or upgraded transport interventions will be appropriately assessed, mitigated, and/or compensated for, in line with existing best practice and relevant</p>

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
			legislation across the life span of the Plan. This would include the Nature 2000 sites and Ramsar sites for which Habitats Regulation Assessment will be carried out, as necessary, prior to final decisions being made on transport interventions.
Protect and enhance air quality	In Section 4.5, the STP noted that transport is the biggest source of air and noise pollution in the UK and further notes the likely implementation of Clean Air Zones in major towns and cities. It also noted the potential for future technology to reduce air pollution.	<p>As with the issue of Greenhouse Gas (and general emissions), it is positive that the STP recognises the role of transport in relation to air quality. However, its sole inclusion in a section relating to 'The Future of Transport' and while it is noted will be considered as part of future revisions of the plan and in the development of specific investment projects, does not reflect the current understanding of this issue.</p> <p>It is important to stress that the issue of poor Air Quality and the role of transport in this, was raised repeatedly and strongly as part of the consultation process and is currently an issue of national significance and concern. It is therefore considered that the STP would benefit immensely from a more detailed and considered approach to its inclusion.</p> <p>This detailed and considered approach would also include the setting of a 'topline goal' in relation to air quality.</p>	<p>The Final STP recognises the importance of reducing air pollution from transport in a new section, with a particular focus on particulate emissions from non-exhaust sources which are becoming increasingly important, as emissions from exhausts decrease.</p> <p>TfN will support interventions that improve air quality by promoting a modal shift from private motor vehicle use to sustainable travel modes, including public transport, walking and cycling, can help improve physical activity levels, which will provide additional public health benefits and contribute to reduced CO2 emissions and air pollution simultaneously.</p>
Increase resilience of the transport network to extreme weather events and a changing climate	Climate change was noted in Section 4.5 as being one of the factors around which there is uncertainty. In particular it noted "The effects of climate change are complex and wide-ranging, but there is an ever-growing body of evidence suggesting that there will be	It is positive that the issue of resilience of the transport network to extreme weather events is recognised. However, as with the issues of Greenhouse Gases and Air Quality, it is considered that the issue of a changing climate and its potential impacts is well enough understood for its more detailed inclusion in the STP (along with 'topline goal' commitments),	A new section has been added dealing specifically with 'Adaptation to climate change' in which TfN and local transport authorities working with stakeholders, will seek to ensure that the north's transport system is resilient to the impacts of severe weather and climate change, so that services can respond effectively to extreme

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
	<p>an increase in the frequency and intensity of extreme weather events".</p> <p>The draft STP further noted "Heavy rainfall and flooding associated with climate change could affect infrastructure repairs and construction, disrupt traffic flow and weaken the infrastructure that supports roads, tunnels, and bridges. The increased risk of disruption, damage and failure of transport systems needs to be recognised and transport infrastructure will need to be built and operated with resilience in mind".</p>	<p>rather than as part of future revisions of the plan and in the development of specific investment projects.</p> <p>A Climate Change Adaptation Strategy should also form a key element of the STP.</p>	<p>weather events while continuing to operate safely and reliably.</p> <p>The Investment Programme should therefore not just identify enhancements, but interventions that ensure the North's productivity is not held back due to a lack of resilience on the strategic transport network.</p>
<p>Protect and enhance the inland and coastal water environment</p>	<p>No note was made in the draft STP of the potential effects on the water environment (inland or coastal).</p>	<p>The STP needs to recognise the need to protect water quality, both during construction and operation, from transport schemes.</p> <p>The STP should also recognise that there is an opportunity to enhance the water environment through the use of SuDS, development of blue infrastructure etc.</p>	<p>The STP now recognises the need to protect water quality in the new section on "Biodiversity, and the natural and historic environment" and that SuDS have the additional benefit of helping to improve water quality and can help to reduce polluting effects from road runoff. In addition, well designed SuDS can act to increase biodiversity and enhance habitat.</p>
<p>Protect and conserve soil and remediate / avoid land contamination</p>	<p>No note was made in the draft STP of the potential effects for the soil environment or the need to remediate / avoid areas of land contamination – an important issue across large parts of the north of England, given the large urbanisation and significant industrial heritage.</p>	<p>The STP needs to highlight the need to avoid permanent (irreversible) loss of the most highly productive agricultural soils, protect soils during construction, remediate contaminated land when possible and prevent negative effects on agricultural holdings through severance and contamination.</p>	<p>A new sub-section on Protection of soils has been added to the Final STP, recognising that soil is an essential finite resource that provides for the growing of foods, timber and other crops, acts as a store for carbon and water, a reservoir for biodiversity and a buffer against pollution.</p> <p>The soils in the North are valued as a finite multi-functional resource, which underpins the region's wellbeing and prosperity. Decisions made about transport interventions will take full account of the impact on soils, their intrinsic character and the</p>

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
			sustainability of the many ecosystems they deliver. A soil survey and agricultural land classification must be carried out as part of the preparation of transport intervention proposals. Measures must be taken to protect, conserve and manage soil resources during construction and operation of transport interventions to prevent soil from being adversely affected by pollution and contamination.
Support the conservation and enhancement of the quality and distinctiveness of historic assets, industrial and cultural heritage	Section 2.3 noted the role of transport in the economy of the north and stated “The North has many historic and modern towns and cities, as well as boasting incredible coastlines and stunning national parks. In some areas of the North, tourism related industries are some of the major employers”.	<p>Better recognition of the unique cultural heritage assets of the north of England should be made in the STP. This could include reference to the World Heritage Sites, Scheduled Monuments, Listed Buildings, Parks and Gardens and the settings in which these are all placed. It should also highlight how access to these areas could be enhanced – preferably by sustainable means.</p> <p>The STP should also recognise that there are significant elements of the transport network, which are important historic assets in their own right, e.g. bridges, canals, railway stations etc.</p> <p>The STP should provide the policy and evaluation framework for lower level plans, programmes (including those of HE and NR) and schemes. At present the draft STP only notes historic towns etc in relation to supporting the primary economic objective.</p>	<p>A new section on “Biodiversity, and the natural and historic environment” has been added to the Final STP. This section clarifies the STP’s fundamental aim of protecting and enhancing, where possible, the natural and historical assets of the northern region and recognises the importance of landscapes, townscapes, historic assets, rivers and the rich biodiversity and habitats.</p> <p>It sets out that protection will be given to important heritage assets and their settings. Careful scheme design will be a vital component in this protection and will often offer opportunities to improve or enhance existing features.</p>
Protect and enhance the character and quality of landscapes and townscapes	No note was made in the draft STP of the potential effects from the transport network on landscapes and townscapes of the north of England.	The STP should encourage design, construction, repair and maintenance of transport infrastructure that respects and enhances the landscape character and townscapes. It should also recognise the need to promote and conserve those landscapes of national significance such as	A new section on “Biodiversity, and the natural and historic environment” has been added to the Final STP. This section clarifies the STP’s fundamental aim of protecting and enhancing, where possible, the natural and historical assets of the northern region and recognises the importance of

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
		<p>AONBs and National Parks and support the protection of 'tranquil areas'.</p> <p>Opportunities should be taken during scheme design to ensure appropriate screening and where possible, improve townscapes.</p> <p>The STP should provide the policy and evaluation framework for lower level plans, programmes (including those of HE and NR) and schemes. At present the draft STP only notes historic towns etc in relation to supporting the primary economic objective.</p>	<p>landscapes, townscapes, historic assets, rivers and the rich biodiversity and habitats.</p> <p>It sets out protection will be given to important landscapes, including National Parks, with construction in these areas only undertaken when it is vital and after careful consideration of all options and the additional planning protection which applies in these areas. Careful scheme design will be a vital component in this protection and will often offer opportunities to improve or enhance existing features.</p>
<p>Promote the prudent use of natural resources, minimise the production of waste and support re-use and recycling</p>	<p>No note was made in the draft STP of the need for prudent use of natural resources, minimising the production of waste and encouraging recycling.</p>	<p>The STP should recognise that the construction and operation of a resilient transport network involves the consumption of significant levels of resources e.g. fuels and construction materials. The STP should encourage new / upgraded infrastructure to be resource efficient (materials, energy, water, sustainable procurement etc) in construction and operation. It should also encourage and promote sustainable waste management practices and encourage the use of recycled or secondary materials, with a goal level commitment made to ensure this.</p>	<p>A new sub-section of 'Use of resources' has been added in which TfN is supportive of new approaches which encourage new or upgraded infrastructure to undertake sustainable procurement and being resource efficient, including through the promotion of the circular economy or exploring opportunities that can reduce the consumption of natural resources, such as soil, materials, energy and water in construction, operation and maintenance.</p>
<p>Enhance lower carbon, affordable transport choice</p>	<p>Other than the comments relating to general emissions noted above, no specific note was made in the draft STP of lower carbon affordable transport choice, it may though be possible to infer this intention from other sections.</p> <p>Reference to affordability was in relation to the (important) need to</p>	<p>The STP should support the minimisation of dependence upon the private car and promote a shift to rail travel. A modal shift in freight away from roads should also be encouraged through the STP. Both these aspects should be ensured through a goal level commitment to prioritise low carbon transport as the preferred choice in all proposed interventions.</p>	<p>The Final STP sets out in the new section on Transport and the Environment that making the best use of existing transport infrastructure and encouraging sustainable modes such as cycling and walking (for example by providing secure cycle storage at public transport interchanges and ensuring that routes are safe and green), will help to reduce environmental impacts (as well as increase public health benefits), while locating new</p>

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
	ensure value for taxpayers from the investment programme.		development where there is good access to public transport and services will reduce road trips and therefore emissions. Road and rail networks must also be used as efficiently as possible.
Enhance long term economic prosperity and promote economic transformation	The Prime Objective of the STP was solely focused on Economic performance and there was significant emphasis throughout the document on this aspect.	It is suggested that the STP should note that strong economic prosperity has to be within an acceptable / appropriate social and environmental context.	<p>This imbalance has been addressed in the Final STP through a clear recognition that 'for transport systems to work efficiently and effectively, it is crucial that pan-Northern road and rail networks are well integrated with local roads and public transport, as well as walking and cycling networks.</p> <p>Whilst interventions to support local roads, local public transport, walking and cycling will mostly be made at a local level, these can reduce congestion and are essential in creating a more integrated, healthy, and resilient overall transport system, and so are vital to achieving transformational growth across the North. The management and delivery of such improvements are vital to the North's transport system and to achieving our economic, health, social and environmental targets, but they are not solely within our remit.</p> <p>It is therefore crucial that all Northern Partners work together to deliver a transport system promotes social inclusion and improves the health outcomes and quality of life for communities across the North. It is also important to meet our objectives for an improved environment and contribute to national and international targets on carbon reduction, clean air and protection of natural species and habitats.'</p>

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
Coordinate land use and strategic transport planning across the region	Section 1 noted “The Strategic Transport Plan must help increase productivity and the North’s contribution to the UK economy by integrating land use and transport in the most effective way”. It is also noted that “TfN’s Strategic Transport Plan can help facilitate joined-up, sustainable infrastructure development”.	These are positive elements of the draft STP, but further clarity could be provided.	<p>An expanded revised section on Spatial Planning has been added which recognises TfN’s remit to influence and promote strategic transport interventions, with the spatial development locations requiring joint working with combined authorities and groups of cooperating authorities as they develop Statements of Common Ground.</p> <p>TfN also wants to continue to work collaboratively through existing partnerships and networks, such as work to develop a Great North Plan, to ensure that there is long term and co-ordinated strategic infrastructure investment in the North linked to these spatial planning priorities and associated infrastructure needs. TfN will also work with its Partners to use the Strategic Transport Plan to support the case for strategic and local investment and how it supports priorities set out in spatial plans.</p>
Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	The STP noted in Section 3.4.3 that “Passengers will be able to plan journeys, view fare information and know the different options as well as benefitting from a fair price promise when travelling across all operators and modes of travel in the North”. However, while it was inferred that this would apply to all citizens, there was a lack of detail on the effects for more vulnerable citizens.	The STP should aim for all citizens to have the opportunity to access transport and the related services that come with this. There should also be a focus on more vulnerable members of society – particularly children and older people.	<p>The Vision has been expanded to include ‘improved opportunities for all’ alongside ‘sustainable economic growth and excellent quality of life’.</p> <p>“A thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life <u>and improved opportunities for all.</u>”</p> <p>A new section on “Inclusive and sustainable growth” clearly recognises that social and health inequalities are widely seen as one of the defining challenges of the 21st Century, as such inclusive and healthy growth should be at the heart of public investment. Local Industrial Strategies and this</p>
Improve health and well-being for all citizens and reduce	The issues of health and well being and reducing inequalities in health were not addressed in the draft STP.	The Plan should seek to provide accessible and affordable transport and ensure that it indirectly improves health through policies to reduce air and noise pollution.	

2018 Plan	How did the 2018 Plan respond to this ISA Objective?	Potential areas for improvement recommended by the ISA in 2018	How does Final Plan respond to this ISA Objective?
inequalities in health (<i>HIA specific objective</i>)		It should also encourage Physical activity levels to be improved by improving walking and cycling facilities and improve access to and provision of greenspace. The STP should also improve the physical environment to encourage physical activity	Strategic Transport Plan must provide a way for inclusive benefits from investment to be imbedded and secured across the North. It also recognises that this Strategic Transport Plan can play a fundamental and important role in bridging the societal, health and environmental inequality gaps that exist across the North.
Promote community safety and reduce crime and fear of crime for all citizens (<i>CSA specific objective</i>)	The issues of community safety, crime and fear of crime were not addressed in the draft STP.	The STP should note the dangers of travelling on the transport network, particularly for more vulnerable citizens such as lone women, young people etc. The Plan should consider schemes that engender a sense of safety and reduce crime and the fear of crime. This can be done through careful design for example. Interventions that reduce or discourage anti-social behaviour should also be promoted.	A new section ‘Safety on the transport network’ has been added to the Final STP covering this ISA objective where it is recognised that a safe and inclusive transport network is a fundamental requirement. This determines how people use and perceive the transport network, especially when encouraging more people to use public transport and active travel modes. Safety must also be a fundamental consideration in the design and delivery of all new transport interventions, for public transport, active travel, and private trips. TfN calls on Delivery Bodies, and transport operators and providers to consider safety throughout the development, delivery, and operation of the North’s transport network.

4. Conclusions

The ISA process carried out during the development of the STP has been thorough and comprehensive. Iterations of the STP have been subject to review by the ISA team throughout all stages from setting of objectives, establishing the baseline and deciding on scope through to appraising strategic options and assessing the effects of the STP, to considering public consultation responses and assessing significant changes to the STP as a result.

Through all these stages, the ISA team engaged in continuous dialogue with and challenged TfN's Strategy team to ensure sustainability was embedded as a fundamental element of the STP. Examples of this engagement include changes to the Vision of the STP itself, Plan Principles which address and cover the sustainability agenda and a clearer approach to how environmental and social matters will be addressed in future, as schemes derived from the Plan are delivered.

It is to be recognised that the nature of a transport plan is that it will result in a series of transport infrastructure interventions, to be set out in the Investment Programme, which in many cases will require extensive engineering works across large geographical areas. The nature of these interventions means that environmental and social implications are to be expected, and these were recognised in the ISA Report and the subsequent responses received to the public consultation on the Draft STP and have now been fully reflected in the Final STP through key changes made by TfN as set out in Table 3-2.

Table 4-1 below indicates the assessment scores of the Final STP performance in relation to the ISA objectives based on the analysis made in Table 3-2. For comparison, Table 4-2 provides the assessment scores of the Draft STP 2017 that was subject to public consultation as set out in the ISA Report. When compared to the Draft STP, the changes made to the Final STP improved its performance with regards to many environmental objectives covered by the ISA: protecting habitats and species and designated nature conservation sites, reducing carbon emissions from transport, ensuring resilience of transport to climate change, protecting air quality, improving resource efficiency, protecting soils and avoiding loss of valuable agricultural land, protecting the water environment and protecting historic assets, landscapes and townscapes. In addition, the Final STP recognises that the need for inclusive and healthy growth to be at the heart of public investment and that the STP can play a fundamental and important role in bridging the societal, health and environmental inequality gaps that exist across the North. Similarly, the Final STP also provides greater clarity on the safety of the transport network and recognises that a safe and inclusive transport network is a fundamental requirement.

The assessment of the proposed Work Programmes has identified adverse effects in relation to both Road and Rail. The risk based assessment approach utilised (refer to ISA Report for further detail) meant that, for example, significant adverse effects are anticipated in some instances on landscapes, on soil and avoidance of land contamination, as well as the ability of the transport network to be resilient to a changing climate. It is the case though, that the cross cutting nature of the Final STP ensures that there are a series of new policies and measures introduced on Inclusive and Sustainable Growth; Transport and the Environment; Analysis and Appraisal; Spatial Planning and Local and Sustainable Transport; the application of which at scheme level will act to reduce effects from these intervention types and other interventions with potentially similar effects. It should also be noted, however, that the predicted effects associated with the proposed Major Roads and Strategic Development Corridors (SDC) are uncertain at this stage as only high level of information about the proposed schemes is known. Nevertheless, it is possible to be confident that identified environmental and

social issues will be adequately addressed at the appropriate stage of scheme development, as part of delivering the Investment Programme.

Of particular note within the Final STP is the greater recognition given to the issue of a changing climate and the role that transport plays in this, along with associated effects on air quality. While it is recognised that TfN cannot achieve a carbon reduction on its own, it will work collaboratively with Partners, Delivery Bodies and the Government, to deliver the ambitions of the STP and local transport plans, in tackling carbon impacts and reductions from transport, with many of these measures also benefitting air quality.

In recognition of the ongoing environmental and social implications of implementing the STP, and the interventions in the Investment Programme, a series of indicators have been identified for monitoring in order to establish a causal link between implementation of the STP and the likely significant effects. This monitoring programme is set out in Section 4 and Table 4-1 and will be utilised by TfN in the development of any future review or iteration development of the STP and the Investment Programme.

Overall therefore, it is considered that the Final STP represents a much improved and balanced approach in terms of sustainability performance across the full range of sustainability objectives identified, and should help ensure that the vision for ‘A thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all’ can be achieved in a sustainable and integrated fashion, with a robust review mechanism in place to ensure that the approach to sustainability can be enhanced as a greater understanding of the effects on the North is gained.

Table 4-1 Assessment Summary for the Final STP (2019)

Plan Element	ISA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Strategic Components																
Connecting People	-	+/-	?	+	+	-	+/-	+/-	--	-	+++	+++	+++	++	++	++
Connecting Business	-	+/-	?	-	+	-	+/-	+/-	--	-	-	+++	++	++	++	+
Moving Goods	-	+/-	?	-	+	-	+/-	+/-	+/-	++	++	++	+	+	++	?
Inclusive and sustainable growth (NEW)	++	+	?	+	+	+	+	0	0	+	++	+	+	+++	+++	+++
Transport and the Environment (NEW)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	++	++	++	+	+	+
Analysis and appraisal (NEW)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
Spatial Planning (NEW)	++	+	+	++	+	+	+	+	+	+	++	++	+++	+	+	+
Work programmes																
Local and Sustainable Transport (NEW)	+++	+	?	+++	+++	++	++	+	+	++	+++	++	+++	++	++	++
Integrated and Smart Travel	++	+	+	++	++	+	+	+	+/-	+	+++	++	+	+	+	+
Strategic Rail	++	+	?	++	--	+	+	+	+	+	++	+++	+++	++	++	++
Northern Powerhouse Rail	++	+	?	++	--	-	+	+	+	+	+	+++	++	++	++	+
Major Roads (NEW)	-?	+/-?	?	-?	-?	-?	-?	-?	-?	+/-?	--	+++	+	+	++	+/-
SDC 1 – Connecting the Energy Coasts	+?	-?	?	-?	-?	-?	-?	-?	-?	+?	--	+	++	+	+/-	+
SDC 2 – West and Wales	+++?	+/-?	?	+++?	+?	+?	-?	+?	+?	+?	++	++	+++	+	+/-	+
SDC 3 – Central Pennines	+?	-?	?	-?	-?	-?	-?	+/-?	--?	+/-?	+	++	+	+	+/-	+
SDC 4 – Southern Pennines	+?	-?	?	+?	-?	-?	--?	+?	+/-?	+?	+	+++	++	+	+/-	+
SDC 5 – West Coast - Sheffield City Region	+?	+/-?	?	+?	-?	-?	--?	+/-?	-?	+/-?	+	++	++	+	++	+
SDC 6 – East Coast - Scotland	-?	+/-?	?	-?	-?	-?	-?	-?	--?	+/-?	-	+++	+	+	++	+
SDC 7 – Yorkshire - Scotland	-?	+/-?	?	-?	-?	-?	-?	-?	-?	+/-?	--	+++	+	+	++	+/-

Table 4-2 Assessment Summary for the Draft STP (2018)

Plan Element	ISA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Strategic Components																
Connecting People	-	+/-	?	+	+	-	+/-	+/-	--	-	++	++	++	++	++	++
Connecting Business	-	+/-	?	-	+	-	+/-	+/-	--	-	-	++	++	++	++	+
Moving Goods	-	+/-	?	-	+	-	+/-	+/-	+/-	++	++	++	+	+	++	?
Ensuring a sustainable investment programme	+++	+	+	++	++	++	++	+	+	++	++	++	++	++	++	++
Integrated and Smart Travel	++	+	+	++	++	+	+	+	+/-	+	++	++	+	+	+	+
Northern Powerhouse Rail	++	+	?	++	--	-	+	+	+	+	+	++	++	++	++	+
Rail North	++	+	?	++	--	+	+	+	+	+	++	++	++	++	++	++
Strategic Development Corridors																
SDC 1 – Connecting the Energy Coasts	+	-	?	-	-	-	-	-	-	+	--	+	++	+	+/-	+
SDC 2 – West and Wales	++	+/-	?	++	+	+	-	+	+	+	++	++	++	+	+/-	+
SDC 3 – Central Pennines	+	-	?	-	-	-	-	+/-	--	+/-	+	++	+	+	+/-	+
SDC 4 – Southern Pennines	+	-	?	+	-	-	--	+	+/-	+	+	++	++	+	+/-	+
SDC 5 – North West to Sheffield City Region	+	+/-	?	+	-	-	--	+/-	-	+/-	+	++	++	+	++	+
SDC 6 – East Coast to Scotland	-	+/-	?	-	-	-	-	-	--	+/-	-	++	+	+	++	+
SDC 7 – Yorkshire to Scotland	-	+/-	?	-	-	-	-	-	-	+/-	--	++	+	+	++	+/-

Key:

Scale	Category
+++	Large beneficial
++	Moderate beneficial
+	Slight beneficial
0	Neutral
-	Slight adverse
--	Moderate adverse
---	Strong adverse
?	Uncertain
+/-	Combination of beneficial and adverse

ISA Objectives:

1. Reduce greenhouse gas emissions from transport overall, with particular emphasis on road transport
2. Protect and enhance biodiversity, geodiversity and the green infrastructure network
3. Conserve and enhance the international sites (HRA specific objective)
4. Protect and enhance air quality
5. Increase resilience of the transport network to extreme weather events and a changing climate
6. Protect and enhance the inland and coastal water environment
7. Protect and conserve soil and remediate / avoid land contamination
8. Support the conservation and enhancement of the quality and distinctiveness of historic assets, industrial and cultural heritage and their settings
9. Protect and enhance the character and quality of landscapes and townscapes
10. Promote the prudent use of natural resources, minimise the production of waste and support re-use and recycling
11. Enhance lower carbon, affordable transport choice
12. Enhance long term economic prosperity and promote economic transformation
13. Coordinate land use and strategic transport planning across the region
14. Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)
15. Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)
16. Promote community safety and reduce crime and fear of crime for all citizens (CSA specific objective)

5. Monitoring requirements

The SEA Directive states that ‘member states shall monitor the significant environmental effects of the implementation of plans and programmes...in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action’ (Article 10.1). In addition, the Environmental Report should provide information on a ‘description of the measures envisaged concerning monitoring’ (Annex I (i)).

SEA monitoring involves measuring indicators which will enable the establishment of a causal link between the implementation of the plan and the likely significant effect (beneficial or adverse) being monitored. It can be used to answer questions such as:

- Were the assessment’s predictions of environmental effects accurate?
- Is the STP contributing to the achievement of desired environmental objectives?
- Are mitigation measures performing as well as expected?
- Are there any adverse effects? Are these within acceptable limits, or is remedial action required?

A preliminary monitoring programme was proposed in the ISA Report. Following consultation on the ISA Report, the programme has been finalised in this Statement.

Table 5-1 contains the monitoring programme for the Final STP for those sustainability adverse effects deemed to be potentially significant. This includes significant cumulative adverse effects in combination with other plans. It has been considered that monitoring of individual schemes/ proposals would be addressed at a project level hence the monitoring programme concentrates on the overall effects of the STP on a given objective rather than on a specific scheme/ proposal. In addition, the proposed programme does not address the location where such monitoring would take place as this aspect will need to be analysed in the further development of the monitoring programme.

Table 5-1 outlines indicators to be used, the current source of monitoring data and frequency of monitoring (if currently collected), the suggested frequency of review of analysis of monitoring data and the Body responsible for undertaking the monitoring.

The guidance suggests that SEA monitoring and reporting activities can be integrated into the regular planning cycle. SEA monitoring should form part of the wider monitoring arrangements for the STP.

Table 5-1 Monitoring programme

No.	ISA Objective against which a significant effect has been predicted (without mitigation)	Indicators to be used	Targets	Source	Suggested frequency of analysis of monitoring of data / mitigation	Responsibility for undertaking monitoring
1	Reduce greenhouse gas emissions from transport overall, with particular emphasis on road transport	CO ₂ emissions from road transport	Reduce	Govt Transport Statistics	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		LZEVs as proportion of total fleet, by vehicle type	Increase	Govt Transport Statistics	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Proportion of passenger travel kilometres for public transport	Increase	Govt Transport Statistics	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Proportion of travel kilometres for walking and cycling	Increase	Govt Transport Statistics	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Volume of lower value freight movement (travel km) by mode (road, rail, water and air)	Reduce road, rail and air volume amount of lower value freight; Increase rail and water volume of higher value freight	Govt Transport Statistics, Haulage bodies; Freight Organisations	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
2	Protect and enhance biodiversity, geodiversity and the green infrastructure network	Area of green infrastructure (greenways, etc.)	Increase	Natural England; Local Authorities; Transport Authorities – TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Net gain in biodiversity (using the Defra metric) and net environmental gain due to transport schemes	Increase	Natural England; Local Authorities; Transport Authorities – TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail

No.	ISA Objective against which a significant effect has been predicted (without mitigation)	Indicators to be used	Targets	Source	Suggested frequency of analysis of monitoring of data / mitigation	Responsibility for undertaking monitoring
3	Conserve and enhance the international sites (HRA specific objective)	Number of transport schemes impacting on designated areas	Zero	Natural England – TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
4	Protect and enhance air quality	Concentrations of air pollutants across the transport network	Reduce	DEFRA	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Area covered by AQMAs declared due to transport emissions	Reduce	DEFRA	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		LZEVs as proportion of total fleet, by vehicle type	Increase	Govt Transport Statistics	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Proportion of passenger travel kilometres for public transport	Increase	Govt Transport Statistics	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Proportion of travel kilometres for walking and cycling	Increase	Govt Transport Statistics	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
5	Increase resilience of the transport network to extreme weather events and a changing climate	Proportion of drainage provision for transport schemes (new or improvements) incorporating best practice SuDS	Increase	Local Authorities; Transport Authorities / Agencies - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
6	Protect and enhance the inland and coastal water environment	Proportion of drainage provision for transport schemes (new or improvements) incorporating best practice SuDS	Increase	Local Authorities; Transport Authorities / Agencies - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail

No.	ISA Objective against which a significant effect has been predicted (without mitigation)	Indicators to be used	Targets	Source	Suggested frequency of analysis of monitoring of data / mitigation	Responsibility for undertaking monitoring
		Number of water pollution incidents attributable to transport	Zero	Environment Agency; Local Authorities	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
7	Protect and conserve soil and remediate / avoid land contamination	Area of grade 1, 2 or 3a agricultural land permanently lost or significantly degraded as a result of transport schemes	Zero	Local Authorities; Transport Authorities / Agencies - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Proportion of area covered by transport schemes located on previously developed land	Increase	Local Authorities; Transport Authorities / Agencies - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
8	Support the conservation and enhancement of the quality and distinctiveness of historic assets, industrial and cultural heritage	Number of heritage assets impacted by transport schemes	Decrease	Local Authorities; Transport Authorities / Agencies; Historic England - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
9	Protect and enhance the character and quality of landscapes and townscapes	% area of transport schemes that incorporate improvements to public realm and sympathetic design	Increase	Local Authorities; Transport Authorities / Agencies - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
		Countryside Quality Counts (CQC) - focus on any changes in the landscape quality due to transport effects)	No noticeable adverse changes in landscape quality	Natural England	As and when CQC results are published	TfN utilising information from Natural England
		Area covered by transport schemes within or in close proximity to AONB / National Park / Heritage Coast designated areas	No noticeable adverse changes in landscape quality	Local Authorities; Transport Authorities / Agencies; Parks authorities; Natural England - TfN promoted schemes only	Annually	TfN utilising information from Parks authorities and Natural England
10	Promote the prudent use of natural resources, minimise the production of waste and support re-use and recycling	Proportion (by mass) of recycled materials used in transport related construction Proportion (by mass) of waste arising associated with transport schemes which is reused or recycled	Increase	Local Authorities; Transport Authorities / Agencies - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail

No.	ISA Objective against which a significant effect has been predicted (without mitigation)	Indicators to be used	Targets	Source	Suggested frequency of analysis of monitoring of data / mitigation	Responsibility for undertaking monitoring
		Proportion (by mass) of waste arisings associated with transport schemes which is sent to landfill				
15	Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	Population within AQMA Population within Noise Important Areas	Reduce	Local Authorities Transport Authorities / Agencies - TfN promoted schemes only	Annually	TfN supported by all relevant Transport Authorities within STP area and Delivery Partners – Highways England and Network Rail
16	Promote community safety and reduce crime and fear of crime for all citizens (CSA specific objective)	Crime incidents associated with transport network Accidents and safety incidents associated with transport network	Reduce	Govt Crime Statistics; British Transport Police	Annually	TfN informed by Crime Statistics and information supplied by British Transport Police

Appendices



Appendix A. Scoping Report Consultation Comments

(To be read in conjunction with the STP ISA Report to which all references apply)

Respondent	Overview of comments	Response	How has this issue been addressed?
N. Corbet Operations Manager, Forth & Southern Scotland Scottish Natural Heritage	SNH have no comments on the proposed methodology, although we would welcome the consideration of any trans-boundary natural heritage issues if these come to light as part of the assessment process.	Noted	We will ensure that cross boundary issues are picked up and considered as options for transport interventions close to the Scottish border are identified.
Transport Scotland	There is ongoing engagement between Transport Scotland and TfN in relation to the development of the STP. Transport Scotland keen to continue working collaboratively and will comment on impacts specifically affecting or relating to cross border transport routes, if identified following scoping phase. Transport Scotland note SEPA, SNH and HES are being consulted and state these organisations would be best placed to comment on the ISA and suggest the Scottish Water may also be worth consulting.	Noted	TfN will maintain ongoing engagement with Transport Scotland.
G Heyworth Senior Policy Advisor Sheffield City Region	Sheffield City Region query how the assessment addresses issues of gender within the EqIA. Whilst accepting that a focus on low income households will pick up many gender issues, it will be necessary to assess gender impact in future as part of business case development and the initial work could help establish a wider context. Sheffield City Region ask that this issue is not put on a back burner and is recognised as one that will need to be addressed going forward.	Equality and gender issues will be considered within the business case development process for transport interventions.	This will be addressed through work on Transport business cases, from Strategic Outline Business Case through to Full Business Case development.

Respondent	Overview of comments	Response	How has this issue been addressed?
<p>Anne Robinson Friends of the Peak District & Campaign to Protect Rural England (South Yorkshire)</p>	<p>This response to consultation was detailed and comprehensive, covering a range of issues. Issues raised related to:</p> <ol style="list-style-type: none"> 1. Language of the ISA 2. Assumption that better connectivity required 3. Emerging Strategy's failure to address carbon emissions and air pollution 4. Small scale smart / active schemes largely ignored. <p>The response also made a number of suggestions for additional elements to be considered in the ISA and STP.</p>	<p>TfN welcomes this comprehensive response on the early drafts of the STP documentation.</p>	<p>Development of the ISA and STP was undertaken in an iterative manner and considered all of the issues raised and amendments were made where these were considered appropriate in the light of the full range of considerations to be made in the development of both the ISA and STP. Specifically, the response on the particular issues raised were:</p> <ol style="list-style-type: none"> 1. Language of the ISA – comments were noted, but it was considered that the language used within the ISA was appropriate and proportionate. 2. Assumption that better connectivity is required – comments were noted. Better connectivity is a key element within the range of Strategic Components within the STP and which were all fully assessed as part of the ISA. As such, a full understanding of the issues relating to Connectivity in sustainability terms has been made. 3. Emerging Strategy's failure to address carbon emissions and air pollution – comments were noted. The STP addresses the issue of Carbon emissions and Air Pollution – for example the ambition to reduce emissions from impacts from air quality

Respondent	Overview of comments	Response	How has this issue been addressed?
			<p>and carbon from transport is included within the objective of the STP to 'promote and support the built and natural environment' and both issues were subject to specific assessment as part of the ISA, with specific ISA Objectives relating to these.</p> <p>4. Small scale smart / active schemes largely ignored – comments noted. However, Integrated and Smart Travel forms a key component of the STP and was fully assessed as part of the ISA.</p>
<p>L Burns North West Transport Roundtable</p>	<p>A key motivating factor behind the establishment of Transport for the North (TfN), was a requirement for it to focus its attention on activities and infrastructure which had perceived economic benefits. This was emphasised by the TfN presenter at the CfBT-organised stakeholder workshop held in Manchester on November 25th, 2016.</p> <p>As the TfN website and documentation published to date confirm, TfN's focus is 'driving economic growth'. This emphasis distorts its approach to sustainability, which is not balanced equally - as it should be - on economic, environmental and social issues.</p> <p>Consequently, instead of questioning how many journeys are necessary and whether there are ways of reducing the need to travel, there is an inherent assumption in the whole TfN ethos that encouraging and enabling more trips is a good thing for the economy. This, despite government acceptance</p>	<p>TfN welcomes this comprehensive response on the early drafts of the STP documentation.</p>	<p>The draft Strategic Transport Plan sets out four core objectives, each of equal weight. These are:</p> <ul style="list-style-type: none"> • Transform Economic Performance • Promote and support the built and natural environment • Improve opportunities across the north • Increase efficiency, reliability and resilience on the transport system <p>The STP takes a balanced approach, recognising the key role transport has in supporting economic activity and through the efficient and reliable movements of passengers and freight opening up greater opportunities for</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
	<p>some two decades ago of two seminal reports by SACTRA, its leading transport adviser at the time, that creating new highway capacity generates extra trips ('Transport & the Generation of Traffic') and that - in a mature economy such as that which exists in the UK - there is no automatic economic benefit in providing new transport infrastructure ('Transport & the Economy').</p> <p>There is also a lack of any genuine commitment to tackle the urgent problems of greenhouse gas emissions, notably carbon, and air quality. It is wholly inadequate to tick them off with a couple of brief passing references and then fail to follow through with concerted actions and programmes. According to the World Health Organisation, 90% of the world's population has air pollution problems and the only places in England with air fit to breathe are the West Country, the Lake District, Northumberland and the centre of the Peak District: http://www.independent.co.uk/life-style/health-and-families/health-news/air-pollution-who-lung-cancer-heart-disease-stroke-deaths-public-health-emergency-fossil-fuels-a7332261.html. Carbon reduction and improving air quality should dominate decision making for national and local government and for all statutory bodies, of which TfN will almost certainly soon be one, especially after two rulings of the Supreme Court that the UK government have not been meeting their statutory obligations. Yet this does not appear to be the case.</p>		<p>people and businesses. Whilst also ensuring that environmental and sustainability impacts are a key consideration in option selection for new strategic transport infrastructure interventions;</p> <p>The STP also recognises the importance of promoting solutions that reduce emissions across the strategic road and rail networks.</p>
<p>M Ibbotson Hull City Council</p>	<p>No comments to make at this time.</p>	<p>Noted</p>	<p>N/A</p>
<p>M McKervey NABARRO LLP</p>	<p>No questions or comments to make.</p>	<p>Noted</p>	<p>N/A</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
<p>C Warburton Senior Advisor Transport Natural England</p>	<p>This response to consultation was detailed and comprehensive and made a number of important suggestions in relation to the ISA and HRA methodologies. Advice was provided relating to additional baseline information and plans and policies to be considered. A small number of additional sites which have been proposed for designation as SPAs were also highlighted.</p> <p>In relation to the ISA Framework, a number of suggestions were made for small amendments to ISA Objectives 2, 5, 7, 9 and 15, or to their decision making questions. In addition, a small number of proposed amendments were made in relation to Health Impact Assessment sub-objectives and their decision making questions.</p> <p>Finally, a number of proposals and suggestions were made in relation to the required monitoring of the STP and notes were made on the importance of Green Transport Corridors.</p>	<p>Noted</p>	<p>Amendments were made to the ISA Objectives, HIA Sub-Objectives and relating decision making questions as appropriate and the suggested baseline information considered during the assessment.</p> <p>A HRA of the proposed STP has been carried out and discussions are ongoing with Natural England relating to this. Comprehensive note is also made within the STP relating to the need for further HRA in relation to any potential interventions derived from the STP which could have a direct or indirect effect on sites designated under the Habitats and Birds Directives. See for example Page 93 of the STP, which states “Any potential direct or indirect impacts on these sites that may arise from new and/or upgraded transport interventions will be appropriately assessed, mitigated, and/or compensated for, in-line with existing best practice and relevant legislation across the life span of the Plan. This would include European designated sites (including Ramsar sites), when necessary, Habitats Regulation Assessment”. This text forms part of a key Strategic Theme to the STP (‘Ensuring a sustainable investment programme’) and as such is a fundamental part of the plan. This is in keeping with a key recognition made within the objectives of the STP (Page 11) of “ensuring that new infrastructure</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
			<p>is designed to minimise negative impacts on both the natural and built environment, including a negative impact on biodiversity” and note is made on Page 91 of the STP as to how this may be done – through further appraisal and analysis, where “Environmental considerations will continue through to the construction and operation of the individual schemes, through the implementation of effective Environmental Management Plans. As such, the mitigation and recommendations made in the Strategic Transport Plan are only a first step in protecting and where possible enhancing the environment, health and wellbeing of the North”.</p> <p>The suggestions made relating to Monitoring were considered and informed the development of this Programme.</p>
<p>A Rae Friends of the Earth / Campaign for Better Transport Volunteer</p>	<p>This response to consultation was detailed and comprehensive, covering a range of issues. It is also supportive of the responses made by A Robinson and L Burns (both addressed above). In this instance, central to the response is the issue of how the STP addresses the issue of present and future carbon emissions.</p>	<p>TfN welcomes this comprehensive response on the early drafts of the STP documentation.</p>	<p>Development of the ISA and STP was undertaken in an iterative manner and considered all of the issues raised and amendments were made where these were considered appropriate in the light of the full range of considerations to be made in the development of both the ISA and STP. For example, carbon has been addressed in a number of places within the STP, including in the STP Objective ‘Promote and support the built and natural environment’ which notes that there is a need to “reduce emissions and impacts from air quality</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
			<p>and carbon from transport”. This STP Objectives also states that “This Plan will promote and support low carbon growth through the use of solutions that reduce carbon emissions and air quality impacts across the strategic road and rail networks”.</p> <p>The STP also includes the following text (see STP Page 26) “Transport has a significant role to play in meeting commitments to reduce greenhouse gas emissions, to improve air quality, and to support and protect biodiversity. The Government has set a target to reduce carbon emissions by 80% by 2050, which investment in the North’s transport network can support”. It is further noted on Page 33 that “Reducing carbon emissions is now imperative”. Further, key consideration of Carbon is made within the Strategic Component ‘Ensuring a sustainable investment programme’. The ISA found that this Strategic Component will act in a cross cutting manner across the STP to ensure that issues addressed within it are applied as core elements of the STP. The ISA also considered the issue of Carbon within a specific Objective and as such this was tested against all applicable components of the STP.</p> <p>TfN officers have subsequently met with Mr Rae on numerous occasions to discuss comments raised in his consultation response.</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
<p>R Worrall Historic Environment Planning Advisor Historic England</p>	<p>This response made recommendations for a small number of amendments to the ISA Objective 8 relating to historic sites and the associated decision making questions. In addition, suggestions were made in relation to further PPP which could be considered, along with further consideration of potential Implications / Opportunities for the STP.</p>	<p>Noted</p>	<p>Amendments were made as appropriate to the ISA Objective and associated decision making questions. Consideration was also made of the suggested additional PPP and potential Implications / Opportunities for the STP.</p>
<p>Historic Environment Scotland</p>	<p>We have reviewed this in our role as a Consultation Authority under the above Regulations. This letter contains our views on the scope and level of detail of the information to be included in the Environmental Report. Please note that our view is based on our main area of interest for the historic environment in Scotland.</p> <p>It is our understanding that the Strategic Transport Plan aims to prioritise investments to improve the capacity, frequency, speed and reliability of the region's transport network.</p> <p>The geographical scope of the plan is the 11 Local Enterprise Partnerships as depicted in Figure 2.2 of the provided report. It is noted that the assessment will cover the surrounding hinterland of this area and therefore may consider border areas of Scotland.</p> <p>The likelihood of transboundary significant effects on the historic environment of Scotland is unclear at this stage. However, we welcome the consideration given to the methodology of assessment for the historic environment outlined in the report.</p>	<p>Noted</p>	<p>The ISA has considered the full range of heritage features within the STP area and the possibility of features within adjacent areas being affected.</p>
<p>C Stelling Parliamentary & Briefings Officer Public Health England</p>	<p>This response highlights the fact that transport is an essential component in securing effective and sustainable economic growth, but has the potential to have a significant impact on people's health. It notes that the ISA (including HIA) are comprehensive in scope, though note is made to</p>	<p>Noted</p>	<p>The ISA included HIA and as such considered a wide range of potential health effects from the implementation of the STP.</p> <p>Recognition is also made within the STP to the potential for transport to have both negative and beneficial</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
	additional sources of PPP and issues to consider during the assessment.		health effects (see for example Page 27 of the STP). Commitment is made to support work being undertaken by other organisations such as Public Health England to further explore how investment in transport can have positive impacts on people's health (see Page 93). This commitment is in line with the ambition on Page 9 of the STP to "work towards a sustainable transport network that will improve the health and wellbeing of residents and visitors to the North". Better access to health facilities is also outlined in the STP Objectives noted on Page 11 of the plan.
H May Historic Environment Service (CADW) Wales	CADW consider that the proposed transport plan could involve some trans-boundary connections. Therefore, we suggest that the Integrated Sustainability Appraisal should consider the impact of the proposals on the historic environment in Wrexham and Flintshire, including the Pontcysyllte Aqueduct and Canal World Heritage Site.	Noted	The ISA has considered the full range of heritage features within the STP area and the possibility of features within adjacent areas being affected.
S Payne Tees Valley Combined Authority	TVCA is content with the proposed approach on Sustainability Appraisal as it is consistent with what we'd expect. As a result, we therefore have no specific comments to make at this point.	Noted	N/A
C Willgoose Principal Transport Planner – North Wales Welsh Government	Concern over lack of recognition in the ISA of the relationship between the economies of the North of England and North Wales and the importance of cross border movements between these areas for freight, for journeys to work, for leisure, for access to services – the 2011 census recorded c.1million cross border movements per month.	The relationship between the economies of the North of England and North Wales is recognised in the development of a Strategic Development Corridor 'West and Wales'.	The issue of connections between the North of England and North Wales is the subject of a Strategic Development Corridor – West and Wales, which aims to improve connectivity for people and goods, to, from and through the important economic centres and assets of Cheshire, Liverpool City Region and

Respondent	Overview of comments	Response	How has this issue been addressed?
	<p>The review of the Plans and Programmes section in Appendix B does not include a consideration of the Wales Transport Strategy (2008), the Welsh Government's National Transport Finance Plan (2015) or the North Wales Joint Local Transport Plan (2015). Whilst Appendix C Section 11.3 does refer to North Wales, it does not explicitly recognise the cross border commuter and other trips.</p>		<p>Greater Manchester, with strategic connectivity in to North Wales and the Midlands. This Strategic Development Corridor has been assessed as part of the ISA.</p> <p>The Plans and Programmes section has been updated to include those noted, which were examined as part of the ISA.</p>
<p>P Nolan The Mersey Forest Team</p>	<p>Response made on behalf of The Mersey Forest Partnership but also makes reference to similar community forest initiatives across the north of England.</p> <p>The Mersey Forest is a government approved, long term plan to increase woodland cover on Merseyside and across north Cheshire to help to tackle some of the complex issues that the area faces. The Forest Partnership, made up of DEFRA Agencies and Local Authorities has a long term Forest Plan that should be considered your future appraisal.</p> <p>This plan is embedded in the National Planning Policy Framework and is included in Local Plans.</p> <p>Across the north of England there are similar community forestry initiatives, each with a plan and links to local and national planning. These are</p> <ul style="list-style-type: none"> • City of Trees – Gtr Manchester • White Rose – West Yorks • South Yorkshire Forest - South Yorks • Heywoods – Hull and East Riding <p>Together, the community forests across north England are working with Woodland Trust to develop a Northern Forest Prospectus, linking the existing forests, accelerating woodland planting,</p>	<p>TfN welcomes the response from the Mersey Forest Team.</p>	<p>The supporting text to the Strategic Transport Plan objective 'Promote and support the built and natural environment' makes it clear that TfN will ensure that environmental and sustainability impacts are a key consideration in option selection for new strategic transport infrastructure interventions; and ensure that improvements to the strategic transport network align with local environmental objectives.</p> <p>Achieving this could include working with the Environment Agency, Natural England, community Forests and other organisations to deliver complementary outcomes.</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
	<p>improving management of existing woodland and contributing to greenhouse gas reductions, active travel, biodiversity enhancement, jobs and growth.</p> <p>The work will also highlight the critical need to ensure the Ancient Semi Natural Woodlands and heritage trees are safeguarded and where possible buffered to enhance their longevity. Natural Capital as a concept may provide a helpful framework for the environmental elements of the Sustainability Appraisal. Natural Capital links into the Industrial Strategy Green Paper, and with the ongoing work of the Natural Capital Committee which is having an important role in the Government's forthcoming 25 year Plan for the Environment.</p> <p>The Community Forests and the Northern Forest are effective mechanisms to deliver natural capital growth and so provide an increasing range of ecosystem services that support people and the economy, as well as safeguarding biodiversity.</p> <p>There is a wealth of evidence to support the work of Community Forests in supporting active travel and in providing the setting for infrastructure improvements. However, given the strategic nature of this consultation we have focussed on the high level Plans and links to policy.</p> <p>Attached document highlighting the opportunity to link to a new strategic environmental initiative across northern England.</p>		
<p>Simon Bird Director Humber Associated British Ports</p>	<p>This response notes the key role that ports make in the economy and also notes that the approach to the ISA as set out in the Scoping Report is comprehensive, thorough and robust.</p> <p>The response also notes the major developments within the port sector, but also major challenges such as Climate Change. Further note is made of</p>	<p>TfN welcomes this response.</p>	<p>Ports and their connectivity, along with their role in the economy were considered as part of the development of the STP. For example on Page 11 of the STP, it is outlined as part of the plan objectives that the plan will "clearly articulate, prioritise and sequence</p>

Respondent	Overview of comments	Response	How has this issue been addressed?
	<p>how ports can play a positive role in sustainability e.g. through development of brownfield sites.</p>		<p>strategic transport investment between important economic centres and assets, to our important ports and airports, to support the transformation of economic performance across the North”. The locations of major and minor Ports are also noted on a map detailing ‘Prime Capabilities around the North’ on Page 17 of the STP and it is noted on Page 20 that ports can help strengthen the global reach of the North.</p>

Appendix B. ISA Report Consultation Responses

Respondent	Comment	Response
Campaign for Better Transport	<p>We welcome the preparation of a thorough ISA and the positive approach taken to engaging stakeholders in commenting on its early scope.</p> <p>Following our work with environmental stakeholders considering the scoping report on the draft ISA, we reported the following conclusions.</p> <ol style="list-style-type: none"> 1) There was a desire to see the ISA objectives comprise more than a tick box checklist: instead providing a coherent sustainability challenge to the STP as a whole. 2) Carbon reduction was seen as the critical objective by which the STP as a whole would be judged. 3) Stakeholders want the ISA to ensure that that STP actively addresses key environmental challenges on carbon emissions, air pollution, land use and biodiversity, while delivering smart growth, inclusive local connectivity and support for active travel. 4) Overall there was support for the objectives proposed in the ISA but respondents wanted to see these underpinned by stronger questions, with the test being not whether the STP would support these objectives but whether it would deliver them. <p>The clear objectives for the ISA are welcome as are the opportunities identified in Table 7.1 of the ISA, including the statement that the STP “should seek to reduce emissions as a core element” and “should ensure new schemes maximise opportunities to absorb carbon dioxide and other greenhouse gases”, in support of the objective to “reduce greenhouse gas emissions from transport overall, with particular emphasis on road transport”.</p> <p>We also welcome the clear objectives on protecting biodiversity and habitats, and on promoting sustainable transport choices. We agree that “the Plan should minimise dependence on the private car... should increase travel by train into and between cities... freight movements to be encouraged away from road network... Integrated transport infrastructure (including ticketing) should be encouraged... The Plan should create infrastructure to encourage people to switch to low emission vehicles”, in support of the</p>	<p>A new section on “Biodiversity, and the natural and historic environment” has been added to the Final STP. This section clarifies the STP’s fundamental aim of protecting and enhancing, where possible, the natural and historical assets of the northern region and recognises the importance of landscapes, townscapes, historic assets, rivers and the rich biodiversity and habitats.</p> <p>The Final STP recognises the importance of reducing air pollution from transport in a new section. TfN will support interventions that improve air quality by promoting a modal shift from private motor vehicle use to sustainable travel modes, including public transport, walking and cycling, can help improve physical activity levels, which will provide additional public health benefits and contribute to reduced CO₂ emissions and air pollution simultaneously.</p> <p>The Final STP now explains that TfN’s Investment Programme, supported by complementary local investment and interventions led by TfN’s Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government’s carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN’s commitment to develop an</p>

Respondent	Comment	Response
	<p>objective that overall that the STP should “enhance lower carbon, affordable transport choice”.</p> <p>The ISA correctly identifies that the different scenarios for future development of the STP have greatly varying environmental impacts: in particular the fourth scenario (Dispersed and Travel Friendly) is identified as having negative implications for rural landscapes, loss of greenfield sites, soil and water contamination, and congestion in urban centres, and would make enhancing lower carbon, affordable transport choice more difficult as well as being least resilient in the face of climate change.</p> <p>This analysis helps provide the sustainability challenge needed to the STP. We note that the ISA report says “it is not the purpose of the ISA to decide the alternative to be pursued” and so it remains to be seen how the ISA will be applied in practice.</p> <p>The test for TfN will be the extent to which those proposals in the STP, such as new road building, that appear to be at odds with the ISA objectives, will go ahead, or whether the ISA will enable such schemes to be vetoed on environmental grounds.</p>	<p>Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a ‘Pathway to 2050’. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p> <p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor’s Transport Strategy will be explored to inform the establishment of a ‘Pathway to 2050’ by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p>
West Yorkshire Combined Authority	<p>We welcome the work undertaken in the ISA to appraise the impact of the potential intervention options and also note the difficulties in appraising investment plans at a strategic level.</p> <p>The approach of appraising four likely investment scenarios is correct, however the ISA could provide more detail on their components and the assumptions made, for example it is not clear how ‘transport friendly’ measures will mitigate a forecast increase in car trips. The</p>	<p>In the new section on Decarbonisation of Transport, the Final STP now explains that TfN’s Investment Programme, supported by complementary local investment and interventions led by TfN’s Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and</p>

Respondent	Comment	Response
	<p>ISA states that the four objectives including ‘support for the built and natural environment’ have equal weighting, however this isn’t necessarily supported by the content of the STP which provides limited detail of how investment programmes will enhance and protect the environment. Without detail and given the proposed road investment programme and traffic growth forecasts provided in the ‘Why’ chapter, it is currently difficult to understand how potential negative impacts will be fully mitigated by the STP.</p> <p>The ISA places a significant reliance on rail investment to counter negative impacts of road schemes and curtail growth in car use, however the ISA could also better promote the mitigating role of sustainable transport mode to support car alternatives, healthier journeys and an improved built environment/urban realm on investment corridors.</p> <p>The ISA also lists some of the potential negative impacts from significant investment in road building and capacity works, including habitats, air quality, noise and vibration. However the ISA has not adequately considered potential negative impacts arising from increased traffic on communities and vulnerable road users e.g. severance, social cohesion and reduced physical activity. The inclusion of a Health Impact Assessment and Equality Impact Assessment within the ISA framework should have help to consider these impacts and recommend appropriate mitigation. This aspect of appraisal appears not to have been adequately covered in the ISA or reflected in the STP.</p> <p>The cross-cutting theme of ‘ensuring a sustainable investment programme’ is noted in the ISA as an assurance mechanism seeking to reduce negative impact but we would expect to see a stronger, clearer response in the final STP to protection and mitigation recommendations made in the ISA.</p> <p>As recognised in the ISA, further granularity of impacts will be required as the investment programmes are developed to appraise impact.</p>	<p>implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government’s carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN’s commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a ‘Pathway to 2050’. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p> <p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor’s Transport Strategy will be explored to inform the establishment of a ‘Pathway to 2050’ by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key</p>

Respondent	Comment	Response
		focus in terms of the identification of carbon reduction measures.
CPRE South Yorkshire and Friends of the Peak District	We submitted comments on the ISA Scoping Report and to the CBT report, which gave strong messages on carbon reduction, improving air quality, avoiding special landscapes and heritage, meeting the needs of local journeys, following spatial priorities and improving the accessibility and affordability of transport services across the North. They still need to be translated into the STP.	In the new section on Decarbonisation of Transport, the Final STP now contains policy and action clarity concerning all aspects highlighted by CPRE. New sections have been added to the STP to address these matters.
?	Whilst the document makes some comment on the impact of the proposals on the local people, jobs, communities and community environment, this is not a part of the formal process as it is not included in the ISA Framework. This is a defect which must be rectified. As the document itself says, there are significant impacts here which need to be considered and avoided, reduced, or mitigated. Failure to do this will have an adverse effect on the acceptance of the proposals by the public, who will bear the brunt of these negative impacts if they are not addressed.	These issues are addressed in detail across a number of different Objectives within the ISA Framework. For example, Objective 12 examined the enhancement of long term economic prosperity and the promotion of economic transformation, while effects on communities and individuals was examined in Objective 14 (Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society) and Objective 15 (Improve health and well being for all citizens and reduce inequalities in health). Due to the regional scale of the TfN Strategic Transport Plan, these issues were examined at a north of England scale and it would be inadequate to try address issues specifically at a local scale which the STP doesn't cover.
?	We have identified the environmental imperatives for moving to a sustainable system of transport, including the need for significant modal shift. The sustainability appraisal gives a comprehensive list of the objectives against which the strategy is measured. We believe that the linkages with elements of the strategy bear stronger emphasis.	Noted.
?	The Independent Integrated Sustainability Appraisal fails to address the core deficiencies of the TfN Strategic Transport Plan - that it fails to achieve its committed journey time targets and its undue and unnecessary dependency on the established HS2 route. Both reduce the efficiency of the proposals, and thereby reduce their potential to achieve the	The ISA processes, as set out in the ISA Report, identifies the likely sustainability effects of implementing the Strategic Transport Plan (STP) and reports on the process of developing the STP from a

Respondent	Comment	Response
	<p>step-change modal shift necessary to achieve major reductions in transport CO₂ emissions and other sustainability goals.</p>	<p>sustainability perspective. However, as noted in Chapter 10 (page 75), it is not the purpose of the ISA to decide on alternatives to be pursued. The STP itself and Partners Strategies, Policies and Plans will help shape the future scenarios, though these will also be influenced by a range of external factors, for example the impact of technological change on transport systems and on future travel behaviour. This is the role of the decision makers who will consider the precise strategy to be taken forward. The ISA provides information on the relative sustainability performance of the strategic alternatives and helps enhance the transparency of the decision making process.</p>
?	<p>The ISA provides a robust assessment that clearly acknowledges inherent limitations. Assumptions relating to future scenarios and environmental change are of value in establishing the future scenarios under which STP interventions will be further assessed. The ISA acknowledges that interventions which come about through the STP will undergo further assessment and issues addressed through Environmental Management Plans, and recommends that these assessments and plans are informed by the list of generic mitigation provided as Appendix I. Further detail on the appraisal and assessment process in subsequent stages may have been of value in clarifying the process of intervention development and environmental assessment. Potentially unclear how the ISA can interact with and influence the transport appraisal process.</p>	<p>In addition, to the ISA acknowledgments, the STP itself clarifies that in the development of any intervention, the environmental, health and social aspects will be assessed at an appropriate level for that stage of the design or planning. It is also noted that assessments could include Environmental Impact Assessment, environmental considerations, or in the case of European Sites, Habitat Regulation Assessment. It can also be seen that environmental issues will be addressed through construction and operation of interventions, through the effective implementation of Environmental Management Plans. It is recommended that these assessments and plans are informed by the list of generic mitigation measures that have been noted for each intervention type and which are listed in Appendix I.</p>

Respondent	Comment	Response
?	<p>1. Transforming economic performance 2. Promote and support the built and natural environment 3. Improve opportunities across the north 4. Increase efficiency, reliability and resilience in the transport system. I agree broadly with these objectives. As previously noted the immediate and practical need is to improve the efficiency, reliability and resilience in the transport system in the North of England. This in itself will transform economic performance and improve opportunities. It clearly must be delivered in such a way as to provide an overall enhancement to our environment.</p>	<p>Noted – the ISA Report sets out what are considered to be the sustainability implications of implementation of the STP. Overall, it was concluded that the STP represents a well-balanced approach in terms of sustainability performance across the full range of potential key effects delineated in the ISA Framework, and should help ensure that the vision for ‘A thriving North of England, where modern transport connections drive economic growth and support an excellent quality of life’ can be achieved in a sustainable and integrated fashion.</p>
?	<p>On the whole I found the ISA to be well-written and a fair assessment. I was sceptical of the "Business as Usual" option which appeared to have been assessed as being very positive for air quality.</p>	<p>Noted – examples of positive elements in relation to air quality under the ‘Business as Usual’ approach were identified due to government commitment to the phasing out of traditionally fuelled cars, alongside the ongoing and increasing uptake of Low and Zero Emission Vehicles, which are anticipated to have beneficial effects on air quality in the medium to long term.</p>
?	<p>There is a real concern the STP & ISA report does not relate or make reference to the UK Clean Growth Strategy and in particular “Accelerating the Shift to Low Carbon Transport” – this is key to the success of the STP and attracting investment to progress the plan forward with UK Government support. Good to see the 16 Objectives cover a wide range of sustainable areas and that a comprehensive review of all these objectives has been undertaken against the STP. However, it is essential further reviews and appraisals continue to be carried out post draft stage and throughout the STP delivery stages. Overall we consider the appraisal is well balanced and covers the environmental aspects and impacts, however, certain areas of the ISA report still raise some concerns especially around the areas of nature conservation and GHG emissions which is appropriate. Mitigation (Section 12) - does state what will be done to address the significant adverse</p>	<p>Noted – the STP sets out how further assessment will be undertaken on any schemes derived from the STP. It is also to be noted that the STP itself will be subject to periodic review and the ISA Report sets out a monitoring regime which will help to inform future iterations of the STP, but also to help develop a database of information that can be used in assessment of any interventions. This will provide TfN and other relevant authorities the information to make appropriate and informed</p>

Respondent	Comment	Response
	effects of the STP, but we believe there will still be residual risks / scenarios that require further mitigation strategies.	decisions and take appropriate action as soon as possible.
?	Please see my previous comments. I believe independent assessment is essential but am not sure that an engineering company such as Atkins are independent enough to do this. The process seems flawed where the assessor's comments appear to have been already accepted with the next iteration of the STP, being then broadly supported by the assessors! I welcome the inclusion of ISA objectives 1, 4, 11, & 15	Noted – the ISA was carried out wholly by Atkins Limited, using a team of professional staff independent of the Plan makers (TfN). The iterative process that has been followed has meant that assessor's comments during one phase of STP development would have informed the development of that phase. The fact that the assessors broadly support the next iteration in evidence that their comments have been taken on board in the preparation of the STP.
?	The NPT's Partnership are pleased to support the Independent Integrated Sustainability Appraisal (ISA) and its 4 key principles. The Partnership believes that it is important to embed sustainability alongside inclusive growth and the economic growth that is set out in the Prime Capabilities of the Northern Powerhouse Independent Economic Review. We recognise the stage that TfN is at with its STP and that an investment programme has yet to be determined and are pleased to see that as and when those programmes and projects do emerge, they will have the sustainability principles embedded within them.	Noted.

Consultation Question 6b: To what extent do you agree or disagree that a robust assessment of the Draft Strategic Transport Plan has been undertaken by the Independent Integrated Sustainability Appraisal?

Respondent	Comment	Response
CPRE	Climate Change CPRE acknowledges the threat to our environment associated with rapid climate change. We urge all stakeholders to plan future investment and development in accordance with the Climate Change Act 2008, and to meet our international commitments climate change that will hold the increase in global average temperature to well below 2°C above pre-industrial levels.	In the new section on Decarbonisation of Transport, the Final STP now explains that TfN's Investment Programme, supported by complementary local investment and interventions led by TfN's Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and

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	<p>Problems in England likely to be associated with climate change include wetter summers impacting on farm yields and localised flooding. Internationally, problems are more severe with droughts, and sea level rises causing large areas to become uninhabitable. People forced to migrate from low-lying coastal areas will need to find new places to resettle. England also has coastal areas that will be impacted by climate change.</p> <p>The Government has carbon budgets, associated with the Paris Agreement, and TfN must address them in the STP. Decarbonisation is highlighted as being urgently needed in the transport sector. For example, fossil based car travel demand must be reduced in the future. New technology, such as electric cars, needs to be harnessed. Irrespective of cleaner fuel road-vehicles, more and better public transport services, including rail, light rail, and bus must be invested in to give people reliable, affordable, safe and clean alternatives to car use.</p> <p>Modal shares</p> <p>The UK is the fourth most car-dependent country in Europe; the same is true of dependency on road-based freight. This has occurred due to a focus on road-based infrastructure. The STP must try and reverse this unsustainable pattern of travel.</p> <p>Decades of under-investment has led to a decline in and loss of many local bus and rail services, and rural places, in particular, have suffered. A clear priority for the STP must be to increase the patronage of public transport through investment in both infrastructure and services to improve connectivity across the north. The STP should also do all it can to improve the amount of walking and cycling, at the local level, with access to safe routes, and true integration into the overall transport system. Strategic infrastructure also needs to facilitate local level modal shift for example by providing more secure cycle storage at strategic public transport interchanges. Simple reliance on 'predict and provide' approaches to extrapolating past trends is completely inappropriate and unsuitable. A 'plan, monitor and manage' approach is more able to respond to new technologies, such as electric cars/bikes, segways, and travel smart cards for use on all types of public transport (like London's Oyster card). ...</p> <p>TfN, a partnership of civic and business leaders, cannot blithely ignore the evidence that more roads, leads to more cars on the roads, more greenhouse gas emissions and air-borne pollution, more congestion, lower air quality, more respiratory disease, more costs</p>	<p>implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government's carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN's commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a 'Pathway to 2050'. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p> <p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor's Transport Strategy will be explored to inform the establishment of a 'Pathway to 2050' by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-</p>

Respondent	Comment	Response
	<p>to the NHS and more early mortality. TfN needs to modernise its thinking, and in its Strategic Transport Plan stretching over several decades, adequately plan for the challenges that future generations face.</p> <p>Environment Plan</p> <p>The Government set out its commitment to improving the environment in the 25-year plan launched at the start of 2018. The Government, with partners such as TfN, should implement the 25-year plan through investing in transport infrastructure that is based on genuine sustainable development principles. The environment must achieve net gains as new development is brought forward. Mitigation and compensation are key aspects of the Environment Plan. The STP must respect and be aligned with the 25 Year Plan.</p> <p>National Planning Policy Framework</p> <p>One of the core planning principles of Government in its National Planning Policy Framework (Paragraph 17) to underpin both plan-making and decision-taking is that planning should “actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.”</p> <p>A key ask from TfN is that the next version of the STP should focus much more sharply on the integration of future land use and transport planning. In addition to more public transport investment and planning, more sustainable modes of transport, such as walking and cycling should be encouraged. But routes need to be safe and green. There is widespread acceptance that people’s health and mental well-being benefits from green routes as document in a raft of recent research...</p>	<p>2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p>
Liverpool City Region	<p>...The Integrated Sustainability Appraisal (ISA) is a welcome publication, which should help to support the STP from a sustainability perspective.</p> <p>As we move to the final version of the STP and ISA, it will be important to ensure that TfN can convince its partners and stakeholders that the ISA has sufficiently addressed some of the ‘big picture’ questions, principally related to transport demand in general rather than any construction issues, in terms of pollution, health risks etc. For example, will greater clarity be provided on:</p>	<p>In the new section on Decarbonisation of Transport, the Final STP now explains that TfN’s Investment Programme, supported by complementary local investment and interventions led by TfN’s Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and implementation of carbon policies and measures through the interventions promoted they prioritise.</p>

Respondent	Comment	Response
	<p>i) Why is there no assessment of the contribution of rail electrification in terms of contributing to a reduction of environmental impacts within the STP? We would have expected the ISA to at least identify this.</p> <p>ii) What can elements in NPR do to encourage mode shift towards more environmentally friendly modes?</p> <p>iii) Has the level of induced road traffic demand (from either highway or related schemes) has been assessed?</p> <p>iv) Have the concerns of Non-Governmental Organisations (NGOs) about air pollution been adequately addressed?</p> <p>v) No evident assessment of the relative/joint merits of road/rail schemes across the Pennines – this should have been raised from an environmental angle.</p> <p>Based on previous and indeed continuing concerns expressed by NGOs (e.g. Campaign for the Protection of Rural England or CPRE), the ISA should perhaps highlight the need for a clearer link to improving air quality within the objectives of the STP. The STP says “the Government has set a target to reduce carbon emissions by 80% by 2050, which investment in the North’s transport network can support” but there is no evidence on how this will be achieved, and with the recognition of the increase in journeys, it is difficult to see how this will be achieved unless through direct intervention.</p> <p>The STP has passing references to sustainable travel, primarily in a local context, and we believe that the ISA should be looking to strengthen the STP in this area, especially as it is heavily road based. An option would be, for example, to look at reducing access to some of the economic centres through increased park and ride/rail or distribution centres, or the promotion of coach travel for longer journeys...</p>	<p>These must all contribute towards meeting the Government’s carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN’s commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a ‘Pathway to 2050’. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p> <p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor’s Transport Strategy will be explored to inform the establishment of a ‘Pathway to 2050’ by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p>

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Zero Carbon Yorkshire Transport Group	<p>In this response, we consider only Objective No.1, “Reduce greenhouse gas emissions from transport overall, with particular emphasis on road transport”.</p> <p>This objective is very seriously inadequate. The projects resulting from the Strategic Transport Plan must form part of a whole transport system that remains in line with emissions targets set nationally.</p> <p>Transport emissions in the North will need to reduce at least as rapidly as for the UK as a whole. Due to demand rising much more rapidly in Southern England than elsewhere, a much-publicised disparity in transport funding between the North and South has developed. If funding is equalised, as many Northern political leaders are calling for, then the Northern target can reasonably be expected to closely match the national one.</p> <p>The Committee on Climate Change’s (CCC’s) 2017 progress report sets out the emissions reductions required to enable legally binding carbon budgets to be met. It states “Domestic transport emissions should fall by around 44% between 2016 and 2030 and create options to allow near-zero emissions by 2050.” Thus the ISA’s target to “reduce” emissions clearly falls massively short of this.</p> <p>A briefing available on the “TransportNorth!” website describes the results of unpublished modelling work carried out by yourselves. (This site is produced by campaigners that have engaged with TFN staff.) . This briefing describes TFN’s own projections of carbon emissions resulting from travel on all existing Northern roads, plus roads projects currently envisaged as being included within both the TFN Strategy and parallel road strategies of other responsible authorities. These projections show total road emissions would only fall by 9 -14% by 2030. That meets your Objective 1 of “a reduction”. However, it is nowhere near the 44% reduction needed to meet carbon budgets.</p> <p>It is important to understand how significant this is by describing the background to the level at which national targets are set. The CCC’s carbon budgets are set at a level intended to meet intergovernmental agreements to mitigate climate change, through the Climate Change Act 2008 (CCA). At that time, the international community had come to a near-consensus view that average global temperature rise should not exceed 2C. (Unfortunately, the CCA’s stated aim to “ limit global temperature rise to as little as</p>	<p>In the new section on Decarbonisation of Transport, the Final STP now explains that TfN’s Investment Programme, supported by complementary local investment and interventions led by TfN’s Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government’s carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN’s commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a ‘Pathway to 2050’. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p> <p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor’s Transport Strategy will be explored to inform the establishment of a ‘Pathway to 2050’ by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the</p>

Respondent	Comment	Response
	<p>possible above 2°C”, is somewhat too weak , due to a reluctance of the Government at the time to make a more robust commitment).</p> <p>Since the CCA was passed, the Paris Agreement has been signed and ratified by the majority of the world’s Governments (though the US has since committed to withdrawing). This reflects more recent scientific evidence and commits signatories “to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels.” Carbon budgets have yet to be adjusted in line with this however, and legal action against the Government is currently in progress over this failure.</p> <p>If average temperatures exceed 1.5-2°C, it is likely to lead to increased extreme weather, through climate change, severe enough to not only cause great environmental damage but also economic damage that would ultimately cancel out the benefits of any growth achieved in the meantime. Clearly a failure to meet sectoral carbon budgets recommended by the CCC in any individual sector endangers that for the whole economy. Furthermore, in the light of the above current legal development, the flexibility to meet more stringent carbon budgets should be maintained.</p> <p>We cannot accept TFN’s claim that pursuing the Strategy in its current form would bring net long-term GVA growth. Further, we believe the likely environmental consequences of a failure to achieve appropriately revised emissions reduction objectives to be more serious than the economic ones. It is crucial that emissions from Northern transport are reduced far more rapidly from the levels currently projected.</p> <p>3. Solutions</p> <p>We at ZCY recognise that we are calling for very radical changes to the TFN Strategy in order to bring about very rapid emissions reductions. Above all, we advocate reduced travel and other measures to strengthen compact local communities. However, below we recommend action we believe it is reasonable for TFN to take.</p> <p>This must be based on a recognition that the level of economic and jobs growth sought through developing the Transport Strategy is not achievable by the means it sets out. Climate objectives need to be strengthened in it to a level that properly protects both our economy and environment, which are of course inter-linked. Low –carbon technologies are not yet developed or adequately adopted in the North - and cannot reasonably be relied on to be developed - at a sufficient rate to achieve that growth, whilst</p>	<p>importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p>

Respondent	Comment	Response
	<p>simultaneously meeting these stronger climate objectives. TFN should therefore engage with other stakeholders, especially the relevant government departments, to seek solutions.</p> <p>We propose that this would involve developing a radically different range of prospective transport projects. In particular, road transport is responsible for the vast majority current surface transport emissions. We would regard scaling back the major road investment programme to be essential. Instead, additional connectivity should be achieved through promoting a modal shift towards low carbon public transport and encouraging more walking and cycling within towns and cities. This becomes a more urgent consideration as measures to tackle poor air quality, including Clean Air Zones, start being implemented in most urban conurbations.</p> <p>There is also a compelling case for digital connectivity, where a step change in adoption and improvements in technology can lead to greatly expanded utilisation that would replace the need for some physical connectivity.</p> <p>We support TransportNorth!'s 10 Core Responses document , which covers a wider range of issues than our own response. We have one reservation, relating to Point 3, in that we would not support greater transport connectivity of any type, where it creates a conflict with the radically improved emissions reduction objectives that we call for.</p>	
National Trust	<p>The STP needs to take on board the issues raised in the sustainability appraisal. The potential effects on landscapes and townscapes are aspects of the assessment where the STP has consistently performed less well across all Plan elements. This is, again, partly a result of the inherent nature of many transport schemes, i.e. they are significant features across a wide area. Greater consideration must be given to the need to protect and enhance landscape and townscape in future iterations of the STP.</p> <p>9.2. Similarly, potential adverse effects on biodiversity present another area of concern in relation to any transport plan. New transport interventions have the potential to adversely impact designated and non-designated sites of ecological or geological value and more generally on the network of linked multi-functional green spaces, comprising the local green infrastructure. These impacts could occur through direct land take for infrastructure (which may also cause fragmentation of habitats and / or notable and protected species</p>	<p>A new section on “Biodiversity, and the natural and historic environment” has been added to the Final STP. This section clarifies the STP’s fundamental aim of protecting and enhancing, where possible, the natural and historical assets of the northern region and recognises the importance of landscapes, townscapes, historic assets, rivers and the rich biodiversity and habitats.</p> <p>The Final STP recognises the importance of reducing air pollution from transport in a new section. TfN will support interventions that improve air quality by promoting a modal shift from private motor vehicle use to sustainable travel modes, including public transport,</p>

Respondent	Comment	Response
	populations) and construction and operational disturbance (noise, vibration, light pollution, etc.) and emissions / contamination (air, water and soil).	walking and cycling, can help improve physical activity levels, which will provide additional public health benefits and contribute to reduced CO2 emissions and air pollution simultaneously.
Public Health England	<p>PHE are encouraged to see the following assessments within the ISA: Sustainability and Strategic Environmental Assessment (SA/SEA),</p> <ul style="list-style-type: none"> <input type="checkbox"/> Health Impact Assessment (HIA) <input type="checkbox"/> Equality Impact Assessment (EqIA) <input type="checkbox"/> Community Safety Assessment (CSA) <input type="checkbox"/> Habitats Regulation Assessment (HRA) <p>In particular, the ISA objectives to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Protect and enhance air quality <input type="checkbox"/> Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective) <input type="checkbox"/> Increase resilience of the transport network to extreme weather events and a changing climate <input type="checkbox"/> Reduce environmental impacts of transport – vibration and air, noise and light pollution <p>PHE welcome the inclusion of these objectives but would like to see them given more prominence and to be associated directly and more strongly with health, rather than the current focus on the environment. PHE would also like to see the objectives in the ISA related to these key areas given higher status in the STP, and as previously pointed out health being incorporated into the overall objectives of the STP.</p> <p>Recommendation:</p> <ul style="list-style-type: none"> <input type="checkbox"/> TfN should ensure that the ISA objectives related to health are given more prominence in the STP 	<p>The Vision has been expanded to include ‘improved opportunities for all’ alongside ‘sustainable economic growth and excellent quality of life’.</p> <p>“A thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life <u>and improved opportunities for all.</u>”</p> <p>A new section on “Inclusive and healthy growth” clearly recognises that social and health inequalities are widely seen as one of the defining challenges of the 21st Century, as such inclusive and healthy growth should be at the heart of public investment. Local Industrial Strategies and this Strategic Transport Plan must provide a way for inclusive benefits from investment to be imbedded and secured across the North. It also recognises that this Strategic Transport Plan can play a fundamental and important role in bridging the societal, health and environmental inequality gaps that exist across the North.</p>
Natural England	We have the following key points to make in relation to the consultation. A detailed response to the consultation can be found in Annex 1.	A new section on “Biodiversity, and the natural and historic environment” has been added to the Final STP. This section clarifies the STP’s fundamental aim of protecting and enhancing, where possible, the

Respondent	Comment	Response
	<p>□ We welcome the STP’s objective to ‘promote and support the built and natural environment’ and would welcome the opportunity to work with you to strengthen the plan so that it aligns with and delivers the ambitions of the Government’s 25 Year Environment Plan and Clean Growth Strategy, ultimately maximising the potential for the natural assets of the north to play a central role in helping to deliver connectivity and economic growth. For example:</p> <ul style="list-style-type: none"> o Realising the opportunities for natural capital and green infrastructure to enhance transport infrastructure resilience/performance, carbon reduction, clean air, flood risk management, as well as other place-making and visitor economy objectives; o Developing and operationalising the high level principles in the plan for enhancing ‘green’ and ‘blue’ infrastructure and supporting net gain in biodiversity. We are currently working with major transport infrastructure delivery bodies, such as Highways England and Network Rail in these areas; o Maximising the opportunities for transport interventions/projects to contribute towards major new initiatives such as Nature Recovery Networks and large scale woodland creation ambitions of the 25 Year Environment Plan; o Working with natural processes on greater flood resilience to the network along with support for Sustainable Urban Drainage Systems; and <p>We would like to see Natural England’s work on the Green Transport Corridors and the recommendations of the Linear Infrastructure Network (LINet)¹ taken forward in the STP. Natural England would like to arrange a meeting with TfN to discuss how the above opportunities for the North can be recognised in the STP, so that it aligns with and delivers the ambitions of the Government’s 25 Year Environment Plan. As part of this meeting, we would like to discuss how the STP can explore opportunities to integrate a ‘net environmental gain’ approach to the seven Strategic Development Corridors and enable opportunities for a natural capital approach and green infrastructure enhancements to be maximised, creating a more resilient transport network across the North.</p> <p>We have also provided more detailed technical comments on the supporting HRA and ISA. To summarise, Natural England does not agree with the STP’s HRA conclusion of no</p>	<p>natural and historical assets of the northern region and recognises the importance of landscapes, townscapes, historic assets, rivers and the rich biodiversity and habitats. It sets out the approach for international sites as follows:</p> <p>Prime among these sites are Special Areas of Conservation and Special Protection Areas, which form the Natura 2000 European network of core breeding and resting sites for rare and threatened species, along with some rare natural habitat types. It is the aim of this network to ensure the long-term survival of Europe’s most valuable and threatened species and habitats, listed under the European Commission’s Habitats and Birds Directives. In addition to the Natura 2000 sites, there are also internationally important wetlands designated as Ramsar Sites.</p> <p>Any potential direct or indirect impacts on these sites that may arise from new or upgraded transport interventions will be appropriately assessed, mitigated, and/or compensated for, in line with existing best practice and relevant legislation across the life span of the Plan. This would include the Natura 2000 sites and Ramsar sites for which Habitats Regulation Assessment will be carried out, as necessary, prior to final decisions being made on transport interventions.</p>

Respondent	Comment	Response
	<p>likely significant effects on European Sites at the screening stage. Further details are provided in Annex 1 of this letter, which includes specific recommendations on how the HRA and ISA can be improved. To help resolve some of the technical issues concerning the HRA and ISA, we propose that a meeting is arranged to discuss the HRA in detail that would have to be undertaken on a chargeable basis. Addressing the issues raised in our response early in options development will help to de-risk your plans from an environmental/heritage point of view, so that we can spot strategic solutions and better options early. This would ultimately save costs associated with environmental regulation and potentially stakeholder challenge down the line. It will also help to identify opportunities through the plan to target environmental enhancements in places that optimise and multiply the social and economic benefits for local communities.</p> <p>...</p> <p>Habitats Regulation Assessment – Stage 1 Screening</p> <p>Natural England have reviewed TfN’s STP HRA Stage 1 Screening Report, which has specified the need to undertake an in-combination assessment at the lower tier level. Natural England does not agree with the above approach and considers that the TfN STP HRA has not followed a pre-cautionary approach, which removes the risk and possibility of effects to European Sites by not committing to an assessment of future projects or planned transport interventions at the plan level. Further recommendations have been provided in this letter, to help improve the HRA and refine the screening assessment.</p> <p>Methodology</p> <p>Table 3.1 for Cumbria does not include Solway Firth pSPA in the list of European Sites, this includes the old site of Upper Solway Flats and Marshes4 SPA. For Lancashire, the list of European Sites should include Morecambe Bay and Duddon Estuary5 SPA not Morecambe Bay SPA.</p> <p>Table A-3 ‘Information about the negative threats, pressures and activities on international sites STP area and up to 20 km from its boundaries’ requires the following amendments:</p> <p><input type="checkbox"/> Table A-3 includes Morecambe Bay SPA and Duddon Estuary SPA, these sites were superseded by Morecambe Bay and Duddon Estuary (MB&DE) SPA, when it was</p>	

Respondent	Comment	Response
	<p>officially classified in 2017. Footnote 12 states that it is currently under consideration for designation, which is incorrect. The HRA assessment should focus on the new designation MB&DE SPA. The designation package can be used in the interim for information about the site. The draft conservation advice package for the site will be published in September 2018;</p> <ul style="list-style-type: none"> <input type="checkbox"/> Magic Map does not include MB&DE SPA or Solway Firth pSPA on the statutory land designations layer, which has informed the mapping and therefore the sites are not appearing on TfN maps. The correct boundaries and application of 20km buffer should be applied. The boundaries should be sought from Marine designations statutory – Special Protection Areas (Marine Components GB); and <input type="checkbox"/> Threats and Pressures are outdated that have been sourced from the December 2015 EU update. There may be more recent threats and pressures that are being captured in supplementary advice packages and specific targets set. <p>Stage 1 – Screening Results</p> <p>Natural England has reviewed the screening results presented in Table 4-1 of the HRA Stage1 Screening Report and the specific policy relating to ‘a commitment to protect European sites, important habitats and species’ that concludes there will be no likely direct, indirect or secondary impacts on European Sites.</p> <p>Natural England does not agree with the assessment of the HRA to conclude that there will be no impacts on European Sites simply because the plan contains policies that seeks to avoid and/or minimise any adverse impacts on European Sites.</p> <p>We note that Table 4-1 also states that any effects on integrity of European Sites must be effectively mitigated and/or compensatory measures provided, as appropriate. We advise that projects causing an adverse effect on site integrity can only ever proceed in the most exceptional of circumstances and there are special tests and procedures for this. If a project is to proceed despite a negative assessment, the competent authority is required to consider:</p> <ul style="list-style-type: none"> <input type="checkbox"/> whether it is satisfied that there are no alternative solutions; <input type="checkbox"/> whether it is satisfied that the project must be carried out for imperative reasons of over-riding public interest (IROPI); and 	

Respondent	Comment	Response
	<p><input type="checkbox"/> whether compensation can be secured to ensure the coherence of the N2K network in order to proceed. Compensatory measures must be provided and put in place before adverse impacts occur.</p> <p>Conclusions</p> <p>The HRA Stage1 Screening Report has assessed the extent to which the TfN STP's four strategic objectives and the seven Strategic Development Corridors, are likely to lead to significant effects on 130 European Sites and has concluded that the STP will have no likely significant effects. The reason for the HRA's conclusion is that none of the objectives of the STP or Strategic Development Corridors will directly lead to development and the objectives and policies of the STP are high level, including no details of potential projects that may result at a later stage.</p> <p>In consideration of the above, Natural England advises that it is not possible for TfN's STP HRA to conclude no likely significant effects on European Sites. As stipulated in the STP (page 78) TfN will be a statutory Sub-National Transport Body in 2018, indicating that the STP has weight in terms of its ability to steer and enable future transport developments across the north. As a result, the STP's four strategic objectives could be the primary drivers for adverse effects on European Sites.</p> <p>Natural England advises that TfN's STP HRA should follow a pre-cautionary approach at the screening stage. Natural England refers to the example of the National Networks National Policy Statement (NNNPS) HRA6 that is similar to the TfN STP, given it is a high level policy document and in the example of the NNNPS, DfT were unable to be specific about individual schemes within the plan. Consequently, the NNNPS HRA undertook a pre-cautionary approach at the screening stage and it could not conclude no likely significant effects. It was made clear that the HRA of the NNNPS did not reduce the scope of the HRA required by an individual development application, where screening shows the possibility of significant effect cannot be excluded. Furthermore, in the NNNPS HRA it is for the Competent Authority to apply in full, the tests stipulated by the Directive (please see Section 5.0.2 – 5.0.5 of the NPPPS HRA for further information). The NNNPS is a good example of undertaking a pre-cautionary approach for a higher tier HRA assessment.</p>	

Respondent	Comment	Response
	<p>The screening exercise included in TfN STP’s HRA could be improved in the following ways:</p> <ul style="list-style-type: none"> □ A better attempt could be made to link the location of the European Sites listed with the associated Strategic Development Corridors to test whether any European Sites can be screened-out through demonstrating any clear lack of impact pathway; □ Clarification is need to explain why European Sites within 20km of the Strategic Development Corridors have been scoped-in to the assessment and an explanation of why this threshold has been used would be welcomed; □ It could be possible to screen-out certain transport interventions, for example the objectives around smart-travel may not represent any significant effect on European Sites. Similarly, it might be possible to consider any future transport intervention within an existing transport footprint (i.e. SRN or rail network) that would in principle pose little or any potential risks; □ Section 2.6 of the STP refers to Delivery Plan 1 and at a later stage this should provide the specific development proposals (i.e. committed, partial and studies, as well as scheme developments) needed to undertake a more detailed assessment of these specific transport projects interventions/delivery schemes that can be aligned to the seven Strategic Development Corridors. This would help determine if likely significant effects can be screened-out and where likely significant effects cannot be ruled out, an Appropriate Assessment should be undertaken at the plan level; □ The above approach could enable the HRA to screen-out certain parts of the plan and isolate others that might generate risks, for example identify any new major infrastructure proposals within the seven Strategic Development Corridors. This could re-iterate the need for project level HRAs to be made by local competent authorities and reduce the scope of the STP HRA required in the case of individual development applications. <p>It has been observed that there are some minor inconsistencies in the labelling of Table B-2 – ‘HRA Stage 1 Screening Findings for Objectives and Principles’ that has been labelled incorrectly as Table B-5, on page 40 of the HRA.</p> <p>Integrated Sustainability Appraisal Report ISA Framework</p>	

Respondent	Comment	Response
	<p>The ISA Tables 10-2, 11-1 and 11-3 for the majority identify negative impacts for the natural environment ISA Objectives such as biodiversity, geodiversity, GI, N2K sites, air quality, water quality, soils and landscape.</p> <p>We welcome the inclusion of an TfN STP principle for Pan-Northern Transport Investment Environmental Responsibility. However, given the negative impact of the STP on these natural environmental ISA objectives and the mitigation measures proposed in the ISA Table 12-1, we consider that the TfN STP principle for Pan-Northern Transport Investment Environmental Responsibility needs strengthening to include a commitment to environmental enhancement and biodiversity net gains. This would be in line with the work of other transport bodies such as Highways England and Network Rail (please see page 4 of this Response Letter).</p> <p>We would like to see a strategic approach taken towards environmental enhancements, delivering a network of green infrastructure corridors and wider ecological connectivity, building on the mitigation proposals in Table 12-1. Work undertaken by Network Rail and Highways England as part of the Green Transport Corridors initiative provides a useful model for this work. The following publication provide further information on green transport corridors:</p> <ul style="list-style-type: none"> <input type="checkbox"/> NEWP32 Transport green corridors: options appraisal and opportunity mapping (NECR168); <input type="checkbox"/> Review of literature: how transport's soft estate has enhanced green infrastructure, ecosystem services, and transport resilience in the EU (NECR169); <input type="checkbox"/> Green Bridges: A literature review (NECR181); and <input type="checkbox"/> Landscape Institute Green Bridge Guide. <p>Compatibility between STP Objectives and ISA Objectives</p> <p>There are four draft STP Objectives that were considered in March 2017, as part of the early development of the STP, which are as follows:</p> <ol style="list-style-type: none"> 1. Transform Economic Performance; 2. Promote and Support the Built and Natural Environment; 3. Improve opportunities across the North; and 	

Respondent	Comment	Response
	<p>4. Increase efficiency, reliability and resilience in the transport system.</p> <p>The ISA Objectives that relate to the natural environment are as follows:</p> <ol style="list-style-type: none"> 1. Reduce greenhouse gas emissions from transport overall, with particular emphasis on road transport; 2. Protect and enhance biodiversity, geodiversity and the green infrastructure network; 3. Conserve and enhance the international sites (HRA specific objective); 4. Protect and enhance air quality; 6. Protect and enhance the inland coastal water environment; 7. Protect and conserve soil and remediate / avoid land contamination; 9. Protect and enhance the character and quality of landscapes and townscapes; and 10. Promote the prudent use of natural resources, minimise the production of waste and support re-use and recycling. <p>The assessments of the comparisons between the STP Objectives and the ISA Objectives conclusions demonstrate uncertainty, with unclear outcomes for the overall compatibility for the objectives listed above. Specifically the ISA Objective 3 'Conserve and enhance the international sites (HRA specific objective)' it is acknowledged in the ISA that no mention was made to these sites within the STP. The ISA further recommends that more consideration is required to resolve this potential conflict, which is welcomed but it is not clear exactly how this will be resolved in detail.</p> <p>The ISA Report again acknowledges that there is uncertainty identified in STP Objective to 'Transform economic performance' that has both negative and positive environmental outcomes. It is noted that the compatibility of the above is likely to depend upon the nature and location of potential interventions, which is a welcomed consideration but further information is needed to ensure European Sites are not impacted upon.</p> <p>Assessment of Alternatives</p> <p>The results presented in Table 10-2 'Summary of findings of Assessment of Alternatives' of alternative scenarios (1-4) are described as "Uncertain" for all elements of ISA Objective 3: Conserve and enhance the international sites (HRA specific objective). This level of uncertainty is attributed to the fact that the plan at this stage does not contain</p>	

Respondent	Comment	Response
	<p>information on likely inventions locations, for specific transport schemes or projects. Table 10-2 will require updating once this information becomes available and an assessment of the alternative scenarios (1-4) will need to be undertaken with the relevant transport inventions/projects details.</p> <p>Assessment of the Draft STP</p> <p>The results presented in Table 11-1 ‘Summary of assessment score for the STP Strategic Components’ for ISA Objective 3: Conserve and enhance the international sites (HRA specific objective) are described as “Uncertain” for all seven Strategic Components listed. It is specified in the ISA that it is not possible at this stage of the plan to ascertain effects on European Sites. A new assessment of the Draft STP will need to be undertaken once information becomes available on specific transport interventions and Table 11-1 will need to be updated to reflect this.</p> <p>The assessment of the Strategic Development Corridors results are presented in Table 11-3 ‘Summary of assessment scores for the STP Strategic Development Corridors’ are described as “Uncertain” for all seven Strategic Development Corridors relating to ISA Objective 3: Conserve and enhance the international sites (HRA specific objective). Table 11-2 ‘Strategic Development Corridors Components and anticipated scheme types’ provides a useful overview of the assumed potential inventions for highways, railways, public transport, enabling infrastructure and waterways, which is a welcomed approach. However, once more detailed information becomes available on the future transport inventions proposals, including specific locations Tables 11-2 and 11-3 can be updated including an assessment of the likely impact on European Sites.</p> <p>Mitigation</p> <p>The mitigation measures included in Table 12-1 contains an inconsistent level of detail for the sixteen ISA Objectives listed. For ISA Objective 3 ‘Conserve and enhance international sites (HRA specific objective), there is not enough detail or precaution applied to above mitigation measures in the ISA to provide the necessary confidence that European Sites will not be effected.</p> <p>Cumulative, Synergistic and Indirect Effects</p>	

Respondent	Comment	Response
	<p>Table 13-1 'Anticipated cumulative, synergistic and indirect effects' includes effects on European Sites'. The STP is said to result in a mix of cumulative positive and negative effects, which it is specified in the plan, as not being possible to quality these effects at this stage. Further details of the likely transport interventions/projects when they become available, need to be updated into the ISA and a reassessment will mostly likely needed to be carried out.</p>	
<p>Campaign for National Parks</p>	<p>...We are extremely concerned that the draft Strategic Plan includes proposals for a number of road schemes which could be extremely damaging to the northern National Parks, undermining their special qualities and putting at risk the significant economic benefits that these areas provide. There is evidence that road schemes justified on the basis of reduced journey times fail to deliver the promised economic benefits² and such schemes would be particularly damaging in areas such as National Parks where the economy is heavily dependent on a high quality environment. TfN must take full account of the additional planning protection that applies in National Parks when developing any proposals for road-building.</p> <p>5. There is a long-established presumption against significant road widening or the building of new roads in National Parks. This is clearly set out in paragraph 5.152 of the National Policy Statement for National Networks³ published in 2014, which states that "there is a strong presumption against any significant road widening or the building of new roads and strategic rail freight interchanges in a National Park, the Broads and Areas of Outstanding Natural Beauty, unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. Planning of the Strategic Road Network should encourage routes that avoid National Parks, the Broads and Areas of Outstanding Natural Beauty." (our emphasis)</p> <p>6. In addition, paragraphs 5.150 and 5.151 of the National Policy Statement reiterate the more general presumption against major development in National Parks, which is also set out in paragraphs 115 and 116 of the National Planning Policy Framework (NPPF)⁴ and retained in the revised draft of the NPPF which was recently published for consultation. The Government also emphasised the additional planning protection for National Parks in the recent 25 Year Environment Plan⁵ (page 57) alongside strong support for greater enhancement of our landscapes.</p>	<p>The revised STP objective "Protecting and enhancing the built, historic, and natural environment" is aimed at ensuring that through collaboration with TfN's Partners, stakeholders and communities, transport interventions across the strategic transport system protect and enhance the natural, historic and built environment, making sure that the North's strategic transport system is as sustainable as possible. It covers a range of issues which include ensuring that new infrastructure is designed to minimise the negative impacts on the natural, historic and built environment, including on biodiversity and where possible result in net environmental gains.</p>

Respondent	Comment	Response
	<p>7. Furthermore, all public bodies have a duty to take account of the potential effect of their decisions and activities on National Park purposes, including activities undertaken outside National Park boundaries which may affect land within them. National Parks' statutory purposes as set out in the Environment Act 1995 are:</p> <ul style="list-style-type: none"> <input type="checkbox"/> to conserve and enhance natural beauty, wildlife and cultural heritage; and <input type="checkbox"/> to promote opportunities for public enjoyment and understanding of their special qualities. <p>8. This means that TfN should be seeking to conserve and enhance National Parks and their settings through all of its activities and should also be considering how it can help promote opportunities for people to visit the Parks (see below for further details in this). High volumes of traffic already have a negative impact on the tranquillity and natural environment in some parts of the northern National Parks. It would be completely inappropriate to develop road proposals which increase these negative impacts. Instead TfN should be placing a much stronger emphasis on ensuring that the Strategic Plan protects and enhances National Parks and their settings...</p>	
Woodland Trust	<p>...</p> <p>ANCIENT WOODLAND</p> <p>We are also pleased that within this objective, TfN "recognises the importance" of a range of natural habitats and will work with partners to "avoid and/or minimise any adverse impacts on important nature conservation sites as far as possible". But absent from this list is support for ancient woodland, one of the country's richest terrestrial wildlife habitats.</p> <p>Ancient woodland is defined as an irreplaceable natural resource that has remained constantly wooded since AD1600. The length at which ancient woodland has taken to develop and evolve (centuries, even millennia), coupled with the vital links it creates between plants, animals and soils accentuate its irreplaceable status (as recognised in Natural England's standing advice for ancient woodland and veteran trees [2014]). The varied and unique habitats ancient woodland sites provide for many of the UK's most important and threatened fauna and flora species cannot be re-created and cannot afford to be lost. Many species of birds, bats and other wildlife rely on ancient woodland</p>	<p>The revised STP objective "Protecting and enhancing the built, historic, and natural environment" is aimed at ensuring that through collaboration with TfN's Partners, stakeholders and communities, transport interventions across the strategic transport system protect and enhance the natural, historic and built environment, making sure that the North's strategic transport system is as sustainable as possible. It covers a range of issues which include ensuring that new infrastructure is designed to minimise the negative impacts on the natural, historic and built environment, including on biodiversity and where possible result in net environmental gains.</p>

Respondent	Comment	Response
	<p>habitats, including hundreds of species of conservation concern. Therefore it is important to prevent any damage, fragmentation or further loss of these vulnerable irreplaceable sites from any form of disruptive development. Our last remaining link to the original 'wild wood', today ancient woodland constitutes just 2 per cent of the UK's land area.</p> <p>We must therefore impress upon TfN the importance of transport schemes first avoiding, and if not possible, minimising damage to ancient woods and trees, and the species dependent on them.</p> <p>NORTHERN FOREST</p> <p>The Strategic Transport Plan has the objective of "promoting" as well as "supporting" the natural environment. We would therefore welcome TfN's support for the 'Northern Forest', a major new project being developed by the Woodland Trust in partnership with the Community Forests of the North of England. These are the Mersey Forest, City of Trees, the White Rose Forest and HEYWoods. The vision is to plant 50 million trees, in various settings and for a variety of purposes, in and around the cities of Liverpool, Manchester, Leeds, Sheffield and Hull, a populous area whose woodland cover is considerably lower than the national average. By harnessing the benefits of trees and woods, the Northern Forest will play a huge role in benefitting the economy, industry, employment, health, wellbeing, sense of place, biodiversity and climate of the North. It will bring a powerful environmental dimension to the Northern Powerhouse project.</p> <p>We are delighted that the Government has endorsed our plans at this early stage, with £5.7m to kick-start the project and help us to build momentum. We hope that further support will be forthcoming both in terms of public funds and also through working with us to lever new and innovative sources of private sector funding to help deliver this wonderful legacy to future generations. TfN is in a uniquely strong position to play a role in this regard given its trans-regional interest. As well as ensuring that proposed new and improved road and railway connections are green corridors, rich in woods and trees, we would encourage TfN to consider how the innovative new forms of funding necessary to</p>	

Respondent	Comment	Response
	<p>deliver the Strategic Transport Plan can be used also to deliver the natural capital gains from tree planting and woodland creation as part of the Northern Forest.</p> <p>...</p>	
Cheshire East Council	<p>.. The Strategic Environmental Assessment (which accompanies the STP) identifies the significant impacts of strategic infrastructure proposals including HS2/NPR “touch points” in the north of the Borough. The Council’s view is that these impacts can only be considered acceptable subject to the highest levels of environmental mitigation. Whilst the details of particular mitigation measures are expected to come through project-related development work, we wish to see greater recognition in the STP that the exceptionally high quality of environment and quality of place is not tradeable for enhanced connectivity and economic growth. The Council takes the view that quality of place must be preserved throughout delivery of new infrastructure in the Borough...</p>	<p>The revised STP objective “Protecting and enhancing the built, historic, and natural environment” is aimed at ensuring that through collaboration with TfN’s Partners, stakeholders and communities, transport interventions across the strategic transport system protect and enhance the natural, historic and built environment, making sure that the North’s strategic transport system is as sustainable as possible. It covers a range of issues which include ensuring that new infrastructure is designed to minimise the negative impacts on the natural, historic and built environment, including on biodiversity and where possible result in net environmental gains.</p>
West Yorkshire Combined Authority	<p>Tend to support. The ISA recognises the challenge in undertaking impact assessment at a strategic level, without confirmation of route alignments, however we acknowledge its initial attempt at identifying risks. A greater degree of information will be required to make a fuller assessment of impact as Implementation Plans and interventions are developed. We support the broad assessment outcomes of the ISA, but would welcome greater clarification from the ISA on assumptions made regarding the appraisal of major road and rail investment on local populations, environments and habitats.</p> <p>...</p> <p>Stakeholders will want to be convinced of the ability of TfN and partners to mitigate any potential negative impacts from TfN interventions on the natural and built environment - this will be important in expediting delivery. To this end the recommendations of the ISA could be more explicitly addressed in the STP, and the STP could better set out TfN’s leadership role on sustainability with the consideration for instance of setting targets within the STP for reducing carbon and harmful emissions alongside identifying more detailed actions.</p>	<p>In the new section on Decarbonisation of Transport, the Final STP now explains that TfN’s Investment Programme, supported by complementary local investment and interventions led by TfN’s Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government’s carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN’s commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a</p>

Respondent	Comment	Response
		<p>'Pathway to 2050'. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p> <p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor's Transport Strategy will be explored to inform the establishment of a 'Pathway to 2050' by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p>
<p>Ian Smith, Historic England</p>	<p>...Given the high-level strategic nature of the document being assessed, we would broadly concur with the evaluation of the potential impact which the strategy might upon our Area of interest and would support the proposed Mitigation Measures which are set out in Section 6. However, there are a couple of aspects of the Appraisal where you might give further thought. These are as follows:</p>	<p>A new section on "Biodiversity, and the natural and historic environment" has been added to the Final STP. This section clarifies the STP's fundamental aim of protecting and enhancing, where possible, the natural and historical assets of the northern region and recognises the importance of landscapes, townscapes, historic assets, rivers and the rich biodiversity and habitats.</p>

Respondent	Comment			Response								
	<table border="1"> <thead> <tr> <th data-bbox="409 268 488 304">Page</th> <th data-bbox="488 268 719 304">Section</th> <th data-bbox="719 268 1462 304">Comments</th> </tr> </thead> <tbody> <tr> <td data-bbox="409 304 488 544">12</td> <td data-bbox="488 304 719 544">Section 4 Summary Table, ISA Objective 8</td> <td data-bbox="719 304 1462 544">Given the very general nature of the Strategic Components being assessed and the extent of the historic environment resource across the North of England, at this stage it is virtually impossible to ascertain with any certainty what the impact will be upon the area's heritage assets. The actual impact will depend of where these interventions take place and how they are implemented. Therefore, at this stage the impact must be 'uncertain'</td> </tr> <tr> <td data-bbox="409 544 488 821">16</td> <td data-bbox="488 544 719 821">Section 5 Summary Table, ISA Objective 8</td> <td data-bbox="719 544 1462 821">Given the very general nature of the Strategic Development Corridors being assessed and the extent of the historic environment resource across each of them, at this stage it is virtually impossible to ascertain with any certainty what the impact will be upon the area's heritage assets of these extremely large tracts of land. The actual impact will depend of where these interventions take place and how they are implemented. Therefore, at this stage the impact must be 'uncertain'</td> </tr> </tbody> </table>	Page	Section	Comments	12	Section 4 Summary Table, ISA Objective 8	Given the very general nature of the Strategic Components being assessed and the extent of the historic environment resource across the North of England, at this stage it is virtually impossible to ascertain with any certainty what the impact will be upon the area's heritage assets. The actual impact will depend of where these interventions take place and how they are implemented. Therefore, at this stage the impact must be 'uncertain'	16	Section 5 Summary Table, ISA Objective 8	Given the very general nature of the Strategic Development Corridors being assessed and the extent of the historic environment resource across each of them, at this stage it is virtually impossible to ascertain with any certainty what the impact will be upon the area's heritage assets of these extremely large tracts of land. The actual impact will depend of where these interventions take place and how they are implemented. Therefore, at this stage the impact must be 'uncertain'		<p data-bbox="1471 258 2116 414">It sets out that protection will be given to important heritage assets and their settings. Careful scheme design will be a vital component in this protection and will often offer opportunities to improve or enhance existing features.</p> <p data-bbox="1471 454 2116 547">The ISA assessment scores have been revised in this Post Adoption Statement to reflect the uncertainty noted by Historic England</p> <p data-bbox="398 852 1462 1345"> Historic England strongly advises that the conservation staff of the various Councils and their respective archaeological advisors are also engaged throughout the preparation of the Integrated Sustainability Appraisal of the Plan. They are best placed to advise on; local historic environment issues and priorities, including access to data held in the HER (formerly SMR); how the policies or proposals might be tailored to minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of historic assets. We should like to stress that this opinion is based on the information set out in the document dated January 2018. To avoid any doubt, this does not affect our obligation to provide further advice and, potentially, object to specific proposals which may subsequently arise (either as a result of this consultation or in later versions of the LTP) where we consider that, despite the SA/SEA, these would have an adverse effect upon the historic environment. </p>
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12	Section 4 Summary Table, ISA Objective 8	Given the very general nature of the Strategic Components being assessed and the extent of the historic environment resource across the North of England, at this stage it is virtually impossible to ascertain with any certainty what the impact will be upon the area's heritage assets. The actual impact will depend of where these interventions take place and how they are implemented. Therefore, at this stage the impact must be 'uncertain'										
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Respondent	Comment	Response
...	...	
Anthony Rae	<p>...</p> <p>I) The STP has failed its 'carbon test'. This is unacceptable</p> <p>Throughout the period of their constructive engagement with TfN the ETOs have been emphatic that carbon reduction is one of, if not <i>the</i> priority they wish to see embedded within the STP (see highlighted section of A5 on p.25). In January 2017 we drew to TfN's attention their obligations to do this under the 2016 Cities & Local Government Devolution Act A9. The statistical and policy basis (under the Climate Change Act, as determined by the Committee on Climate Change - CCC) for this priority are set out in A5 and also in paragraphs 31-2 of <i>CPRE-SY</i></p> <p>But since the STP does acknowledge that 'Reducing carbon emissions is now imperative' <i>p.35 the question must be: how has it turned that 'imperative' into strategic direction? We have been clear that this requires an explicit carbon reduction objective, trajectory and target within the STP – for a number of reasons: so that these mechanisms can act as a policy driver to influence and direct all subsidiary levels of the strategy, and to demonstrate carbon leadership, seeing that under subsection 10 of S1021 of the C&LGDA subsidiary transport authorities would be required to work within the same carbon framework¹ - but a careful reading of the objective Promote and support the built and natural environment shows that that has not been done.</i></p> <p>This is deeply disappointing, and unacceptable. A5 identifies the quantitative aspects of the STP's carbon reduction failure, based on the preliminary carbon analysis TfN have produced, but have not made available to any other stakeholders; and also note that a question relating to carbon reduction is not included in the IPSOS Mori consultation form, meaning that effectively the carbon issue has almost no visibility within the STP the STP or its consultation mechanisms.</p> <p>So what are the consequences within the STP and its programme approaches, particularly in road mode, of not having carbon reduction as a strong policy driver? The initial TfN STP carbon analysis A12 of the carbon impacts of the four traffic demand scenarios (in comparison to a DfT BAU) at 2030/40/50 dates, provided to the ETOs in February 2018 records carbon reductions of -9 or 14% by 2030 under any scenario but which are nowhere near the -44% by 2030 recommended by the Committee on</p>	<p>In the new section on Decarbonisation of Transport, the Final STP now explains that TfN's Investment Programme, supported by complementary local investment and interventions led by TfN's Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government's carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN's commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a 'Pathway to 2050'. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport. This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor's Transport Strategy will be explored to inform the establishment of a 'Pathway to 2050' by 2020.</p>

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	<p>Climate Change. The fact also that the low end of this range provides just a 1% reduction compared to the BAU (-9% as against -8%) demonstrates how weak any TfN carbon reduction interventions must be. Beyond 2030 the rate of reduction of course accelerates (as EV decarbonisation spreads) but to focus instead on the 2030-50 period would be to demonstrate a lack of understanding of the time-specific nature of the policy framework (CCC’s legally adopted national carbon budgets) within which the STP has to work. Against those requirements the STP is proposing to underachieve by a shortfall of 68-80%, and the scale of this - to be clawed back in little more than a decade - will obviously require the preparation of an alternative Carbon Reduction scenario for the entire STP; thus with carbon reduction acting as a top level ‘policy driver’ as we have asserted from the start.</p> <p>Because we have not had access to the methodology behind these overall numbers it's not possible to understand immediately what might be happening at levels of finer detail. However, the ISA appendices do contain a non-quantitative expression of what is projected to happen in each of the strategic development corridors: 'For all SDCs, GHG emissions from road movement is anticipated to grow in the short term, up to 15% in the case of SDC 1, relative to today. However, by the medium term, for most of the SDCs there was an overall (small) drop in GHG emissions relative to today, or a declining trend in emissions relative to the short term.' p.89 For each individual SDC the reported outcome is:</p> <table border="1" data-bbox="398 935 1254 1257"> <thead> <tr> <th data-bbox="398 935 510 999">SDC</th> <th data-bbox="510 935 1254 999">Medium term carbon impact – by 2035 <i>carbon emissions from road ...</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="398 999 510 1062">1</td> <td data-bbox="510 999 1254 1062">should continue to slightly be higher than 2015 levels, though lower than in the short term</td> </tr> <tr> <td data-bbox="398 1062 510 1094">2</td> <td data-bbox="510 1062 1254 1094">should show a decline</td> </tr> <tr> <td data-bbox="398 1094 510 1126">3</td> <td data-bbox="510 1094 1254 1126">will show a low increase</td> </tr> <tr> <td data-bbox="398 1126 510 1158">4</td> <td data-bbox="510 1126 1254 1158">will show a slight decline</td> </tr> <tr> <td data-bbox="398 1158 510 1190">5</td> <td data-bbox="510 1158 1254 1190">should show a decline</td> </tr> <tr> <td data-bbox="398 1190 510 1222">6</td> <td data-bbox="510 1190 1254 1222">are expected to show a continuing slight increase,</td> </tr> <tr> <td data-bbox="398 1222 510 1254">7</td> <td data-bbox="510 1222 1254 1254">are expected to show a low increase</td> </tr> </tbody> </table> <p>Expressing these results concisely: strategic development corridors in road mode are carbon generators, not reducers, and this ought to be a significant policy determinant <i>against</i> the SDC concept as a whole.</p>	SDC	Medium term carbon impact – by 2035 <i>carbon emissions from road ...</i>	1	should continue to slightly be higher than 2015 levels, though lower than in the short term	2	should show a decline	3	will show a low increase	4	will show a slight decline	5	should show a decline	6	are expected to show a continuing slight increase,	7	are expected to show a low increase	<p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p>
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	<p>TfN have asserted that ‘using sustainability appraisal progressively to correct strategy direction’ is an adequate alternative/preferred methodology to a ‘using a carbon reduction objective as a policy driver’ approach - whereas in the 2017 consultation we argued that it was too weak in its influence over other policy components – and this specific SDC example is a further demonstration of that. ISA table 11-3 is instead recording that the performance of the SDCs is positive against ISA objective 1 (‘reduced GH GM emissions from transport overall, with particular emphasis on road transport’) and this must be because its methodology is insufficiently sensitive to the quantified requirements of the real-world policy framework. Whilst <i>ISA Appendices table A-1 p.13</i> duly records that ‘amendments were made where these were considered appropriate in the light of the full range of considerations’ in response to my 2017 critique, it is now clear beyond doubt that TfN’s ‘response-to-carbon’ methodology underpinning the preparation of the STP does not work.</p> <p>[My colleague Anne Robinson has made similar criticisms of the effectiveness of ISA <i>CPRE-SY para.69</i> which I also support.]</p> <p>Yet another example would be the ISA’s treatment of aviation’s environmental impacts, where all 11 references (to ‘airports’; there are none to ‘aviation’ or ‘flights’) are positive in tone. In general TfN’s inexperienced and partial consideration of the aviation policy area makes the STP’s treatment of the carbon issue even worse; the detail of this policy ‘case study’ is reviewed in A6 and A10. Furthermore this episode has proved to be revealing of other weaknesses within the TfN policy process, and what happens when it experiences ‘challenge’ - it ignores it (as also happened with the ETOs ‘challenge’ to Trans-Pennine Tunnel feasibility – see A) above). After a review meeting I had requested in order to ‘challenge’ the technical weaknesses of TfN’s <i>International Connectivity</i> report I identified just the ‘headline’ number of these in writing <i>highlighted in A10</i> August 2017. Yet despite being confronted with substantive criticism of the methodology and content of the report all its policy positions have still been repeated within the STP.</p> <p>One of these criticisms (<i>iv</i>) interacts also both with the STP’s roads (mostly) programme, and also the ISA assessment. I had pointed out that a policy of public financial support for ‘improving surface access to airports’² is in fact contrary to government policy. Now whilst</p>	

Respondent	Comment	Response
	<p>buried within the ISA appendices is a recognition that ‘a potential growth in air travel and it is likely that this would have a consequent impact on GHG emissions’ <i>table G-4 p.139</i> the ISA itself seeks to justify an aviation carbon increase by claiming that ‘this growth in air travel would include the potential for all air freight to fly from the North’s airports, compared to just 4% in 2016. Reducing surface transfer of freight to/from southern airports would therefore act to offset some of the GHG emissions from extra flights.’ In my August 2017 letter I had already suggested that such transfers should be treated as occurring ‘only ‘at the margin’ and can therefore be discounted until they have been demonstrated as possible and significant. Again I think a certain amount of policy naivete is being displayed.’</p> <p>Finally, how the carbon issue has been included - in fact excluded - within the STP evidence base <i>appendix A</i> makes the same point. It should have included reference to all the relevant CCC publications (e.g the 2017 Progress Report, or the report on <i>Sectoral scenarios for the Fifth Carbon Budget</i> November 2015) together with such as CBT’s <i>Environmental quality, climate change and transport innovation 2017</i>, but instead there is nothing at all. There is indeed no identifiable carbon related process, exposed to public engagement, within TfN. This <i>de facto</i> marginalisation can only undermine the credibility and reputation of TfN and its processes.</p> <p>For all these reasons (just summarised here) the <i>10 Core Response</i> document reached the conclusion: ‘the STP fails the ‘carbon test’ and cannot be supported on this ground alone.’ A1 no.7 Above all strategies such as the STP have to be the vehicle by which top-level national policy imperatives like carbon reduction have to supported, contributed to and delivered. TfN haven’t understood this and their proposed strategy acts against it.</p> <p>Recommendations-I: the STP environmental objective must include a specific and quantified carbon reduction trajectory and target, located within and responding to the adopted carbon budgets set by the Climate Change Act. This should be prepared incorporating aviation emissions within the same approach utilised by CCC. Alongside this objective a carbon reduction protocol, covering both TfN and combined authority activity, should be developed and applied. A carbon reduction objective/target having been established, it should then used as a ‘policy driver’ for all subsidiary levels of the STP to ensure that their outputs are contributing to the objective, and are consistent with the guidance of the Committee on Climate Change. The entire STP must be reviewed and revised against an alternative ‘carbon reduction scenario’ consistent with the CCC</p>	

Respondent	Comment	Response
	<p>recommended –44% reduction by 2030. The TfN <i>International Connectivity</i> report and its analysis must be submitted to independent peer review, which includes environmental stakeholders. The STP evidence base should make appropriate reference to the UK carbon reduction framework and CCC guidance.</p> <p>J) Other environmental issues</p> <p>It's noticeable to the ETOs that there has been no comparable overarching review of the environmental issues associated with developing and implementing an STP, comparable to the multi-volume examination of the Independent Economic Review. This comment is made in the light of the equal weight given to both 'economic growth' and 'social and environmental impacts' that an STB is required to give to both by its founding statute (and see section K below).³</p> <p>In relation to air quality: considering the intensifying policy focus on AQ, the 10 or so entirely generalised references to air quality in the STP, and the absence of any specific proposals for further investigations examining how its programmes will interact with this issue, is further evidence of an absence of balance in the strategy's treatment of environmental issues. The ISA's equally generalised assessments then compound this problem by pronouncing favourable conclusions for its AQ evaluation, which must be made in the absence of any underpinning and substantiating analysis relating to the short-to-medium term: e.g 'Overall, therefore, performance against the ISA Objectives relating to GHG emissions and air quality shows marked improvement in the long term with overall beneficial effects over the timeframe of STP implementation.' <i>Conclusions p. 102</i></p> <p>For this reason the <i>10 Core Responses</i> document states: 'The STP has failed to demonstrate that its overall approach and road investment programmes are supporting compliance with legal requirements for air quality, as now imposed by the Supreme Court.' A1 no.8</p> <p>In relation to the impact of STP programmes on landscape and the natural environment - hardly mentioned at all in the STP, and therefore not treated in a balanced way; whilst the ISA acknowledges the obvious implication of major road building programmes: '... it is</p>	<p>The revised STP objective "Protecting and enhancing the built, historic, and natural environment" is aimed at ensuring that through collaboration with TfN's Partners, stakeholders and communities, transport interventions across the strategic transport system protect and enhance the natural, historic and built environment, making sure that the North's strategic transport system is as sustainable as possible. It covers a range of issues which include ensuring that new infrastructure is designed to minimise the negative impacts on the natural, historic and built environment, including on biodiversity and where possible result in net environmental gains.</p> <p>Two new sections have been added to the Final STP 'Why' chapter to provide the environmental and social context of the Plan alongside the economic context. These sections set out the current situation in the region and how the STP proposals could affect them. In addition, a new section on 'Inclusive and Sustainable Growth' has been added to the Final STP 'Why' chapter providing clear policy direction on addressing several social and environmental aspects:</p> <ul style="list-style-type: none"> - People and the transport network - Safety on the transport network

Respondent	Comment	Response
	<p>inherent in the nature of any transport plan that it will result in a series of transport infrastructure interventions, which in many cases will require extensive engineering works across large areas. The nature of these works [are] that there will be environmental implications in particular. For example, new roads could involve a direct loss of wildlife habitat, or could have an adverse effect on the water environment through pollution incidents during construction or through polluted runoff during operation and would also result in new features in the landscape.' <i>Conclusions p.101</i> – its treatment merely represents an unconsidered and unresolved contradiction within the STP's outlook. On the one hand it wants to deploy the high-quality Northern natural environment and landscape as positive components of its overall 'product', but on the other hand it is systematically developing a series of enhanced trans-Pennine road corridors that will inevitably compromise, degrade and damage that same environment.</p> <p>For this reason the <i>10 Core Responses</i> document states: 'The STP has not demonstrated how it resolves the tensions between its major investment programmes (particularly road) and their impact on the natural environment and protected landscapes.' <i>A1 no.9</i></p> <p>As a final example of the absence of balance in the treatment of environmental impacts within the STP process, it should be noted that the words 'environment', 'carbon', 'emissions' and 'air quality' do not feature in the questions of the online consultation form. In which case: how can the views of environmental stakeholders be adequately expressed and taken into account when the subjects have been omitted from the consultation framework?</p> <p>K) Conformity with the requirements of the Cities & Local Government Devolution Act The purpose of my letter to the TfN Chief Executive on this subject <i>A9</i> in January 2017 was to locate all the subsequent work of the ETOs on the emerging STP within the framework set by section 102I <i>Transport strategy of an STB</i> of the C&LGDA. The issues are described in <i>A4 Does the new TfN strategy meet its legal requirements to protect the environment?</i> and were summarised in the final one of the <i>10 Core Responses</i> document: 'Consequently the strategy risks failing the test set for it in TfN's founding statute – that it 'must have regard to the social and environmental impacts in connection with the implementation of the proposals contained in the strategy' <i>Cities & Local Government Devolution Act 2016 section 102I 'Transport strategy of an STB' subsection 8b</i> - and is therefore potentially open to legal challenge.' <i>A1 no.10</i></p> <p><i>Recommendations-K:</i> TfN needs to be able to demonstrate that the draft STP is</p>	<ul style="list-style-type: none"> - Transport and health - Transport and the environment - Biodiversity, and the natural and historic environment - Adaptation to climate change - Use of resources - Protection of soils - Reducing air pollution from transport - Decarbonisation of transport

Respondent	Comment	Response
	<p>compliant with precise wording of subsections 8(b-d) of S.102I of the C&LGDA: that the strategy 'must have regard' to its social and environmental impacts, defined in terms of 'the implementation of [its] proposals' – which cannot be complied with simply by generalised references to such as a need to achieve carbon reduction but rather require e.g quantified projections linked to defined proposals which are available for investigation and 'challenge'; with the assessment of such environmental impacts being located within the framework of 'any current national policy relating to transport' - in this case the Climate Change Act, its adopted carbon budgets, and the recommendations of the Committee on Climate Change; with TfN also being able to demonstrate that it has had regard to 'the results of the public consultation' - both past and present. The ETOs have high expectations that these legal stipulations will be complied with, and will expect to see a detailed demonstration that they have been.</p>	
<p>CPRE South Yorkshire and Friends of the Peak District</p>	<p>We do not believe the ISA is robust. It may have fulfilled legal and policy requirements but with respect to GhG emissions, air quality and designated landscapes it has not made a robust assessment of the STP. Incredibly it has assessed all four future scenarios and the business-as usual-scenario as being beneficial for reducing GhG emissions from transport, particularly from road transport by 2050. Its only concern with aviation appears to be surface connectivity to airports.</p> <p>70. The Habitats Regulations Assessment⁵⁹ includes quotes which appear to refer to an earlier version of the STP so it is not clear how it relates to the current STP, despite its date. The Assessment identifies the Peak District Moors SPA and the South Pennine Moors SAC and claims that the TfN STP is not directly connected to a European site. However, through its Trans-Pennine Tunnel Strategic Study TfN is planning a major upgrade to the A628 corridor, 5 miles or more of which passes through these two designated sites. Whilst 5-6 miles of the dual carriageway may be in a tunnel we believe that potential impacts on these two designations should be recognised in the screening assessment.</p> <p>71. Stage 1 Screening is to 'test whether a plan or project either alone or in combination with other plans and projects is likely to have a significant effect on a European site. A 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</p>	<p>In the new section on Decarbonisation of Transport, the Final STP now explains that TfN's Investment Programme, supported by complementary local investment and interventions led by TfN's Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government's carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN's commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a 'Pathway to 2050'. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p>

Respondent	Comment	Response
	<p>to fall into unfavourable condition they can be considered to have a likely significant effect on the site'. In this case the Trans-Pennine Tunnel Strategic Study is a major project within TfN's plan. Even if the tunnel passes under the SPA and the SAC the projected traffic increases within this corridor of up to 624% would have profound consequences for the integrity of the sites. However, TfN states that the upgrading could be sequenced, in which case the tunnel may the last section to be implemented or not implemented at all, leaving the SAC and SPA to bear the consequences of substantial traffic increases. We do not need to look that far ahead for a threat as the Trans-Pennine Upgrade Programme at Mottram, the first section of this upgrade, would increase traffic on several cross-Park routes through these sites; its proposed extension as the Hollingworth-Tintwistle bypass would worsen the situation further.</p>	<p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor's Transport Strategy will be explored to inform the establishment of a 'Pathway to 2050' by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p> <p>Two new sections have been added to the Final STP 'Why' chapter to provide the environmental and social context of the Plan alongside the economic context. These sections set out the current situation in the region and how the STP proposals could affect them. In addition, a new section on 'Inclusive and Sustainable Growth' has been added to the Final STP 'Why' chapter providing clear policy direction on addressing several social and environmental aspects:</p> <ul style="list-style-type: none"> - People and the transport network - Safety on the transport network

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Friends of the Earth	<p>Transport for the North's development into a Sub-National Transport Body has been enabled by Part 5A of the Cities and Local Government Devolution Act 20161. This legislation requires TfN to prepare a transport strategy for the area. S102I(1) states that this must contain proposals for the "promotion and encouragement of sustainable, safe, integrated, efficient and economic transport facilities and services to, from and within the area of the STB."</p> <p>Furthermore, S102I(8) states that the transport strategy must have regard to:</p> <p>(b) the social and environmental impacts in connection with the implementation of the proposals contained in the strategy,</p> <p>(c) any current national policy relating to transport that has been published by or on behalf of Her Majesty's Government,</p> <p>Friends of the Earth is concerned that the Strategic Transport Plan fails to address these social and, particularly, environmental impacts with an appropriate level of ambition and, therefore, fails to meet the requirements of the Act.</p> <p>Climate change</p> <p>National policy on climate change is underpinned by the Climate Change Act 20082 and the UK's international commitments to reduction of greenhouse gas emissions, in particular the Paris Agreement.</p> <p>Alongside the long term target of reducing UK greenhouse gas emissions by at least 80% by 2050 (on 1990 levels), the architecture of the Climate Change Act 2008 sets out shorter and medium term five year carbon budgets. These budgets recognise the</p>	<p>In the new section on Decarbonisation of Transport, the Final STP now explains that TfN's Investment Programme, supported by complementary local investment and interventions led by TfN's Partners, and strategic investment by Delivery Bodies, needs to set out a clear programme of phased introduction and implementation of carbon policies and measures through the interventions promoted they prioritise. These must all contribute towards meeting the Government's carbon reduction targets and carbon budgets, through to 2050.</p> <p>TfN cannot achieve a carbon reduction from transport on its own. As part of TfN's commitment to develop an Inclusive and Sustainable Growth Framework, TfN will lead the scoping, developing, and implementing of a 'Pathway to 2050'. This will require continued collaboration with Partners, Delivery Bodies, and the Government, to deliver the ambitions of the Strategic Transport Plan and local transport plans, in tackling carbon impacts and reductions from transport.</p>

Respondent	Comment	Response
	<p>cumulative nature of greenhouse gases and are designed to accelerate early action on emissions reduction rather than leaving it to later in the period to 2050.</p> <p>The fifth carbon budget under this regime³ for the period 2028-32 is set at 1725 MtCO_{2e} (a reduction of emissions of 57% by 2030 on 1990 levels). The UK Government has accepted the fifth carbon budget at these levels and so, it is our position, the Strategic Transport Plan must reflect that budget if it is to be consistent with national policy (as per S102I(8)c as above).</p> <p>In 2016, transport became the largest emitting sector of greenhouse gases representing 26% of UK emissions.⁴ Note that this figures consists of surface transport and domestic aviation – it does not include international aviation (which the STP sets out to facilitate with infrastructure connections to the region’s airports). Very little progress has been made to date on reduction of transport emissions (2% reduction between 1990 and 2016) and recent years have seen a small year-on-year growth.</p> <p>The Committee for Climate Change has issued advice to Parliament⁵ recommending a target to reduce transport emissions by 44% between 2016 and 2030 and further reductions to near zero by 2050. This clearly represents a significant step-change in progress over the period of the Strategic Transport Plan.</p> <p>Therefore, it is of grave concern that no targets are identified for emissions reduction in the STP. While the report contains welcome words recognising the scale of transport’ emissions, it lacks any indication of actual emission reductions, resulting from the STP. Of even greater concern is the fact that draft projections released by Transport for the North (and attached to this submission) identify that the best case scenario under the Strategic Transport Plan result in only a 14% reduction in transport emissions. This is an order of magnitude short of the CCC’s recommendations and is therefore untenable, failing as it does to demonstrate sufficient compliance with national policy.</p> <p>It is noteworthy that the UK Climate Change Act is based on limiting the global temperature rise to 2 degrees Celsius, by 2050. In 2015 the UK Government agreed to, and later ratified, the Paris Agreement on Climate Change which builds on the ambition of maintaining temperature rises (as close as possible) to 1.5 degrees. The CCC, in response have stated that we need to reach global net-zero carbon dioxide levels (the main greenhouse gas resulting from transport) by the 2040s. The TfN projections indicate</p>	<p>This will require a clear programme of phased interventions, at a pan-Northern and local level, and their projected contribution to meeting carbon budget targets through to 2050.</p> <p>A carbon performance approach similar that used in London and set out in the Mayor’s Transport Strategy will be explored to inform the establishment of a ‘Pathway to 2050’ by 2020.</p> <p>Given that transport is the only UK sector which saw an increase in total emissions over the second carbon budget period (2012 – 2017), and given the importance of the period covered by the third (current), fourth and fifth carbon budgets in terms of being able to limit global warming to 1.5 degrees, estimates of total carbon impacts and reductions from transport (from 1990 baseline) projected for the periods 2023-2027 and 2028-2032 will form a key focus in terms of the identification of carbon reduction measures.</p>

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	<p>an at-best decrease of 67% by 2050, again woefully short of the net-zero recommendations.</p> <p>Air Quality Air Quality is a significant public health and environmental hazard. Over 7000 people die prematurely in the three Northern regions as a result of particulate pollution⁶ and many areas of our towns and cities have been included in Air Quality Management Areas. Road transport is the primary source of both particulate and nitrogen dioxide emissions in the UK.⁷</p> <p>Following successive court judgements against the UK Government, DEFRA has produced its Air Quality Plan⁸. This, and a further recent court judgement, require Action Plans to be developed in 23 local authorities in the North. This process entails the attainment of legal levels of nitrogen dioxide pollution “as soon as possible”. The solutions to reduction of air pollution from motor vehicles are twofold: (a) Improve vehicle performance, through stronger mandatory emissions standards (b) Demand management, to reduce the distance travelled by high polluting vehicles</p> <p>The Strategic Transport Plan clearly has a role in the second of these solutions. However, the STP fails to address air pollution in two key ways: (a) Under the Strategic Transport Plan, the demand for travel increases between 2015-2050 by a minimum of 27% up to 54%.⁹ It should be recognised by Transport for the North that particulate matter emissions from electric vehicles are roughly equivalent to internal combustion vehicles due to the high level of non-exhaust emissions.¹⁰ (b) The spatial distribution of the planned investment of over £70bn appears to be targeted at a “predict and provide” construction of meeting transport demand between cities. This needs to be balanced by a substantial level of support to local authorities to create more local solutions to the problems identified above.</p> <p>Conclusions and recommendations Friends of the Earth welcomes some of the investment proposals in the draft Strategic Transport Plan particularly the development of rail infrastructure, including Northern Powerhouse Rail and Integrated and Smart Travel.</p>	<p>Two new sections have been added to the Final STP ‘Why’ chapter to provide the environmental and social context of the Plan alongside the economic context. These sections set out the current situation in the region and how the STP proposals could affect them. In addition, a new section on ‘Inclusive and Sustainable Growth’ has been added to the Final STP ‘Why’ chapter providing clear policy direction on addressing several social and environmental aspects:</p> <ul style="list-style-type: none"> - People and the transport network - Safety on the transport network - Transport and health - Transport and the environment - Biodiversity, and the natural and historic environment - Adaptation to climate change - Use of resources - Protection of soils - Reducing air pollution from transport - Decarbonisation of transport

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	<p>However, we are concerned that the bulk of the proposed investment priorities are in developing the road network on a “predict and provide” basis rather than managing demand and creating modal shift.</p> <p>We are concerned that this will lead to a failure to meet Transport for the North’s statutory duties in relation to climate change and air quality. We are also concerned that individual projects will have deleterious impacts on the natural environment (e.g. the Trans Pennine Tunnel and associated development).</p> <p>We call on Transport for the North to significantly revise the Strategic Transport Plan to recognise the urgent, binding imperative of tackling climate change and air quality by ensuring that the final STP is consistent with the scientific evidence on both. Without this consistency, we consider that the draft Strategic Transport Plan will lead to significant negative impacts on the environment, and the health and quality of life of the people that Transport for the North is being established to serve.</p>	
?	<p>Whilst the document makes some comment on the impact of the proposals on the local people, jobs, communities and community environment, this is not a part of the formal process as it is not included in the ISA Framework. This is a defect which must be rectified. As the document itself says, there are significant impacts here which need to be considered and avoided, reduced, or mitigated. Failure to do this will have an adverse effect on the acceptance of the proposals by the public, who will bear the brunt of these negative impacts if they are not addressed.</p>	<p>These issues are addressed in detail across a number of different Objectives within the ISA Framework. For example, Objective 12 examined the enhancement of long term economic prosperity and the promotion of economic transformation, while effects on communities and individuals was examined in Objective 14 (Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society) and Objective 15 (Improve health and well being for all citizens and reduce inequalities in health). Due to the scale of the TfN Strategic Transport Plan, these issues were examined at a north of England scale and as such did not address issues specifically at a local scale.</p>
?	<p>As noted previously, the Independent Integrated Sustainability Appraisal fails to address the core deficiencies of the TfN Strategic Transport Plan - that it fails to achieve its committed journey time targets and its undue and unnecessary dependency on the established HS2 route. Both reduce the efficiency of the proposals, and thereby reduce</p>	<p>The ISA processes, as set out in the ISA Report, identifies the likely sustainability effects of implementing the Strategic Transport Plan (STP) and reports on the process of developing the STP from a</p>

Respondent	Comment	Response
	<p>their potential to achieve the step-change modal shift necessary to achieve major reductions in transport CO2 emissions and other sustainability goals. Hence the appraisal cannot possibly be robust.</p>	<p>sustainability perspective. However, as noted in Chapter 10 (page 75), it is not the purpose of the ISA to decide on alternatives to be pursued. The STP itself and Partners Strategies, Policies and Plans will help shape the future scenarios, though these will also be influenced by a range of external factors, for example the impact of technological change on transport systems and on future travel behaviour. This is the role of the decision makers who will consider the precise strategy to be taken forward. The ISA provides information on the relative sustainability performance of the strategic alternatives and helps enhance the transparency of the decision making process.</p>
?	<p>The ISA proportionately assesses the likely impact of the STP through objectives appropriate to the forms of assessment considered. A clear methodology is outlined that has been responsive to consultation, provides robust assumptions and acknowledges limitations.</p>	<p>Noted.</p>
?	<p>Without undertaking a detailed independent appraisal on the process followed it is not possible to comment in detail. What is clear from Table 11-1 is that the analysis has been undertaken on a subjective basis with no evident quantification. Without evidence of calibration of the judgements made (refer DW Hubbard, 2009) these conclusions cannot be relied on. Overall the structure makes sense but it need more work.</p>	<p>Noted – the process followed in the ISA is set out in Chapter 2 of the ISA Report, with Table 2-1 setting out how the requirements of the applicable legislation have been addressed.</p>
?	<p>We have concerns regarding the uncertainty of the effect on nature conservation. However, it is noted that a key element of the Strategic Component ‘Ensuring a sustainable investment programme’ will work with partners to avoid and / or minimise any adverse effects on important nature conservation sites as far as possible. We would want to ensure this is progressed. • Concern about the short term road schemes adverse effects in terms of GHG and air pollutant emissions, however in the longer term the presumption is that these will be beneficial due to the 'likely' uptake of Low Zero Emission Vehicles (LZEVs). What mitigations will be put in place should this not be the case? There is a concern in relation to the increasing importance of reducing Air Quality Pollution. •</p>	<p>The ISA was undertaken of the STP at a point in time and as such reflects the sustainability performance of the STP at that particular point. While the STP has a temporal scope up to the year 2050, it will be subject to periodic review during that timeframe.</p>

Respondent	Comment	Response
	<p>Further consideration should be given to the principles of smart highways facilitating LZEV charging systems, via strategic innovative charging stations, smart grids and highways that can potentially indirectly charge LZEV in the near future. • Compatibility between STP and ISA Objectives - notes potential conflict with the ISA objectives 1 (GHG), 4 (air pollution) and 11 (lower carbon affordable transport) for the STP Objective 'Transform Economic Performance'. It is noted that the STP objectives have been revised to help ensure that the sustainability performance of the plan can be maximised – and this is a key aspect and must be maintained throughout the duration of the plan. • Concern is over the effects on biodiversity, nature conservation. It states these areas will be a concern over all the STP strategic components but could be both a concern and an opportunity of enhancement. • Consideration could be given to more detailed baseline positions for the environmental aspects and clearer targets set and how monitoring will take place against these targets. We accept this STP & ISA is at draft stage, clarity on baselines and targets would demonstrate good governance and support for the Clean Growth Strategy.</p>	
?	<p>From the context of the NPT Partnership we would agree the TfN Consultation has included a robust assessment of the Draft Strategic Transport Plan as undertaken by the Independent Integrated Sustainability Appraisal. We recognise the stage the plan is at which is reflected in the ISA document. Going forward the Partnership would welcome regular dialogue and review of sustainability issues emerging from the delivery of the agreed specifics of the TfN Strategic Transport Plan as part of the anticipated engagement between TfN and its consultees and stakeholders.</p>	<p>Noted – further engagement issues are a matter for TfN.</p>

Appendix C. Changes to Final STP

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
Introduction	About Transport for the North (TfN)	Text revised and expanded upon	No implications identified as this is background information though it is to be noted that the roles and remits of TfN and Partners are made clearer.
	The Strategic Transport Plan	Text revised	Implications to be considered in terms of describing the Final STP.
Vision	Vision noted as 'A thriving North of England, where modern transport connections drive economic growth and support an excellent quality of life'	'A thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all'.	Implications of change to Vision wording to be considered in this Post Adoption Statement.
Transport Objectives	Increase efficiency, reliability and resilience in the transport system	No change to wording of the Objective or its supporting text (integration is now included which is important for the whole journey)	No change to Objective – note though that while the text of the Objective has not changed, the bullet points relating to what the Plan will do have been removed it was considered that these were picked up in the text throughout the document, so points still remain but are not repeated
	Transforming economic performance	No change to wording of the Objective or its supporting text	No change to Objective – note though that while the text of the Objective has not changed, the bullet points relating to what the Plan will do have been removed it was considered that these were picked up in the text throughout the document, so points still remain but are not repeated
	Improve Access to Opportunities across the North	Change to the wording of the Objective to read: 'Improve inclusivity, health and access opportunities for all'	Note that while the text of the Objective has changed, the supporting explanation has not – though the bullet points relating to what the Plan will do have been removed it was considered that these were picked up

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
			in the text throughout the document, so points still remain but are not repeated
	Promote and support the built and natural environment	Change to the wording of the Objective to read: 'Promote and enhance the built, historic and natural environment'.	Note that while the text of the Objective has changed, the supporting explanation has not – though the bullet points relating to what the Plan will do have been removed it was considered that these were picked up in the text throughout the document, so points still remain but are not repeated
Why? The Case for Change		Text layout revised and new / expanded detail added on the overview of 'The North Today'. New detail added / expanded relating to the 'Productivity Puzzle', the changing economic landscape and agglomeration benefits.	Implications considered in this Post Adoption Statement.
The North's role in powering the UK economy		Text layout revised and new / expanded detail added on the Northern Powerhouse Independent Economic Review (NPIER). Similar level of detail provided on the Prime and Enabling Capabilities of the north. More detail added on the Visitor Economy. More detail added on the North's economic assets and clusters.	Implications considered in this Post Adoption Statement.
Future transformed demand for a transformed North	Text detailing the role of transport in economic growth – this sets out 4 scenarios and notes the role of enabling policy and plans and technological and social change	Text moved to a new section in the report entitled 'The North's transport network', with amended text on road and rail demand. Note that this section provides more detail on the Growth Scenarios.	Implications considered in this Post Adoption Statement.
Northern transport network challenges and opportunities	Text sets out the challenges and opportunities Text then sets out the three main roles of transport to help drive the economy: <ul style="list-style-type: none"> • Connecting people • Connecting Business • Moving Goods 	Text on challenges and opportunities has been removed / subsumed into other sections. New section on Aims of the Plan to set out what Investment in transport can do and what it will help to do – this includes deliver a sustainable transport network that supports improving quality of life and protects the environment.	Implications considered in this Post Adoption Statement.

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
		Text then sets out how transport has three main roles to support economic assets and clusters, namely: <ul style="list-style-type: none"> • Connecting people • Connecting Business • Moving Goods 	
Connecting People	General	Text has been reworked and expanded. This includes new information on the need for charging / fuelling networks to grow and adapt government commitments to electric and hydrogen fuelled vehicles. Also additional text re. accessing health and leisure services etc.	Implications considered in this Post Adoption Statement.
	Multi-Model Connectivity Improvements	Text has been reworked and expanded. Now includes reference to seaside resorts and coastal attractions which are often at the periphery of the transport network and often most susceptible to incidents on the network. Greater recognition of 'first and last mile' connection and need for complementary local infrastructure to the strategic infrastructure.	Implications considered in this Post Adoption Statement.
	Delivering nationally significant infrastructure improvements etc.	No change to text	No implications identified.
	Cross border connectivity	No change to text	No implications identified.
	Supporting the international connectivity of the north	Small changes to text – some detail removed e.g. the potential for all air freight flying from north's airports removed.	Issue is now under 'Moving Goods'. No implications identified.
Connecting People	Connectivity between the North's economic centres and assets.	Small additions to text to include reference to digital clusters in Newcastle and the Liverpool, Manchester and Leeds City Regions.	No implications identified.
	Multi-modal connectivity improvements	No changes to text	No implications identified.
	Delivering nationally significant infrastructure improvements etc.	Small removal of text re. Liverpool2	No implications identified.
	Cross border connectivity	No changes to text	No implications identified.
	Supporting the international connectivity of the north	Small changes to text	No implications identified.

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
Moving Goods	Connectivity between the North's economic centres and assets.	Small changes to text – this includes additional text on supporting a shift to rail to reduce congestion, but notes that constraining factors will need to be addressed. Additional text has been added on need to develop skills e.g. within the education system on operating autonomous vehicles etc. Small areas of text removed relating to four principles of multi-modal transit improvements. Text also removed relating to carbon emissions and green growth strategy.	Implications of removal of text relating to carbon emissions and Clean Growth Strategy considered in Post Adoption Statement.
	Multi-modal connectivity improvements	Small changes to text	No implications identified.
	Delivering nationally significant infrastructure improvements etc.	Additional text added to note that reducing carbon and improving air quality is imperative for freight and logistics sector. Section now notes Clean Growth Strategy. New text added to note the need to be aware of changes to the energy industry and the need for new infrastructure.	Implications of reducing Carbon considered in Post Adoption Statement.
	Cross border connectivity	Additional text added to support economic growth in Midlands region.	No implications identified.
	Supporting the international connectivity of the north	Small changes to text to add for example reference to greater use of coastal shipping and inland waterways to move freight.	Implications considered in this Post Adoption Statement.
Inclusive and sustainable growth	<i>No original section.</i>	NEW section has been added to the Final STP.	Implications considered in this Post Adoption Statement.
What? Identifying the major strategic interventions.	Current transport commitments in the North	Text has been substantially reworked. Greater detail is provided on recent transport investment across a number of areas. Recognition of role of Partners is also expanded upon. This includes for example the role of Local Transport Plans.	No implications identified.
	Current rail commitments in the north		
	Current road commitments in the north		
	Building the long term investment programme	Text on investment has been 'rolled into' the relevant section dealing with modes.	No implications identified.

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
	Northern Powerhouse Rail	Text on Northern Powerhouse Rail has been reworked, with more specific information on benefits provided. This text is to be reworked further, with additional information provided.	No implications identified.
	Long term rail strategy	<p>Greater detail is provided under the title of 'Strategic Rail' on rail franchises and investments which these have made.</p> <p>The text identifies a number of strategic gaps within the existing rail network.</p> <p>Additional text is provided on how the identified conditional outputs from the LongTerm Rail Strategy will be addressed.</p> <p>Text relating to the enhancements pipeline has been reworked and additional information provided.</p> <p>A large section of additional text has been provided in relation the HS2 and this highlights a range of implications for the STP, including areas which will be complimentary to the STP.</p>	No implications identified.
	Major Road Network for the North and Strategic Road Studies	<p>Text has been reworked and includes greater level of detail on strategic road connectivity gaps.</p> <p>Text on Strategic Road Studies largely as per previous iteration, though some additional information on progress of development of specific schemes is provided.</p>	No implications identified.
	Integrated and Smart Travel	Greater detail on TfN partners provided, along with greater clarity on what the Objectives of Integrated and Smart Travel are. This includes greater clarity on the commitment to 'Fair Price'. Greater detail is provided on what is involved at each Phase of implementation.	No implications identified.
	<i>No original text</i>	(NEW) Local and Sustainable Transport section added to the Final STP.	Implications considered in this Post Adoption Statement.
	Strategic Development Corridors	Introductory text reworked.	No implications identified.

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
		Noted that the two page summaries are to remain unaltered, aside from amendments to Important Economic Centres advised by Partners and updates to the demand figures from further assessment / development of the Strategic Development Corridors that has been undertaken.	
How? Delivering TfN's Investment Programme	Governance and Accountability	Text reworded to update TfN's new governance structure.	Roles and responsibilities of TfN and Partners is now clearly set out – no further implications for ISA.
	Stronger Partnerships	It appears that some text on Stronger Partnerships is missing / not developed as yet. There is however, expanded text and additional clarification of the linkages of Transport and Spatial Planning. Additional text has been added in a new section on on Policy Positions. This sets out how TfN will interact with Partners and Stakeholders across the North of England.	Consideration made of the expanded text on Spatial Planning as this is linked to one of the ISA Objectives (to try and improve this linkage between transport and spatial planning).
	Innovation	Revisions made to text – of particular note is reference is made to the Climate Change Act 2008. Revision and expansion of the text relating to interaction with future strategies is also made. Additional text added re. collaboration with research / innovation institutions. Further text added on links between transport and energy infrastructure.	Revisions and additions to the text appear to expand upon and clarify how the STP will encourage and interact with new innovations and recognition made of implications. Consideration of this additional text made in this Post Adoption Statement.
	Northern Transport Skills	Revisions and additions to the text have been made that help to clarify and expand upon intentions.	Revisions and additions to the text appear to expand upon and clarify how the STP will encourage an increase in skills. Consideration of this additional text made as it would be relevant to elements of the ISA Objectives.
	Funding and financing	New section developed that sets out the Funding Framework. Text relating to funding sources has also been revised.	No implications identified.
	Appraisal and analysis	Revision made to text – includes additional detail on modelling. Additional text and clarification has also been	Additions to the text appear to expand upon and clarify how the STP will be made more

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
		<p>provided in relation to a 'sustainable return on investment'. This includes the commitment that any interventions set out in the Investment programme should carry out an environmental and sustainability assessment to the highest regard, including what carbon benefits the interventions will bring. It is noted how this will build upon work carried out in relation to the ISA and Environmental Assessment Reports for the Strategic Corridors.</p>	<p>sustainable and a number of important commitments are made. Consideration of this additional text made in this Post Adoption Statement.</p>
	<p>Ensuring a Sustainable Investment Programme</p>	<p>This theme has been renamed to 'Inclusive and Sustainable Growth'. And part of the Why section</p> <p>Additional text added to commit to an inclusive development of transport infrastructure that will provide opportunity for all potential users. Series of points provided on what inclusive growth will include. This additional text also notes that it should apply across the north to all communities – not just those already well connected (in terms of people and places). Text notes that STP can play fundamental role in bridging inequality gaps.</p> <p>Additional text provided to note that improvements to strategic transport networks should ensure support for inclusive growth, reduced social isolation, have health and wellbeing benefits and provide affordable access to key opportunities.</p> <p>New text provided on making transport more accessible through design.</p> <p>Additional text to be added relating to Public Health.</p> <p>Commitment made to No Net Loss in Biodiversity.</p> <p>Additional text relating to Natural Capital etc.</p> <p>Additional text provided relating to decarbonisation of transport.</p> <p>Additional text provided on Air Quality</p> <p>Additional text provided on LZEVs and need for electric charging points network to be expanded significantly.</p>	<p>Major additions to the text appear to expand upon and clarify how the STP will be made more sustainable and a number of important commitments are made. Consideration of this additional text made in this Post Adoption Statement.</p>

Section	Original section that was assessed (2018)	How has the original section been revised in the Final STP?	Implications for ISA
	Strategic Transport Plan review process and consultation	Text included in relation to TfN programmes and interventions.	No implications identified for ISA, though note the Monitoring Programme set out in this Post Adoption Statement which will help TfN to further clarify issues during any review process.

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