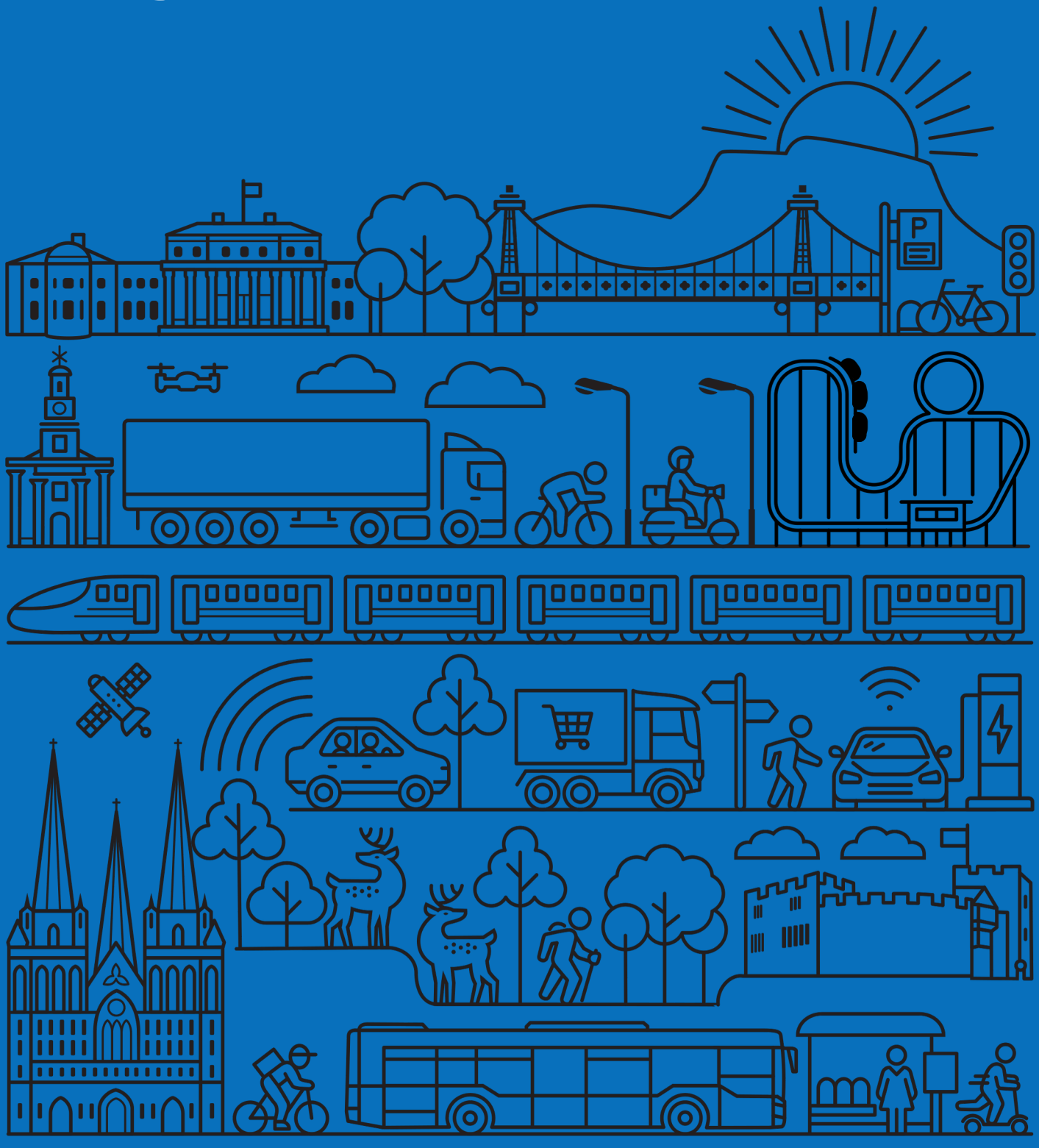
STAFFORDSHIRE

Draft Local Transport Plan

2025

Integrated Impact Assessment



Staffordshire County Council

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Chapter 1. Overview

1.1 Introduction

It is vital that the new Local Transport Plan (LTP) for Staffordshire (2025), is developed and delivered in a way which:

- Promotes strong economic growth.
- Protects and enhances the environment.
- Promotes the health and quality of life of Staffordshire's residents; and
- Allows as many different people as possible, the choice regarding how, when and if they travel.

To help achieve this, the LTP has been the subject of a series of assessments that consider the requirements included in a:

- Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA);
- Health Impact Assessment (HIA);
- Community Impact Assessment (CIA); and
- Equality Impact Assessment (EqIA).

Taken together, these assessments are described as an 'Integrated Impact Assessment' (IIA)[1]. An IIA sets out the likely significant effects of the LTP in terms of economic, social and environmental factors; and identifies the measures that can either mitigate any adverse effects and maximise any positive effects.

The LTP has also been subject to a Habitats Regulation Assessment (HRA), which was undertaken in parallel to the IIA. A copy of the HRA can be found in Appendix 1.4 of the main LTP document.

Key reporting requirements have been set by the SEA Directive and SEA regulations. Table 2 shows where specific SEA requirements have been considered in this report.

Table 1: Key reporting requirements of the SEA process

	Information to be included in the Environmental Report under the SEA Regulations	Chapter
1	An outline of the contents, main objectives of the plan, and of its relationship with other relevant plans and programmes	1 & 2
2	The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	3 & 5
3	The environmental characteristics of areas likely to be significantly affected	3

[1] For stage A - Scoping Report - The IIA was referred to as an Integrated Sustainability Appraisal

4	Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC	3
5	The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation	3
6	The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as biodiversity; population; human health; fauna; flora; soil; water; air; climatic factors; material assets; cultural heritage including architectural and archaeological heritage; landscape; the interrelationship between the above factors	5, 6 & 7
7	The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan	8
8	An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	5
9	A description of measures envisaged concerning monitoring in accordance with Regulation 17	11
10	A non-technical summary of the information	Non-technical summary

1.2 Consultation as part of the IIA process

Key consultation requirements are those set in the SEA Regulations. It identifies three organisations that act as statutory consultation authorities in the SEA process. These are the Environment Agency, Natural England (formerly English Nature and the Countryside Agency) and Historic England (formerly English Heritage).

- **Scoping Report**
  The first consultation requirement involved the statutory consultation authorities only. They were provided with a Scoping Report, which sought to determine the scope and level of detail for the assessment, focusing on key environmental, social, and economic issues, and establishing the framework for the subsequent assessment. Consultees were given 5 weeks to respond from 13 May 2025. We specifically asked for their views on the IIA's scope, its level of detail and the data that will be relied upon to carry out the IIA. A summary of the feedback we received is set out in Table 2, together with how these comments have informed the further development of the IIA and LTP.

- **The IIA Report (referred to as an Environmental Report in the SEA Regulations)**
  The second consultation requirement involves the statutory consultees and the public. This document went out to full public consultation from 30 September to 27 October 2025. At the same time, the LTP and HRA were also consulted on.

The comments we received were considered when finalising the LTP as set out in the Post Adoption Statement. This Statement. It describes:

- How the consultation responses have been considered and addressed.
- How impacts on economic, social and environmental factors have been integrated into the LTP.
- How the IIA report has been taken into account.
- The reasons for agreeing on the final LTP document in the light of other reasonable alternatives dealt with.
- The monitoring regime to ensure that any significant effects of the LTP's implementation are observed.

Table 2: Summary of feedback from the Scoping Report

Statutory Consultees	Feedback on Scope	Changes to IIA	Changes to LTP
Environment Agency	Consider climate change as an overall plan priority, with impact, mitigation and adaptation addressed in relation to all objectives as opposed to a standalone theme.	Since the consultation on the Scoping Report, the Council's stance on climate change has altered. Rather than prioritising climate change, the Council, as custodians of Staffordshire's natural environment, will prioritise its protection.	Five principles now run through the new LTP and seek to ensure that schemes have a sound business case, add value, contribute to social good, and protect the natural environment. Three of the delivery principles are pertinent to climate change: • Enable People to Make the Right Travel Choice • Adopt an Infrastructure-light Approach • Enhance the Natural Environments
	Include tighter requirements for flood risk betterment.	Greater emphasis has been given to improving the flood resilience of surrounding areas, which could include reducing flood storage volume loss, providing flood storage compensation, and improving surface water drainage. Promote the minimisation of the use of impermeable hard surfacing and the use of SuDS and upstream storage (Natural Flood Management - NFM) has been added as a decision-making question.	Greater emphasis has been made in reducing instances of highway flooding and resilience to it. In addition, the highway network must not exacerbate flooding on surrounding areas.

	Seek to protect and enhance waterbodies within the plan area.	An IIA objective already exists to protect and enhance protected habitats and promote ecosystem resilience.	Reference has been made to protecting waterbodies, such as rivers and ponds.
	Strengthen IIA objectives and decision-making questions to include greater reference to waterbodies, their importance to wildlife, source of drinking water; as well as the associated catchment management plans and source protection zones.	Reference has now been made, stating that waterbodies fall under the umbrella term of 'habitats' and that they are important to wildlife and are a source of drinking water. The following decision-making questions have been added: Will the LTP…. • Protect ground and surface water quality in line with Water Framework Directive (WFD) requirements? • Safeguard the availability of water resources (surface and groundwater)? • Improve and enhance green infrastructure, contributing to improvements in the quality of surface water run-off?	The Vision has been strengthened to read, "..improve the environment", rather than "…protect the natural environment". This is considered more proactive and ambitious. Also, removing 'natural', extends the meaning to include both the natural and built environment. Where transport has a direct impact, possible, more positive language has been used.
	Development proposals need to consider the wider and indirect impacts on the riparian environment as well as within channel ecosystems and processes etc.	'Will the LTP help to meet objectives of the Water Framework Directive (WFD) and River Basin Management Plans?' has been added as a decision-making question.	Green-blue Infrastructure is considered in the LTP in the context of the Staffordshire Highways Design Code.

Natural England	Incorporate measures to help encourage people to access the countryside for quiet enjoyment.	'Will the LTP encourage people to access the countryside for quiet enjoyment?' has been added as a decision-making question.	Several additional references have been included in the LTP regarding access to the countryside and the Public Rights of Way network.
	Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.	A revised PRoW Improvement Plan will be published at the end of the year.	
	Maximise opportunities to incorporate green infrastructure during the development of the LTP.	The following decision-making questions have been added: Will the LTP…. • Improve public realm and the overall environment, including green infrastructure? • Encourage people to access the countryside and urban fringe areas for quiet enjoyment? • Protect and enhance green infrastructure, a network of linked, multifunctional green spaces?	Measures such as reinstating existing footpaths, together with the creation of new footpaths and bridleways, are to be encouraged and will form part of the new PRoW Improvement Plan. Links to other green networks and, where appropriate, urban fringe areas, will also be explored to help promote the creation of wider green infrastructure.
	Advises caution when using broad conclusions when assessing air quality impacts on Protected Sites. Particularly in regard to any perceived buffer that secondary woodland and bracken would provide to European dry heaths and Northern Atlantic wet heaths with Erica	Noted. An action has been made to monitor the potential impacts on the SAC.	

	tetralix which are qualifying features of the SAC.		
Historic England	Consider acknowledging the associated PPG, which is not referred to.	This has now been included.	
	Consider including reference to some of Historic England's documents, including Good Practice Advice note 2, *Managing Significance in decision making*, and Good Practice Advice note 3, *The setting of heritage assets*.	This has now been included.	
	Consider other local sources of information such as National Park/AONB Management Plans, Heritage/Conservation Strategies, Other Strategies (e.g. cultural or tourism), and Conservation Area Character Appraisals and Management Plans.	Additional local sources of information have now been included.	
	Unclear why in preceding paragraphs, information relating to Conservation Areas is included in Section 7.8 'Landscapes and townscapes' rather than Section 7.7 'Cultural heritage'.	This has been resolved.	
	In terms of the indicators, consider reframing wording or adding new text to highlight that local transport schemes can also offer opportunity to enhance and better reveal the historic environment.	Table 9 includes the indicator, "Number of improvements made to heritage assets within the local road network".	

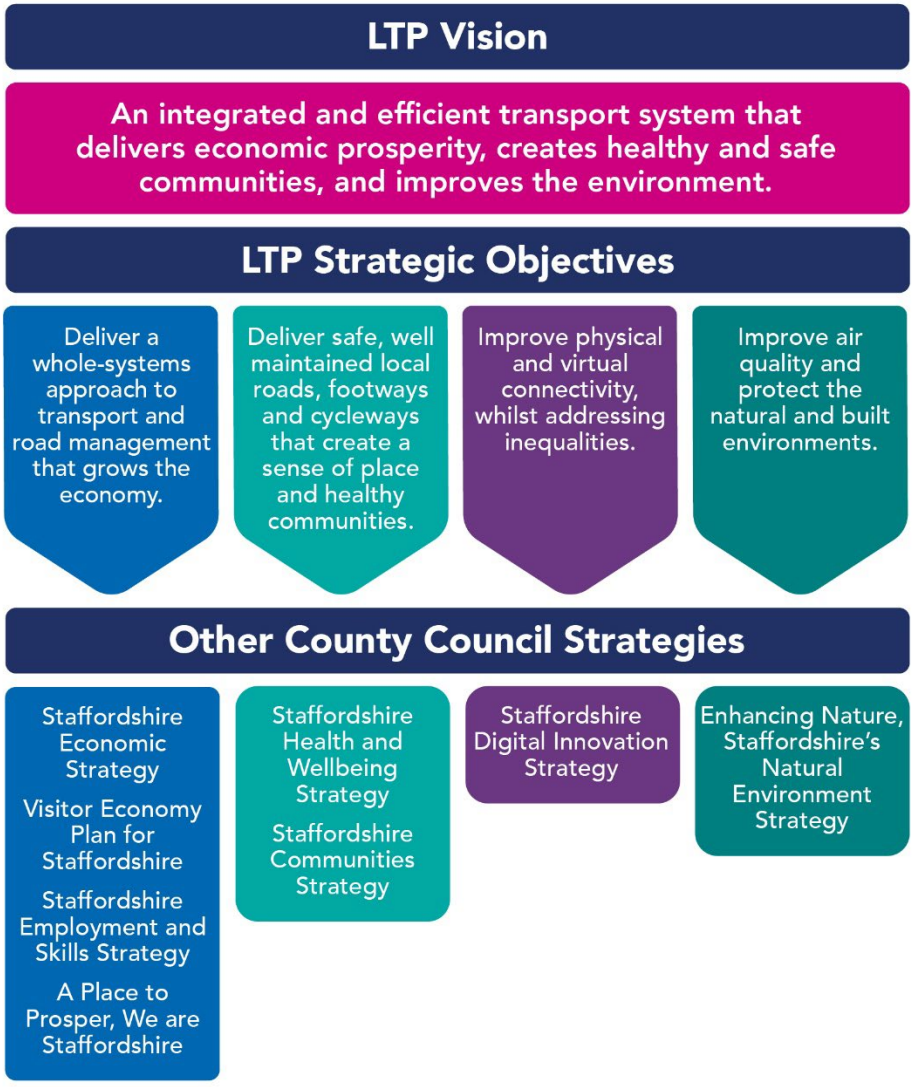
1.3 Overview of the new LTP

The new LTP is Staffordshire's fourth transport plan. It covers the administrative area of Staffordshire County Council. It is a live document and will be updated regularly.

Transport is the movement of people and goods, and our road and rail networks facilitate this movement. Transport is fundamental to delivering a vibrant economy in Staffordshire, enabling people to meet, and access jobs, education, goods and services. Ensuring transport is inclusive is key to providing equal opportunities for people with disabilities and mobility issues. We will deliver the right types of schemes to support economic growth, create a cleaner and greener county and improve the health and wellbeing of our residents.

The vision and strategic objectives of the new LTP are set out in Figure 1, along with their links to other plans and strategies prepared by the Council.

Figure 1: Linkages between the LTP and wider Council Strategies and Plans



There are 18 theme objectives in the LTP. These sit beneath the strategic objectives, as stated above, and aim to steer LTP delivery. Table 3 shows how the theme objectives align with the National Government's five missions.

Table 3: LTP Theme Objective alignment with the Government's Five Missions

LTP Theme Objectives	Kickstart economic growth	Make Britain a clean energy super power	Take back our streets	Break down barriers to opportunity	Build an NHS fit for the future
1. Ensure multi-modal connectivity for all, to, from and within rail stations.	✓			✓	
2. Improve rail passenger and freight services.	✓			✓	
3. Deliver high-quality bus services that are reliable, accessible and easy to use.	✓			✓	
4. Provide other public travel options where frequent bus services are not available.	✓			✓	
5. Improve the safety and efficiency of the Strategic Road Network to deliver a positive impact on the local road network.	✓				
6. Improve the safety, efficiency and journey time reliability of the local road network.	✓		✓	✓	
7. Deliver a whole-life asset management approach to improve the condition of the local road network.	✓		✓		
8. Support the efficient movement of freight whilst minimising the adverse impacts it can have on local roads and communities.	✓		✓		
9. Ensure the road network provides facilities that make walking, wheeling and cycling convenient and safe for all.	✓		✓	✓	✓
10. Increase the use of the Public Rights of Way network.			✓		✓
11. Deliver promotional activities that complement our active travel infrastructure.			✓		✓
12. Integrate land-use planning and transport infrastructure, and ensure development is located where there are, or will be, travel choices.	✓		✓		✓
13. Ensure decisions made on the location and design of new development sites, provide high quality connectivity by active and public transport.	✓		✓		✓
14. Provide high quality active and public transport connectivity when reshaping and revitalising our town centres.	✓	✓	✓	✓	✓
15. Improve digital connectivity to give people the option not to travel and improve the way the road and transport networks operate.	✓	✓		✓	
16. Improve data sharing with partners to enhance the efficient and safe operation of the local road network.	✓				

17. Facilitate the transition to low emission vehicles amongst residents and businesses by focusing on off-road charging locations.	✓	✓		✓	
18. Support the bus industry by enabling investment in low emission buses and charging infrastructure.	✓	✓		✓	

1.4 Our approach to conducting the IIA

Sustainability Appraisal / Strategic Environmental Assessment (SA/SEA)

Originally, the SA/SEA process focused on the environmental effects of preparing and implementing plans and programmes with a view to addressing any significant effects. Today, it is widely accepted that the SA/SEA process is wider, including social and economic dimensions of sustainability.

The requirement to carry out a SEA came from an EU Directive[2] and took effect in the UK in 2004. Whilst the UK has left the EU, the need to carry out a SEA remains for plans and programmes, including LTPs.

When carrying out a SEA, we must:

- Publish our findings in an Environmental Report (this document);
- Consult on the LTP, alongside this document;
- Consider the results of the consultation exercises, ensuring that they have been reflected in the LTP; and
- Inform the public of how the results of the SEA have been considered and included in the LTP via a Post Adoption Statement.

Health Impact Assessment (HIA)

A HIA assesses the potential health effects of plans and programmes on the population, particularly on vulnerable and disadvantaged groups who might need special consideration. We know that transport can widen or narrow health inequalities. Therefore, where possible, through the preparation and implementation of the LTP, any health benefits will be maximised, and any inequalities will be mitigated.

Whilst there is no statutory requirement to undertake an HIA in relation to the new LTP, we know that transport and health are inextricably linked. The management, maintenance and development of the transport and road network have the potential to cause significant positive, as well as some negative, impacts on health and wellbeing. Some groups are more at risk of experiencing transport-related exclusion or are disproportionately affected by the negative effects of roads and transport. Some examples of the types of impact transport can have on health are shown in Table 4.

[2] EU Directive 2001/42/EC.

Table 4: Impacts of Transport on Health

Positive	Negative
• Improves access to services (including healthcare), jobs and nature. • Promotes physical activity through active travel modes. • Facilitates social interaction and access to community events and activities, which can improve social wellbeing and reduce feelings of isolation.	• Motorised transport is a significant source of air and noise pollution, which can lead to respiratory problems, cardiovascular diseases, and other health issues. • Road traffic collisions and injuries related to transport pose a serious threat to public health. • Reliance on motorised transport can lead to sedentary lifestyles and reduced physical activity, contributing to obesity, heart disease, and other health problems. • Traffic congestion, long commutes, and the stress of driving, can negatively impact mental health and wellbeing. • Busy roads and transport infrastructure can create barriers and divide communities, limiting social interaction and access to resources.

Equality Impact Assessment (EqIA)

An EqIA seeks to ensure that the LTP does not discriminate against any group within the population, especially those with 'protected characteristics' as defined under the Equality Act 2010. These are:

- Age
- Disability
- Sex
- Gender reassignment
- Marriage
- Civil Partnership
- Race
- Religion or belief
- Pregnancy and maternity
- Sexual Orientation

In addition, people with other characteristics that are not defined in the Equality Act 2010, but who are equally likely to be disproportionately affected by the negative effects of transport, include people on low incomes and people who are neurodivergent and have conditions such as Autism, Attention Deficit Hyperactivity Disorder, Dyspraxia, etc. Where possible, an EqIA should be used to promote equality across the population through the implementation of the LTP.

Our Equality Objectives

The Council has developed principles which set out its ambitions for equality, diversity and inclusion in the county, in delivering its services, and as an employer. The principles are:

- Staffordshire is a place where there is equality of opportunity for all, regardless of circumstances.

- The Council is an inclusive and diverse employer, where our people feel they have the opportunity to succeed and progress.
- The Council develops and delivers services that are inclusive and accessible to all.

Alongside this, the Council has developed four equality objectives. They are:

1. Review and strengthen our recruitment and retention processes and practices.
2. Review and strengthen our diversity and inclusion training offer to employees.
3. Strengthen our approach to engaging and collaborating with our workforce and communities on diversity and inclusion issues.
4. Raise awareness of, and celebrate, diversity.

In carrying out an EqIA, we are fulfilling our statutory duty on public bodies to promote equality under the Equality Act 2010 and subsequent Public Sector Equality Duty.

Community Impact Assessment (CIA)

All key decisions made by the Council, including approving the LTP, must undergo a CIA to ensure that any potential negative consequences are minimized and any positive impacts are maximized. A CIA considers topics such as access to jobs, schools, shops, and healthcare services; crime and fear of crime; and community severance.

Staffordshire Communities Strategy

Communities are at the heart of everything we do as a Council and that is why we have prepared a strategy that seeks to get residents and partners more involved in their community to make a local difference. It has three pillars:

- Great Places Where We Live
- Connected Communities
- The Way the Council Listens, Talks and Acts

It found that 29% of residents identify infrastructure and maintenance (roads and pavements), along with the need for better public transport, as the things that could most improve their communities. Transport was the most important priority amongst the responses to our face-to-face work with seldom-heard groups, particularly regarding accessing local amenities, and seeing this as necessary for a thriving local area.

Habitat Regulations Assessment (HRA)

Under the requirements of the EU Habitats Directive and the Conservation (Natural Habitats, & c.) Regulations 1994, all strategic plans, such as the LTP, must be subject to an assessment of their impact on sites of European and international importance. Such sites include Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. As a matter of UK Government policy, potential SPAs (pSPA), possible SACs (pSAC), listed or proposed Wetlands of

international importance sites (Ramsar sites) and sites identified, or required, as compensatory measures for adverse effects on other European and international sites, need to be included. Hereafter, all the above designated nature conservation sites are referred to as 'European sites'.

A HRA has been undertaken alongside the SEA/IIA process, as well as the preparation of the LTP. If the HRA finds that potential adverse effects would occur due to the implementation of the LTP, mitigation measures must be developed and approved by Natural England.

There are several stages to carrying out a HRA, which are summarised below:

- Stage 1 – Screening: Test whether the LTP, either alone or in combination with other plans and projects, is likely to have a significant effect on a European site;
- Stage 2 – Appropriate Assessment: Determine whether the LTP, either alone or in combination with other projects and plans, would have an adverse effect on the integrity of the site with respect to its structure, function and conservation objectives. If adverse impacts are anticipated, potential mitigation measures to alleviate the impacts should be proposed and assessed;
- Stage 3 – Assessment of Alternative Solutions: If the LTP is assessed as having an adverse impact (or risk of this) on the integrity of a European site, there should be an examination of alternatives solutions (e.g. alternative locations and designs of development); and
- Stage 4 – Assessment where no Alternative Solutions Exist and Adverse Impacts Remain: In exceptional circumstances, where no alternative solutions exist and adverse impacts remain (e.g. where there are imperative reasons of overriding public interest), compensatory measures would be required to offset the negative impacts of the LTP.

HRA Stages 1 and 2 have been carried out for the LTP and the findings are presented in a separate HRA Report. For ease, the main conclusion from these stages is that "the LTP is not a 'Plan' in the context of the Habitats Regulations because it does not contain detailed proposals; it is a 'statement of general aspiration, or political will or general intentions'. Therefore, a Habitats Regulations Assessment is not required. However, in the interest of transparency, it is important to record the decision-making processes and to include safeguards for future work to comply with the Habitats Regulations".

1.5 Scope of the IIA

Geographical Scope

The LTP for Staffordshire covers the administrative boundary of Staffordshire County Council as shown in Figure 2. This includes parts of the Peak Park Authority but excludes Stoke-on-Trent City Council.

Staffordshire covers 2,620 km^2 and has a population of 876,100. This means its population density is lower than the national average at 334 people per km^2, compared to 434 across England.

We recognise that the implementation of the LTP may have effects outside the immediate boundary of its area. Therefore, the areas of all adjacent authorities to have also been considered. They include, Birmingham City Council, Bromsgrove District Council, Cheshire East Council, Derbyshire Dales District Council, Dudley Metropolitan Borough Council, North West Leicestershire District Council, Shropshire Council, South Derbyshire District Council, Telford and Wrekin Council, Walsall Council, City of Wolverhampton Council, and Wyre Forest District Council.

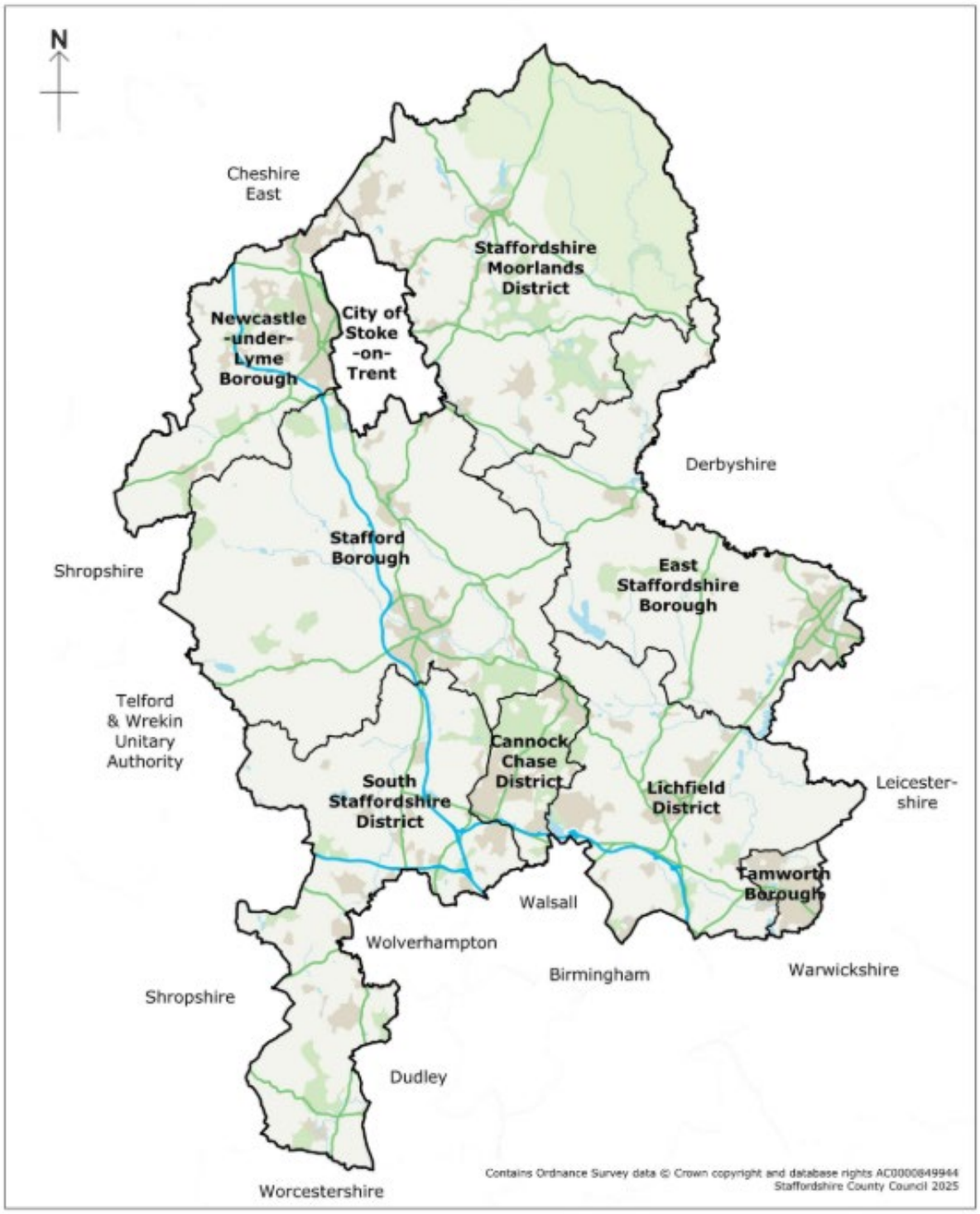
Temporal Scope

The LTP contains a five-year costed programme of measures, covering the period, 2026 to 2031.

Technical Scope

The topics that have been examined as part of the SA/SEA are listed in Table 5, together with those that would be included in a HIA, CIA and EqIA. There is a degree of overlap between what is examined across the four individual assessments. Therefore, a pragmatic approach has been adopted with duplication being removed and the merging of similar topics taking place.

Figure 2: Map of Staffordshire



Staffordshire County Council

Scale: 1:400000

Table 5: Topics covered as part of the IIA

Assessment	Topics
SA/SEA	• Biodiversity • Population • Human health • Fauna and flora • Soil • Water • Air • Noise • Climatic factors • Material assets (e.g. infrastructure, waste, run-off) • Cultural, architectural and archaeological heritage • Landscape
HIA	• Disability • Long Term Illness • Obesity • Physical Activity • Deprivation • Employment • Education • Road Safety • Vulnerable road users such as new drivers, the elderly, cyclists and pedestrians • Access to green areas and leisure facilities
CIA	• Population • Employment • Education • Access to jobs, schools, shops, and healthcare services • Walking and cycling • Community severance • Frequency and severity of crashes • Collisions causing injury and fatal accidents • Air and noise pollution • Ageing population and increasing disability • Crime and fear of crime
EqIA	• Age - Children and adolescents, and older people • Disability – Long-term and temporary, physical, mental, and neurodiverse • Gender • Gender reassignment • Marriage and Civil Partnerships • Pregnancy and maternity • Race • Religion or belief • Sexual orientation • Low-income groups

1.6 IIA Methodology

The methodology adopted in carrying out this IIA, is broadly based on published guidance, including the Department for Transport's (TAG) 2.11Strategic Environmental Assessment for Transport Plans and Programmes, and the Department of Health's Draft Guidance on Health in Strategic Environmental Assessments. Good practice and lessons learnt from preparing previous assessments have also guided this IIA.

Table 6 shows how the stages of LTP and IIA development have run in parallel, broken down by the four individual assessments. For completeness, the HRA process has also been included.

The stages should not be regarded as discreet but rather as part of an on-going process of assessment and refinement, which we want to ensure delivers an LTP with economic, social, and environmental benefits.

Table 6: Alignment of the LTP, IIA and HRA processes

Transport Planning Stage	IIA Stage	Sustainability Appraisal / Strategic Environmental Assessment	Habitats Regulation Assessment	Health Impact Assessment	Equalities Impact Assessment	Community Impact Assessment
		Tasks				
Determining the scope of the LTP, clarifying goals; specifying the problems or challenges we want to solve	A. Setting the context and objectives, establishing the baseline and deciding on the scope	A1. Review and confirm plans/programmes and strategies at a international, national, regional and local level		Confirm and identify Health related plans/programmes and strategies (as part of SA/SEA)	Review and confirm plans/programmes and strategies	Review and confirm plans/programmes and strategies /
		A2. Review and confirm sustainability related themes		Review and confirm health related themes (as part of the SA/SEA)	Review and confirm equality related themes	Review and confirm community related themes
		A3. Review and update Baseline data and likely future trends	Confirm identification of all international sites within and up to 20km around the Strategy area	Gather data relating to health (as part of SA/SEA)	Review and update baseline evidence	Review and update baseline evidence
		A4. Review and confirm key sustainability issues – update these if required	Confirm details of all international sites	Review and confirm health specific issues (as part of the SA/SEA)	Review and confirm equalities specific issues	Review and confirm community specific issues
		A.5 Review objectives and decision-making	Liaise with SA/SEA team to ensure SA/SEA	Ensure inclusion of Health specific	Ensure inclusion of equalities specific	Ensure inclusion of community specific

		questions (SA/SEA Framework) – update these if required	Framework covers international sites appropriately	objectives in SA/SEA Framework	objectives in SA/SEA Framework	objectives in SA/SEA Framework
		A6. Prepare IIA Scoping Report to consult informally with relevant consultees	Input into IIA Scoping Report	Input into IIA Scoping Report	Input into IIA Scoping Report	Input into IIA Scoping Report
		A7. Review consultation responses and update scoping information for IIA Report	Review consultation responses as part of SA/SEA for any aspects of note in relation to HRA	Review consultation responses and update scoping information for IIA Report	Review consultation responses and update scoping information for IIA Report	Review consultation responses and update scoping information for IIA Report
Generating options for the LTP to resolve these challenges; appraising the options and predicting their effects	B. Developing, refining and appraising strategic options	B1. Review and confirm Assessment of Plan objectives against the updated SA/SEA Framework	Review proposals and considerations of likely impacts	Review and confirmation of Plan objectives and strategic options be undertaken within SA/SEA	Review and confirmation of Plan objectives and strategic options be undertaken within SA/SEA	Review and confirmation of Plan objectives and strategic options be undertaken within SA/SEA
		Review and confirm Appraisal of Plan strategic options	dentification and consideration of other plans and projects			
		Review and confirm Evaluation / selection of Plan preferred options				
Selecting preferred options for	C. Assessing	Predict and assess effects of new or revised options	HRA review of proposals in draft Strategic	Predict and assess effects of new or revised preferred	Predict and assess effects of new or revised preferred	Predict and assess effects of new or revised preferred

the LTP and deciding priorities	the effects of the LTP	taken forward. Confirm findings in relation to previously assessed schemes.	Transport Plan (screening)	options to be undertaken within SA/SEA. Review and confirm and if required, propose mitigation measures within SA/SEA	options to be undertaken within SA/SEA. Review and confirm and if required, propose mitigation measures within SA/SEA	options to be undertaken within SA/SEA. Review and confirm and if required, propose mitigation measures within SA/SEA
		Review and confirm proposed mitigation measures – if required, new mitigation measures to be developed	Review and confirm and if required propose mitigation measures			
		Develop monitoring programme	Monitoring as part of SA/SEA			
Production of the LTP	D. Prepare IIA Report		Prepare HRA Report	HIA documented in IIA Report	EqIA documented in IIA Report	CIA documented in IIA Report
Consultation on draft LTP	E. Consulting on IIA Report		HRA Report sent to Natural England for agreement on findings	HIA consultation included in IIA Report consultation	EqIA consultation included in IIA Report consultation	CIA consultation included in IIA Report consultation
Production of the final LTP	F. Assess significant changes		Assess significant changes	HIA assessment of significant changes undertaken as part of SA/SEA	EqIA assessment of significant changes undertaken as part of SA/SEA	CIA assessment of significant changes undertaken as part of SA/SEA
Adoption of the new LTP	G. Post Adoption Statement		Prepare updated HRA Screening Report		Relevant results reported in Post Adoption Statement	

Stage A - Setting the context and objectives, establishing the baseline and deciding on the scope

The new LTP will directly and indirectly influence and be influenced by other plans, policies and programmes. We have produced some of these, as well as our local, regional and national partners. In addition, legislation will also influence the type and pace of change that the LTP can achieve. To set the IIA context, relevant plans, policies, programmes and legislation have been identified and common themes are set out in Chapter 2.

To predict how the LTP's implementation might influence Staffordshire's key characteristics and features, we have identified and assessed their current state and then examined their likely evolution with and without the implementation of the LTP. As there is a degree of overlap of topics across the four assessments, we have taken a pragmatic approach, removed duplication and merging similar topics together. This is set out in Chapter 3.

Chapter 4 lists 14 IIA objectives that have been developed to assess the LTP against. These were developed in the light of guidance, relevant issues deemed significant in Staffordshire, as well as the engagement that took place during 2024 in preparation for writing the LTP. In addition to the objectives, we have also identified questions regarding what the LTP needs to achieve or do to support the direction of change required.

Stage B - Developing, refining and appraising strategic alternatives

A compatibility assessment of the LTP's four strategic objectives was made against the IIA objectives. This allowed us to ensure that the IIA objectives informed the development and refinement of the LTP and provided a suitable framework for developing alternatives.

Chapter 5 sets out strategic alternatives for the LTP, which have been assessed as part of the IIA. This task comprised the prediction of changes arising from the LTP's alternative strategies. While carrying out this evaluation, each alternative was considered in the context of whether it would have a likely significant effect in relation to each of the IIA objectives.

Stage C - Assessing the effects of the LTP

Assessing the significance of predicted effects is a matter of judgement, there are several factors that determine the level of significance such as scale, permanence and the nature and sensitivity of the receptor.

An assessment has been carried out for proposals contained in the LTP and the results are described in Chapter 7. Moderate and strong beneficial and adverse effects have been considered, and where there is no effect, or slight beneficial or slight adverse effects, this has been deemed to have no significant impact. Several mitigation measures or recommendations have also been highlighted. We have carefully considered these and have made every effort to address these as appropriate in the LTP.

The term mitigation encompasses any approach that is aimed at preventing, reducing or offsetting significant adverse effects that have been identified. A range of measures, applying one or more of these approaches has been considered in mitigating any significant adverse effects, resulting from the implementation of the LTP.

Similarly, measures aimed at enhancing positive effects have also been considered. Although it is recognised that the primary focus of the IIA is to, in the first instance, proactively avoid any adverse effects. Only once alternative options or approaches to avoid an effect have been examined, then ways of reducing the scale/importance of the effect have been identified and proposed.

Consideration has also been given to secondary or indirect effects, which are those that occur that are not as a direct result of the LTP, but in combination with other plans, projects or programmes. Cumulative or synergistic effects, which arise where several proposals – which individually may or may not have a significant effect - combine to have a significant effect. The cumulative effects of the LTP have been assessed and the results are presented in Chapter 9.

Monitoring the effects of LTP implementation has required us to identify 22 possible indicators that have a causal link between the LTP and the likely significant effect. These will allow us to identify and take appropriate action if, during LTP delivery, adverse effects, whether expected or unforeseen, arise.

A monitoring programme is outlined in Chapter 11. It shows, for each significant effect, what data should be monitored, the source of the data, and the frequency of monitoring.

Stage D - Preparing the IIA Report

This IIA report has been prepared alongside the LTP.

Stage E - Consulting on the draft LTP and IIA Report

This IIA report went out to public consultation, alongside the draft LTP, from 30 September to 27 October 2025.

Stage F - Assessing significant changes that may affect the final LTP

The results of the public consultation exercise may mean that changes are required to the LTP, and this will have implications for the IIA. In addition, the consultation exercise may result in direct changes to the contents of the IIA report, and this will be reported in the Post Adoption Statement.

Stage G - Post Adoption Statement

A Post Adoption Statement has been prepared and is appended to final LTP.

Chapter 2. Review of relevant Legislation and other Plans and Programmes

We have identified relevant plans, policies, programmes and legislation that might influence the LTP's development and implementation. This has helped us to identify relevant economic, social and environmental factors; understand current baseline information; and provide an early indication of any likely significant effects.

This is not an exhaustive list, and elements may have been superseded. However, it demonstrates the context in which the LTP and IIA have been prepared. Common themes emerging from the review in the context of transport planning are listed in Table 7.

Table 7: Common themes emerging from the review of plans, policies, programmes and legislation

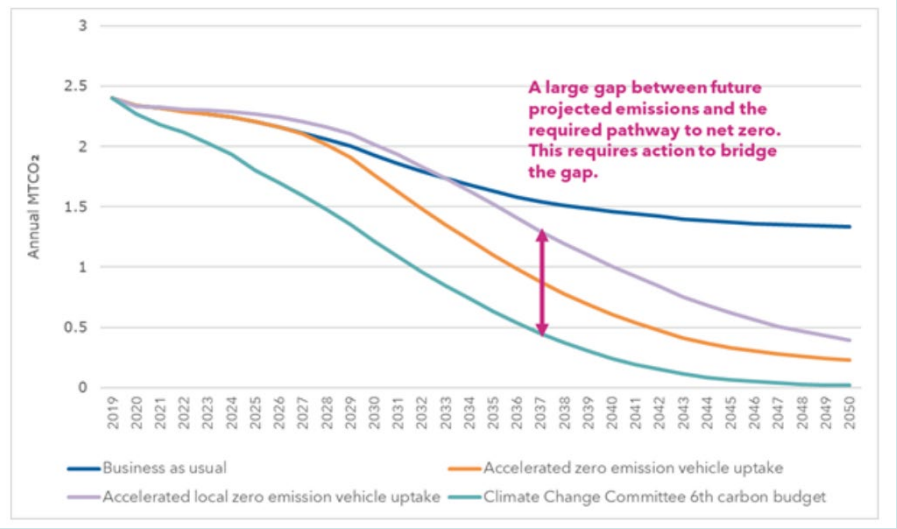
Environment	Equality
• Reduce transport emissions. • Increase use of low and zero emission vehicles. • Increase energy efficiency and make use of new technology. • Adapt to a changing climate and flooding. • Resilient to extreme weather events. • Protect and enhance endangered or important species and habitats. • Contribute to Biodiversity Net Gain. • Conserve and protect historic assets. • Meet objectives of the Water Framework Directive (WFD). • Prioritise development on brownfield sites. • Protect productive land and soils. • Consider opportunities for a circular economy. • Further the purpose of conserving and enhancing Cannock Chase National Landscape and Peak District National Park.	• Protect human rights. • Remove discrimination, harassment and victimisation. • Promote equality of opportunity and ensure no one is left behind. • Promote dignity and respect. • Recognise and embrace people's differences. • Provide physical access for people with disabilities. • Minimise isolation for vulnerable people.
Health	**Community**
• Reduce health inequalities within the community. • Support the public to make healthier and more informed choices regarding their health. • Address pockets of deprivation. • Reduce crime and anti-social behaviour. • Improve road safety.	• Create communities which are active, inclusive, safe, fair, tolerant and cohesive. • Improve economic, social and environmental conditions, especially in deprived areas. • Ensure fair access to, and distribution of, resources. • Create a sense of belonging and wellbeing for all. • Improve access to jobs, education and services. • Make the area more attractive for inward investment. • Improve rail and road journey reliability for business users.

Chapter 3. Key Environmental, Social and Economic Baseline Information

Baseline data provides an overview of wider environmental, social and economic, characteristics of the new LTP area and this is set out in Table 8, along with the evolution of these trends without the new LTP being in place. These datasets are deemed the most relevant to transport planning and most likely to be affected by the LTP's implementation. An explanation of the possible implications/opportunities for the LTP is provided.

The datasets that have been used, provide a comprehensive overview of the wider, non-transport related issues across Staffordshire.

Table 8: Key Baseline Data – Overview, Issues, Implications and Opportunities for LTP, and evolution without the LTP

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Carbon emissions and a changing climate Staffordshire generates the highest transport emissions of all the shire authorities in the Midlands (at 2.4 Mt in 2019). Over half (53%) of the county's total emissions are generated by cars, 15% from vans, and just over 24% from goods vehicles. Less than 8% of the transport emissions are generated by buses and trains. Staffordshire's Strategic Road Network makes a significant contribution to the county's overall carbon emission levels, with 40% of the county's traffic emissions coming from through-trips. The gap between Business as Usual and the pathway to being carbon neutral is shown below.  	There is a significant gap between the existing carbon emission trajectory and the pathway to net zero. Staffordshire is behind the national average in the adoption of low and zero emission vehicles and there are significant barriers to uptake. Even if the county were to experience an accelerated adoption of low and zero emission vehicles, there would still be a sizeable gap in the pathway to meeting National Government's net zero target by 2050. Much of the change required to enable the transition to low emission vehicles will require action at a national level. Putting into law, the ban on the sale of new petrol and diesel, and some hybrid vehicles from 2035, will have a significant impact on reducing tailpipe emissions and will dwarf any initiative adopted at a local level. At present, the typical transport and highway schemes and programmes that are being delivered in Staffordshire are unlikely to have a significant impact on emissions. Delivering larger reductions in carbon emissions over the next two decades, will require significant changes. The LTP should promote the 'right schemes', which minimise the use of embodied carbon, and deliver them in the 'right way'. For example, adopting PAS2080 principles - a standard that focuses on managing carbon emissions across the entire lifecycle of buildings and infrastructure – would support this engender and help reduce costs, foster collaboration and innovation throughout the construction process.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Likely evolution of the baseline: Declining - Staffordshire may experience hotter, drier summers; and warmer, and wetter winters, which will result in greater instances and more severe flooding and damage to highway infrastructure.	The LTP should seek to ensure that scheme delivery maximises the opportunity for increasing green infrastructure, which absorbs tailpipe emissions from the atmosphere. It should also promote the greater use of active and public transport, introduce demand management techniques that make internal combustion engine vehicles less convenient, and encourage greener freight movements. Reducing carbon emissions requires everyone to make changes to their travel patterns. For this to happen, greater effort is needed at sub-regional, national and global levels.
Air Quality Even though air quality has improved since the 1900s, poor air quality, resulting from tailpipe emissions, remains a significant issue for community health and biodiversity. In Staffordshire, poor air quality generally arises in urban areas or at major road interchanges. The county has 8 Air Quality Management Areas (AQMAs) that have been designated due to high levels of NO2 and PM10. **Likely evolution of the baseline:** Improving - At a national level, air quality is improving due to cleaner industrial practices, energy sources and tighter environmental legislation. Internal combustion engine vehicles are also less polluting now due to advances in technology and cleaner fuels. Furthermore, the increasing number of low and zero emission vehicles will slowly, start to make an impact.	The LTP should seek to protect and enhance the county's air quality, considering both its impact on human and biodiversity. It should highlight the importance of partnership working with the county's district and borough councils and National Highways, to help remove AQMAs. Examples of how this could be done include promoting public transport, walking and cycling; introducing demand management measures; and encouraging green freight practices. We have secured Department for Transport funding to kickstart the zero emission bus agenda in Staffordshire. In 2025/26, the following services will get electric buses: • Arriva's service 110 (Tamworth to Birmingham) • Diamond Bus's services 8/9 (Burton, Swadlincote and East Midlands Airport) • Chaserider's 74 (Cannock - Stafford) • Select Bus's service 875 (Cannock to Stafford via Penkridge)

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
	The LTP should seek to introduce more zero emission buses on the busiest bus corridors that also run through AQMAs in Burton, Leek and Newcastle-under-Lyme. In these areas, it should also promote the use of active travel.
Biodiversity, Fauna and Flora & Geodiversity Staffordshire's position in the centre of the country means that one of its unique features, is its wide range and variety of biodiversity, forming a transition between upland and lowland. There are some excellent examples of most wildlife habitats, including woodlands and species-rich meadows and even an area of inland salt marsh. Staffordshire's heathlands, particularly those on Cannock Chase, are nationally significant as are some of the ancient woodlands, such as those in the Churnet Valley. There are just under 900 sites in the county that are protected because they represent isolated fragments of habitats that were once more widespread. Today, Staffordshire has 65 Sites of Special Scientific Interest (SSSIs) and over 800 Local Wildlife Sites (LWSs). SSSIs and LWSs cover about 8% of the county. There are also 40 Local Nature Reserves in the county and over 6,500 hectares of Ancient Woodland (some re-planted). Finally, there is also an extensive network of hedgerows, some dating back hundreds of years, and many veteran and significant hedgerow trees. Staffordshire has 13 sites that are designated at a European level because of their international importance for nature conservation. They comprise:	The LTP should seek to protect and enhance all sites of biodiversity importance, placing a particular emphasis on protecting sites designated for nature conservation and geodiversity purposes. The LTP should seek opportunities to create new habitats and enhance existing ones via LTP delivery. This could include, using locally native species in landscaping plans and creating new road verges. The LTP should include measures that: • Avoid the fragmentation or loss of green infrastructure, which contribute to protecting natural habitats and biodiversity; • Create cohesive habitat networks to help habitats and species adapt to the consequences of climate change; • Enhance green infrastructure through footpaths and cycle lanes. • Divert people away from sensitive sites, such as those designated for wildlife and geological conservation, by using green infrastructure. • Seek to achieve Biodiversity Net Gain, especially where an intervention is taking place on previously utilised land or on road verges.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
• Nine sites that are designated as part of the Natura 2000 network of European sites, representing areas of the highest value for natural habitats and species at a European level. These are: ➢ Cannock Chase, Special Area of Conservation (SAC) ➢ Cannock Extension Canal, SAC ➢ Mottey Meadows, SAC ➢ Pasturefields Salt Marsh, SAC ➢ Peak District Dales (Part), SAC ➢ River Mease (Part), SAC ➢ South Pennine Moors (Part), SAC ➢ West Midlands Mosses (Chartley Moss), SAC ➢ Peak District Moors (Part), Special Protection Area (SPA) SACs support rare, endangered or vulnerable natural habitats and species of plants or animals, whereas SPAs support significant numbers of wild birds and their habitats. Some areas of the county, such as the Peak District National Park, are both SACs and SPAs. • Four Ramsar sites, which are wetland habitats, designated under the inter-governmental Ramsar agreement. These have very similar protection to Natura 2000 sites and in Staffordshire, they include: ➢ Midlands Meres and Mosses phase I (Betley Mere), Ramsar ➢ Midlands Mere and Mosses phase II (Aqualate Mere), Ramsar ➢ Midlands Mere and Mosses phase II (Cop Mere), Ramsar ➢ Midlands Mere and Mosses phase II (Black Firs and Cranberry Bog), Ramsar	

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Road verges can be of high value for biodiversity. In some parts of the county, such as in moorland and heathland areas, road verges can be part of nationally or internationally designated sites. In others, road verges can support remnant habitats running through an otherwise 'green desert'. Staffordshire's extensive network of rivers, canals, meres and mosses, add a further important dimension to the county's wildlife. **Likely evolution of the baseline:** Uncertain - The designated elements of the county's most precious biodiversity is protected from the pressures of development, and this will occur without an LTP in place. The evolution of non-designated sites however, remains at risk.	
Water Resources Transport contributes to water pollution primarily through contaminants washed from road surfaces and parking areas. The main pollutants include, fuel leakages, motor oil, road salting run-off and herbicides used to control grass verges. The cumulative impact of such pollutants can have a significant detrimental impact on water habitats and dependent species. The Environment Agency is responsible for producing River Catchment Management Plans, which are strategic frameworks for protecting and improving the water environment within a river basin. They are legally binding and aim to enhance the ecological status of water bodies, supporting both environmental and socio-economic wellbeing. Six River Catchment Management Plans are relevant in Staffordshire and three of these have no water bodies that are classed as good or high for their ecological status.	The LTP should prevent the pollution of water bodies, during the construction and operation of any intervention. There are many appropriate and emerging measures in road drainage design that could enhance water quality and reduce pollution and flood risk. The LTP should encourage the following of the WFD objectives in the construction and operation of interventions. The LTP should advocate the creation of blue and green infrastructure in the context of the aims of the WFD and how the LTP can realise these, as well as other wider, benefits and objectives.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
For the purposes of taking a holistic approach to management of water resources and to address the pressures on the water environment, under the Water Framework Directive (WFD), the UK has been divided into a series of River Basin Districts (RBD), each has a management plan that has local objectives. The RBDs relevant to Staffordshire are the Humber, the Severn and, some of the Trent. As with most water bodies in England, there are a range of significant water management issues manifested within each RBD. Pollution from towns, cities and transport is highlighted as an issue for 60% of water bodies in the Humber RBD, 52% in the Severn, and 63% in the North West RBD. Groundwater provides a third of drinking water in England. Protecting these sources helps ensure that water is safe to drink. National Government has introduced three levels of Source Protection Zones (SPZs) for groundwater. Staffordshire only has zones 2 and 3, which are not the highest. **Likely evolution of the baseline:** Improving - Surface and ground water quality is predicted to improve although significant challenges remain as noted in the River Basin Management Plans. Increase in traffic levels could increase the risk of pollution impacts reducing water quality.	
Adaptation to a changing climate and flooding Significant proportions of the UK population are at risk from flooding, although the degree of risk varies, with a range of factors affecting potential risk. Staffordshire has experienced at least 13 significant flood events since 2000 - 3 of these events occurring in 2020 alone. In February 2020, during Storm Dennis, 281 properties were flooded, but no doubt the real number is higher.	The LTP should seek to ensure that transport infrastructure minimises any negative effects arising from flooding and avoids, where possible, areas of highest flood risk. Flood risk should be considered in all schemes and the use of SuDS or similar, should be considered if a risk is present. The LTP should ensure that where transport interventions require a land take from the

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Staffordshire has a Local Flood Risk Management Strategy. It seeks to: • Meet the statutory duties outlined in the Flood and Water Management Act 2010; • Work with others to ensure flood risk is not increased through future planning and maximise opportunities to reduce and better manage flood risk; and • Align the Council's functions with national priorities and the Council's Strategic Plan. Flood risk presents a significant planning issue in the development of major infrastructure, both in terms of direct impacts (e.g. building on a flood plain and changing the drainage regime) and indirect impacts (e.g. increased run-off). The increasing risk of extreme weather (e.g. higher/lower temperatures, and increased wind and rain) could lead to: • Direct impacts of flooding on transport infrastructure, now and into the future. • Secondary impacts of flooding such as flood damage to bridges, embankments, surfaces etc.; and passengers feeling discomfort when travelling. **Likely evolution of the baseline:** Declining - Staffordshire is likely to experience hotter, drier summers; warmer, and wetter winters, which will result in greater instances and more severe flooding, and damage to highway infrastructure. These trends are anticipated to continue.	floodplain, there are appropriate compensatory measures put in place. We need to better understand the implications of a changing climate on highway assets and seek to improve their resilience. More frequent and extreme weather events should be considered in any infrastructure design and maintenance regime. The LTP should advocate the creation of blue infrastructure, which can both help to manage localised flood risk and create new habitats.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Land use, soil and contaminated land There is a mix of land uses across Staffordshire, from rural areas of open countryside and farmland, to urbanised areas such as Burton upon Trent. Whilst several soil types are present in Staffordshire, two are prominent. The north-east is characterised by acid loams and clay with a notable representation of peaty upland soils. Acid loams and clay are the most notable soils throughout the rest of Staffordshire and these are interspersed with base rich, flood plain and acid sandy loamy soils. Almost 60% of Staffordshire's agricultural land is classified as Grade 3a (good) and Grade 3b (moderate). Despite this, Staffordshire has a lower than national proportion of the best and most versatile agricultural land. The best quality land is around the southwest of Lichfield with other concentrations in South Staffordshire district and northwest of Stafford. Many areas of land in the UK have been contaminated by human activity such as former factories, storage depots and landfills. By its nature, it is often very difficult to know where land has been contaminated or is presently being contaminated. Given the present and historic levels of industrial, commercial and transportation activity in Staffordshire, it is considered that the number of areas of contaminated land could be considerable. Staffordshire's geology presents opportunities for the working of a range of mineral resources, including aggregate minerals (e.g. sand and gravel).	One of the four strategic LTP objectives is to protect the natural environment. Therefore, the LTP should seek to encourage the county's district and borough councils to make best use of areas that are already or have been developed. These sites need to be prioritised for regeneration. If the use of agricultural land is unavoidable, the LTP must avoid areas of the highest quality and aim to protect soil and agricultural holdings through avoidance of impacts such as contamination or severance. During the construction phase of LTP interventions, care must be taken to avoid contamination of soils.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Likely evolution of the baseline: Declining - it is likely that greenfield sites will experience increasing pressure for development in preference to the complexities of building on previously developed and potentially contaminated sites. This could reduce available high quality soil resources and fail to realise the potential capacity within urban areas. Increased traffic levels may increase the risk of contamination. There is a reduced risk of loss of resources through 'soil sealing' caused by infrastructure schemes.	
Cultural Heritage Cultural heritage represents the physical evidence of the past and of the interaction between humans and the environment. It includes historic buildings and structures, archaeology, historic landscapes and townscapes, and reflects an area's distinct character, providing a sense of identity and belonging for its community. Staffordshire's Historic Environment Record contains information on all the known designated and non-designated heritage assets within the county as well as the Staffordshire Historic Landscape Characterisation (HLC) project. There are around: • 13,000 heritage assets, including 289 Scheduled Ancient Monuments; • over 5,000 Listed Buildings; • 15 Registered Parks and Gardens; • 159 Conservation Areas, and • Registered Battlefields.	The LTP should aim to protect and preserve designated and non-designated heritage assets and their contexts and settings. Transport related schemes need to be sensitively designed to be sympathetic to existing character, and opportunities to improve settings should be examined. Better accessibility to the historic environment should also be something which the new LTP should seek to do. Where schemes would involve physical development that could affect previously undiscovered archaeological assets, the design of the scheme and site selection should be informed by early investigation of the potential archaeological interest of the affected land.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
There are over 400 identified heritage assets including milestones, mileposts and bridges. Designated heritage assets benefit from protection that will continue without the LTP. However, there is a risk of uncoordinated and piecemeal development, resulting in the successive erosion of the quantum and integrity of the county's cultural heritage resource. **Likely evolution of the baseline:** Stable / Declining - Designated heritage assets benefit from protection, and this will continue without the LTP. However, heritage assets, including a number associated with the transport network, do not have a listing and could be vulnerable to deterioration and/or loss. Increased traffic growth can have a negative effect on existing character, particularly in areas already experiencing significant levels of congestion.	
Landscapes and townscapes There are nine National Landscape Character Areas in Staffordshire. They seek to combine natural, historic and aesthetic factors to identify local landscape character. For each landscape character area, there is guidance on the key issues and pressures, and advice on the ways in which land managers and developers can seek to address those issues and minimise adverse impacts and maximise the scope for beneficial effects and enhancements. Around 9% of Staffordshire is wooded and this equates to approximately 65,007 hectares. This is more than Leicestershire (5%) and Warwickshire (7%). There are a range of pressures on the landscape, many of which are altering them in a direction that could be regarded as	The LTP should preserve and enhance the character of the county's landscapes and townscapes by ensuring its integrity. One of the documents that will sit beneath the LTP is the Staffordshire Residential Highway Design Code, which will guide developers through their project's life cycle. It will state that all new developments, must be designed to respect the 'hierarchy of users' and facilitate all modes of transport. It also refers to designs reflecting the local vernacular architecture when possible. The LTP should refer to ensuring that transport interventions avoid sensitive areas and respect particular landscape or townscape settings, with consideration made of design quality in both an urban and rural setting. It also states that opportunities for landscape enhancement should be explored, such as through

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
inconsistent with the traditional landscape vernacular of the area. These changes reflect the fact that the landscape of the UK has changed over many years due to a range of issues such as urbanisation and changes to agriculture. In 2007 Campaign for Rural England (CPRE), published Intrusion Maps, showing the extent to which rural landscapes are 'intruded on' from urban development, noise (primarily traffic noise), and other sources of visual and auditory intrusion. They concluded that about half of the county, mainly urban in nature, in west Staffordshire had been disturbed. To preserve the best landscapes, a series of National Parks and an Area of Outstanding Natural Beauty (AONB) were designated. Staffordshire has the Cannock Chase AONB which covers 2.6% of the county. Almost 8% of the county is within the Peak District National Park, which also spans Derbyshire. There are 157 conservation areas in Staffordshire. As well as buildings and bridges, other items of street furniture, owned or maintained by the County Council, fall within these areas. The removal or alteration of these assets could affect the character or appearance of the conservation area. Many of the county's district and borough councils have undertaken townscape or urban character studies as part of the work to inform their Local Plans. In several cases, this work has been captured in supplementary guidance, which provides advice on the standards that should be observed in the design of new development within specific character areas.	sympathetic design and planting. The LTP should pro-actively seek to further the purposes of the county's national landscapes.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Likely evolution of the baseline: Stable – Many of Staffordshire's most exceptional landscape and townscapes, benefit from protection through designations that will continue in the absence of the LTP. In general terms, modern design / landscaping principles and interested parties' expectations are promoting a renewed focus on the quality of scheme design and this trend is likely to continue, though risks from increased urbanisation and infrastructure development remain. Failure to tackle the growth in road traffic might detract from the existing character of landscapes and townscapes.	
Waste Management and Resource Efficiency The transport sector can impact on a wide range of resources such as energy and construction materials, and it is also a generator of waste. For example, if building materials are not efficiently used, more waste is produced. This waste then needs to be transported for disposal, which generates more traffic. **Likely evolution of the baseline:** Uncertain – Facilitating continued traffic growth will contribute towards a trend of increased waste and resource use. While new approaches are helping to shift towards greater efficiencies, underlying waste generation volumes may well increase.	The LTP has four strategic objectives, one of which is to create safe, well maintained local roads and footways, which encourage active travel and attractive public realms, generating a sense of place and healthy communities. The LTP should seek to ensure that all assets are maximised in that during scheme design, every opportunity is taken to re-use, repair, and re-purpose assets, thereby maximising its whole life carbon and reducing waste. This implies a circular economy, whereby the value of resources used in a scheme is maximised and the environmental impact, minimised. In relation to maintenance activities this may see assets, such as guard rails and signage, not being automatically replaced if they are damaged or past their service life. Instead, each asset will be assessed with regards to its relevance.
Noise, Tranquillity and Light Noise pollution from transport can negatively impact tranquillity by disrupting the natural sounds and visual landscapes that contribute to feelings of calm and wellbeing. National Government has	The LTP should seek to mitigate the impact of transport on tranquility by focusing on reducing vehicle volume, promoting greener transport, and minimising noise pollution. This can be achieved by encouraging public transport, cycling, and walking, as

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
published strategic noise map data that gives a snapshot of the estimated noise from road and rail sources across England in 2022. Potential issues identified in Staffordshire where road noise exceeds 68bd, include sections of the M6, A5, A38, M54, A34, A50, A500, A449, A5195 (Burntwood), A51, A460, and the A5127. In addition, arterial roads in many of the county's major town centres have sections of road that exceed 70db. Tranquillity is valued for its positive impact on quality of life, mental health, and the rural economy. Whilst the dataset is old, produced in 2007, CPRE produced tranquillity maps, giving a 'national' understanding of the concept of tranquillity. It found that there were few truly tranquil areas within the county. Light pollution is a generic term referring to artificial light that shines where it is neither wanted nor needed. It can impact on people's experience of the countryside. CPRE hosts an interactive map, depicting the light pollution and dark skies in 2016. It found that levels of light pollution in Staffordshire were worse in built-up areas. **Likely evolution of the baseline:** Stable / Uncertain – Staffordshire's land use patterns are likely to remain the same. However, technology is advancing, meaning that modern LED lighting is easier to control, limiting the amount of light spilling into homes and gardens. Likewise, traffic noise should reduce with the uptake of low and zero emission vehicles.	well as implementing traffic management strategies and investing in quieter transport technologies.
Economy, Employment and Skills Staffordshire's strengths are:	The LTP should improve transport links within and between employment (commercial and industrial) centres and improve connectivity to allow businesses to access wider markets. Improved connectivity should be achieved by greener and more affordable

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
• It has a diverse local economy, with a strong mix of production, construction and service-based industries. • It has seen growth in engineering and advanced manufacturing, construction, and logistics, with high demand for skilled workers. • It has world-renowned expertise, businesses and facilities in green technologies, life sciences and automotive sectors. • It has a vibrant visitor economy, which offers flexible work to a broad range of people. • It has seen a significant improvement in adult skills levels over recent years. • Strong local universities with nationally leading specialisms. • High performing local colleges, helping to increase more young people and adults to achieve higher technical skills. • Low levels of unemployment. Staffordshire's challenges are: • The economy is still recovering from COVID and is now facing further global challenges (e.g. US tariffs, the war in Ukraine, the energy and cost of living crisis). • Businesses need to play a role in limiting their emissions to achieve National Governments net zero target by 2050. • Traditional businesses in key growth sectors are still to adopt new digital technologies. • Automation in Staffordshire's key industries (e.g. manufacturing and logistics) reduces the need for people in lower-skilled jobs. • An ageing workforce. • Increase in adult skills to support higher value growth and raise productivity levels, particularly at Level 4+ (equivalent to degree or above).	modes of transport and business practices, and by improved digital connectivity. Reliability and resilience of transport links should be improved to further enhance the productivity and competitiveness of the Staffordshire economy. The LTP should seek to reduce road congestion (therefore reducing the time to commute and transport goods). Universities and other educational and training establishments are an important asset within Staffordshire. The LTP should seek to limit the rising costs associated with travel to assist in enhancing accessibility to education, training, cultural and leisure activities and employment opportunities within the region. The LTP should consider that high quality green and blue infrastructure can play an important role in enhancing the visual appeal of transport infrastructure and help to encourage new inward investment, as well as help to retain high skilled labour.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
• Increasing higher apprenticeships and T-Levels in priority sectors. • Low school performance is holding back progression of many young people to higher skills levels. • Unemployment hotspots across the county need greater employment and skills support. • Young people and other disadvantaged groups continue to be disproportionately impacted by unemployment. **Likely evolution of the baseline:** Uncertain – While Staffordshire will likely remain a premier location for business due to its central location and excellent transport links, it is not immune to wider macro-economic uncertainties.	
Patterns of land use and transport There is a mix of land use types across Staffordshire e.g. heavily urbanised, suburban, urban fringe and rural locations. Staffordshire has no one dominant town, instead it has 11 settlements that act is key locations for employment, education and key facilities. These are: • Burntwood • Burton • Butt Lane, Kidsgrove and Talke • Cannock • Lichfield • Newcastle • Rugeley • Stafford • Stone • Tamworth • Uttoxeter	Whilst the new LTP will seek to improve Staffordshire's transport system to increase accessibility and meet other objectives, it also recognises that accessibility can also be improved through place making (i.e. bringing activities and opportunities closer to people through land use planning, and digital connectivity). The LTP should seek to facilitate the transition to low emission vehicles amongst residents and businesses by focusing on off-road charging locations.

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
These towns contain 59% of the county's population and it is where most of the inward investment is seen and where development pressures are greatest. Staffordshire is at the heart of a multi-modal national transport network. A well-functioning transport network in Staffordshire is critical to unlocking greater connectivity between the Midlands and the North of England. The county's strategic location, with access to major national routes such as the M6, A50 and the West Coast Main Line (WCML), emphasises its importance for UK freight, industry and employment, bringing local economic benefits, alongside extra through traffic. The strategic transport network is particularly vital for north to east and north to south movements, between northern Staffordshire and Derbyshire, and southern Staffordshire and the West Midlands conurbation. According to Census 2021, journey to work data for Staffordshire, an average of 66% of residents work within their district/city boundary. This ranges from 56% in South Staffordshire, up to 75% in Stafford Borough. Overall self-containment for Staffordshire and Stoke-on-Trent, including internal movements between districts, boroughs and Stoke-on-Trent, is 84%. This indicates that we have strong functional economic areas. When looking within the region, there is strong movement between areas, particularly Stoke-on-Trent, Newcastle-under-Lyme and Staffordshire Moorlands. Although we are relatively self-contained, we do have strong movements in and out of the area to the east and south, including:	

<table>
<tr><th>Environmental, Social and Economic Baseline Information</th><th>Implications / Opportunities for the LTP</th></tr>
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East Staffordshire with Derbyshire;
Lichfield, Cannock, Tamworth and South Staffordshire District/Boroughs with the West Midlands conurbation; and
Tamworth with Warwickshire.

Car ownership is high in Staffordshire, at 84% per household, which is well above the national average, at 67%. Partly because of this, and its rural nature, the county is not particularly well served by public transport.

Staffordshire is behind the national average in terms of adoption of low and zero emission vehicles and the number of charging devices per 100,000 as shown below.

<table>
<tr><th>Area</th><th>EV Charging Devices per 100,000</th></tr>
<tr><td>Staffordshire (Countywide)</td><td>67.13</td></tr>
<tr><td>West Midlands</td><td>107.7</td></tr>
<tr><td>United Kingdom</td><td>108.5</td></tr>
</table>

Likely evolution of the baseline: Stable / Uncertain – There is uncertainty how Staffordshire's traffic patterns will change over time. Vehicle journeys may increase as people see low and zero emission vehicles as 'harmless', Conversely, increasing levels of homeworking and e-commerce may help reduce commuting patterns.
</td><td></td></tr>
<tr><td>Population and Health
Staffordshire's population is approximately 876,100. Its population density is around 334 people per km^2, which is lower than the average for England.</td><td>Health levels could be improved through secondary effects of LTP policies, including those that seek to reduce air and noise pollution.</td></tr>
</table>

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Staffordshire's population is aging. Similar to the national picture, growth in the older population is greater than the working age population, resulting in fewer working age people to support the young and the old. By 2031, the elderly population (85+) will increase by 42% - a rise of 10,200 people. These trends represent an increasing demand on public services. The general health of the county's population is largely in line with the England average, with 81.7% of residents reporting good or very good health. However, healthy life expectancy is slightly lower than the national average, obesity is higher, along with people living with long-term health conditions. In 2019 there were 440 deaths in Staffordshire (5.1%), attributed to poor air quality, The NHS recommends that adults aim for at least 150 minutes of moderate-intensity exercise per week, or 75 minutes of vigorous-intensity exercise. A significant portion of adults are physically inactive, with around 1 in 4 adults not meeting recommended physical activity levels. This inactivity is linked to higher rates of obesity and chronic diseases. The table below highlights the latest data regarding the proportion of road collisions, involving the most vulnerable and high-risk road users who are disproportionately involved in road collisions.	Improving access to greenspaces (including urban fringe), the walking and cycling network, and the public realm, should increase physical activity levels, as well as create a general sense of wellbeing. Collaborative working as part of the Staffordshire Safer Roads Partnership must continue. The Partnership aims to achieve a long-term, sustained reduction in road traffic collisions in Staffordshire and Stoke-on-Trent through joint work by partners, including Staffordshire County Council, Stoke-on-Trent City Council, Staffordshire Commissioner's Office, Staffordshire Police, Staffordshire Fire & Rescue Service and National Highways. The LTP should describe an approach to road safety management where lives and health are not compromised by our need to travel. This would involve taking a holistic approach, considering the safe design of roads, safe vehicles, safe speeds, and safe road users.

Road User	Proportionality	Involved in:
Pedestrians	22 times higher risk of KSI than car occupants	16% of KSIs
Motorcyclists	1% of traffic	24% of KSIs

Environmental, Social and Economic Baseline Information			Implications / Opportunities for the LTP
Pedal cyclists	1% of traffic	10% of KSIs	
Young drivers (17-24 yrs)	6.8% of license holders	21% of fatal collisions	
Mature drivers (65+)	increasing risk with ageing population	11% of KSIs	
HGV/LGV/Van	22% of traffic	27% of fatal collisions	
High risk contributory factor	Alcohol, drugs, speed, mobile, red light running, no seatbelt	39% of fatal collisions	
Likely evolution of the baseline: Stable / Uncertain – Population profiles are likely to continue to get older and this will likely result in changes to overall health outcomes, with an increased number of long-term conditions. At the national level, air quality is generally improving as industrial practices, energy sources and tighter environmental legislation have contributed to reductions in pollutants. Improved vehicle technology and cleaner fuels and the increasing number of ZEVs is making an impact. Improvements in vehicle technology, known as Advanced Driver-Assistance Systems (ADAS), means that cars are increasingly using various technologies to enhance driving safety and convenience. These are only likely to further improve during the period of the LTP.			
Demographics, Ethnicity and Deprivation Staffordshire's population is ageing. Those aged 65-79 increased by 22.5% between 2011 and 2021, and those aged 80+ increased by 27.4% between the same period.			The LTP should aim for all residents to have the same level of opportunity to access transport and related services that come with this. However, in practice, this is unrealistic due to the rural nature of the county and the size of sustained investment required. The

Environmental, Social and Economic Baseline Information	Implications / Opportunities for the LTP
Staffordshire's population is predominantly White, with 93.6% of residents identifying as such. The remaining 6.4% of the population comprises various minority ethnic groups, including Asian, Asian British, and Asian Welsh. In the national context, there are few areas in Staffordshire which experience high levels of multiple deprivation. Just over 8,000 people live within an area classified in the 10% most deprived areas nationally, with a further 60,000+ people living within the next most deprived area (10%-20% most deprived areas). **Likely evolution of the baseline:** It is also unclear how economic uncertainties will be reflected in deprivation levels across the county. It is anticipated that Staffordshire will remain similar and continue to have pockets of deprivation, which could get worse without investment.	LTP has taken a pragmatic approach and will introduce interventions that are time, people and place specific. The way people travel depends on their circumstances, characteristics and choices. Characteristics, such as age, gender, disability, ethnicity and socio-economic status, has a big effect on travel choices. People can also be placed into different audience segments, depending on their attitudes to change travel behaviour. The LTP should implement interventions with the least mobile in mind. Designing schemes that encourage active travel will help to improve the health of the population and reduce inequalities, which are especially felt by people from lower socio-economic groups, such as the elderly, disabled and people from ethnic minority backgrounds. The LTP must support the Equality Act 2010, protecting the rights of individuals and improving equality of opportunity for all.
Community Safety Staffordshire has a lower crime rate than the UK average, with 77 reported crimes per 1,000 people, compared to 84 reported crimes. Violence and sexual offences are the most reported crimes in Staffordshire. **Likely evolution of the baseline:** Stable / Uncertain – Crime is closely linked to economic outcomes, and it is unclear how economic uncertainty, relating to current global issues, will be reflected in crime statistics. It is likely that Staffordshire will continue to have lower reported crime rates than the UK average.	The LTP should consider 'Security by Design' interventions that engender a sense of safety, and reduce crime and fear of crime, through indirect measures. Measures could include the incorporation of design features such as additional lighting, CCTV, and active street frontages. The LTP should also consider interventions that discourage anti-social behaviour and opportunistic crime. Examples might include more open and green spaces in the public realm and improved access to leisure facilities.

The table above provides a description of key baseline data of wider environmental, social and economic factors, together with the potential implications/opportunities of such issues on the LTP. The analysis of baseline data has influenced the development of the IIA Framework (see below) in terms of formulating its objectives and assessment aid questions.

Chapter 4. IIA Framework

The IIA framework comprises 14 objectives that have been developed to assess the LTP against and these are listed in Table 9. They were developed in the light of guidance, relevant issues deemed significant to Staffordshire, the engagement that took place during 2024, and input from the recently elected County Councillors. In addition to the objectives, Table 9 also sets out:

- A series of questions that the LTP needs to consider. These questions will help guide the assessment process and whilst they are not perfect (e.g. there is a certain degree of cross-over in the questions), they provide a useful starting point and structure to get the process underway. The questions have been updated, following the comments received on the Scoping Report.
- Several indicators to support the assessment process and to inform future monitoring.

Please note that there is no inherent prioritisation of the IIA objectives and all have equal importance.

Table 9: IIA Objectives and Framework Questions

No.	IIA Objective	Decision-Making Questions Will the LTP…	Potential Indicator/s	Possible Target/s	IIA Topic
1.	Improve air quality.	• Reduce harmful emissions from road transport? • Improve air quality within AQMAs? • Promote the use of lower emission vehicles? • Reduce traffic growth and congestion, and promote public and active travel choices? • Use green infrastructure in scheme design to facilitate increased absorption and dissipation of pollution?	Number of AQMAs associated with pollution arising from the local road network.	Reduce the number of AQMAs.	Air
2.	Reduce tailpipe emissions from road transport.	• Encourage people and businesses to travel less? • Promote the use of public and active forms of transport? • Promote the use of lower emission vehicles? • Increase opportunities to sequestrate pollutants in the atmosphere by incorporating green infrastructure into schemes? • Encourage greater use of digital technology?	Level of transport related CO_2 emissions.	Net zero emissions from road transport.	Climatic Factors
3.	Reduce the dependency on cars, especially for shorter journeys.	• Promote public and active travel choices that are as convenient, if not more convenient to car travel? • Encourage new development in places where public and active travel choices are a real alternative to car travel? • Promote the use of digital connectivity? • Promote workplace travel measures that support greener travel options and digital connectivity? • Promote school-based travel measures that support public and active travel options?	Mode share of journeys to town centres. Congestion levels. Mode share of journeys to work.	Increase the mode share of journeys to work by shared or active modes. Increase bus patronage levels.	Population - Transport and Access
4.	Reduce risk of flooding and increase resilience of the road and	• Minimise the risk of flooding through design and implementation of drainage solutions that mimic natural drainage patterns to manage stormwater	Flooding incidents impacting on	Reduce the number of days that the primary route	Climatic Factors

	transport network to extreme weather.	runoff, reduce flood risk, and improve water quality? • Minimise the risk of flooding by avoiding areas of flood risk / flood plain when possible? • Design schemes that are flood resilient over their lifetime, taking account of the effects of a changing climate, and do not increase the flood risk elsewhere? • Protect ground and surface water quality in line with Water Framework Directive (WFD) requirements? • Safeguard the availability of water resources (surface and groundwater)? • Protect and enhance green infrastructure, contributing to improvements in the quality of surface water run-off? • Ensure that where transport interventions require land from a floodplain, there are appropriate compensatory measures put in place? • Promote measures which can both help to manage localised flood risk and create new habitats? • Promote the minimisation of the use of impermeable hard surfacing and promote the use of SuDS and upstream storage (Natural Flood Management - NFM)?	the local road network.	network is affected by flooding.	

5.	Facilitate future development while not impacting on greenfield sites and high-quality soils.	• Promote the re-use of previously developed land? • Avoid the permanent loss of the most highly productive agricultural soils? • Ensure the protection of soil resources and reduce soil quality degradation during transport-related infrastructure construction activities? • Seek to remediate contaminated land?	Land taken to expand the highway network.	Levels of recycling. Reduce the area of new land obtained to accommodate highway improvements.	Soil / Landscape
6.	Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net Gain.	• Avoid loss, damage or disturbance to valued habitats, including the fragmentation and severance of species migration and commuter routes? • Protect the integrity and further the purposes of designated sites (e.g. Cannock Chase National Landscape and Peak District National Park), including enhancements and furthering their purpose? • Promote new habitat creation or restoration and linkages with existing habitats? • Safeguard the availability of water resources (surface and groundwater)? • Protect and enhance green infrastructure, contributing to improvements in the quality of surface water run-off? • Meet objectives of the Water Framework Directive (WFD) and River Basin Management Plans? • Take on board the findings and recommendations of the HRA?	Number of highway maintenance agreements that actively promote and support habitat creation.	Enhance habitats on road verges.	Biodiversity
7.	Reduce nitrate deposition on Cannock Chase SAC.	• Reduce emissions of pollutants from transport? • Promote the use of public and active travel when accessing visitor attractions?	Levels of nitrate deposition	Reduce nitrate deposition	Biodiversity

		• Further the statutory purposes of Cannock Chase National Landscape? • Support the delivery of the Cannock Chase Management Plan 2025 - 2030?	on Cannock Chase SAC.	on Cannock Chase SAC.	
8.	Conserve and enhance heritage assets and the wider historic environment.	• Contribute to creating attractive, high-quality, vibrant places where people want to live, work and visit? • Avoid loss, damage or disturbance to the integrity of designated heritage assets and their settings? • Avoid loss, damage or disturbance to non-designated heritage assets and their settings? • Reduce and/or avoid the impacts of highway operations (e.g. noise, pollutants and visual intrusion) on heritage assets and their settings? • Support the maintenance and improvement of heritage assets within the local road network? • Promote transport schemes which tackle traffic congestion in historic locations?	Number of improvements made to heritage assets within the local road network. Number of schemes that will impact on known and yet undiscovered heritage assets.	Improvements to heritage assets within the highway e.g. mile-markers. Improvements to the public realm.	Cultural Heritage
9.	Promote the prudent use of finite natural resources when undertaking road improvements and maintenance and reduce the level of waste generated.	• Reduce the consumption of primary, natural resources through encouraging the use of recycled and / or secondary materials to reduce embodied carbon in transport-related schemes? • Encourage resource efficiency during the whole project life cycle of transport-related schemes? • Promote the use of local suppliers that use sustainably sourced and locally produced materials within transport-related schemes? • Promote good waste management practices?	Embodied carbon in highway maintenance and improvement schemes. Levels of recycling.	Increase the amount of highways assets that are recycled.	Material Assets
10.	Promote strong economic growth.	• Support improved availability and accessibility to good quality education, training and job opportunities.	Congestion levels.	Increase the mode share of journeys to	Population – Economy

		• Contribute to establishing an effective transport network that increases investment? • Reduce congestion and improve journey time reliability on the highways and rail network? • Promote workplace travel measures that encourage the use of public and active travel options and remote working?	Mode share of journeys to work.	work by shared or active modes.	
11.	Reduce levels of inactivity and obesity across the population.	• Promote health and wellbeing, including of vulnerable groups and of the wider population? • Ensure active travel modes are prioritised, and measures put in place to enable more people to walk, wheel and cycle? • Improve access to blue and green infrastructure?	Obesity levels. Mode share of journeys to work and school.	Reduce the number of people, including children, who are classed as obese.	Human Health and Equalities
12.	Promote greater equality of opportunity for all.	• Align with the requirements of the Equality Act 2010? • Provide initiatives that are accessible for all, including people on low income? • Provide initiatives that improve perceptions of transport? • Encourage people to access the countryside and urban fringe areas for quiet enjoyment? • Protect and enhance green infrastructure, a network of linked, multifunctional green spaces?	Access to a frequent bus service. Condition of the PRoW network.	Increase the percentage of the population within a 500m distance of an hourly or better bus service.	Equalities
13.	Improve road safety and reduce the number of road traffic collisions, particularly those involving high-risk road users.	• Promote a holistic approach to road safety, considering the safe design of roads, safe vehicles, safe speeds, and safe road users? • Ensure safe routes for walking and cycling? • Ensure initiatives aim to reduce traffic speeds in residential areas and promote safer driving? • Promote road safety awareness for all, with particular emphasis on vulnerable and high-risk road users?	Number and severity of road traffic collisions.	Reduce the number and severity of road traffic collisions.	Human Health – Accidents and Safety

14.	Address fear of crime and antisocial behaviour on the transport networks.	• Promote interventions that engender a sense of safety and reduce crime and fear of crime through adopting 'Security by Design' principles. • Contribute to improvements to levels of natural surveillance in the public realm and on active travel routes to discourage incidences of anti-social behaviour and opportunistic crime? • Promote improvements to personal safety and security on public transport?	Levels of crime and anti-social behaviour recorded on the bus network.	Reduce levels of crime and anti-social behaviour recorded on the bus network.	Human Health – Crime and Safety

Chapter 5. Assessment of Alternative

The SEA requirements mean that we must identify, describe and evaluate the likely significant effects of implementing the LTP, compared to implementing reasonable alternatives. It was concluded that there was only one reasonable alternative, which was not implementing the new LTP and carrying on with the existing, outdated LTP. The two scenarios are outlined below.

Alternative 1: Business As Usual

It is anticipated that the Business as Usual approach will continue with current transport trends in terms of:

- Large number of trips per person.
- Long average trip lengths.
- Low levels of people walking, wheeling and cycling.
- Low number of people travelling on public transport.
- Slow increase in the uptake of low and zero emission vehicles.
- New infrastructure, facilitating the expeditious movement of motor vehicles.

Alternative 2: The New LTP

It is anticipated that implementing the new LTP will create the following transport trends:

- Fewer trips per person on average.
- Shorter average trip lengths.
- More people walking, wheeling and cycling.
- More people using public and shared transport.
- Faster uptake in low emission vehicles.
- Less traffic congestion and smoother traffic flows.
- New infrastructure, facilitating the expeditious movement of people, using public and active travel modes.

Assessment of Alternatives

Table 11 contains a description and assessment of the alternative approaches in relation to the IIA objectives and the consideration of their likely significant effects. The results use the scale set out in Table 10.

Table 10: Scale being adopted in the Assessment of Alternatives

Scale	Description
Large Positive	A significantly positive outcome is anticipated
Positive	Minor positive outcome is anticipated
Neutral	This alternative is anticipated to have the same outcome
Negative	Minor adverse outcome is anticipated
Large Negative	A significantly adverse outcome is anticipated

Table 11: Assessment of Alternatives Against IIA Objectives

No.	IIA Objective	BAU	New LTP	Commentary
1.	Improve air quality.	Neutral	Positive	**Alternative 1 – Business As Usual** At a national level, air quality is generally improving as industrial practices, energy sources and tighter environmental legislation have contributed to reductions in pollutants. However, poor air quality remains in local hotspots, particularly on busy roads in urban areas. Staffordshire has 8 areas that have been identified as having pollution levels close to, or in excess of, national targets and have been declared as AQMAs. We will continue to work with district and borough councils and National Highways to address these. Local interventions will continue to be in addition to measures proposed at a national level. For example, National Government has adopted a legally binding target to reduce significant emissions of NOx and four other damaging air pollutants. Alongside this, the ban on the sale of new petrol and diesel vehicles and the increasing uptake of low and zero emission vehicles, will help improve air quality and reduce tailpipe emissions. Congestion, slow moving traffic and unreliable journey times, will continue to result in higher levels of vehicle emissions in localised areas. This option may also result in new infrastructure, such as increased road space, with no clear focus on new approaches such as car clubs etc. There will be continued pushes to promote active and public transport, but these may continue to have ongoing problems, such as financial viability. **Alternative 2 – The New LTP** Implementation of the new LTP will result in investment into non-car alternatives to travel, increased use of digital services; and new development being in locations that make public transport the most convenient. These, combined with investment in active travel measures
2.	Reduce tailpipe emissions from road transport.			
3.	Reduce the dependency on cars, especially for shorter journeys.			

				(e.g. new, extended and improved routes; supporting facilities; increased awareness and safety; hire schemes, etc.) will help reduce tailpipe emissions and improve air quality. There will also be schemes looking to explore the creation of car clubs and an increased focus on public transport such as improving, integrating and simplifying services, improving reliability, simplifying fares and expanding provision. Greater digital connectivity through the rollout of fibre broadband and 5G mobile coverage and supporting development and raising awareness of online opportunities and services. This will reduce vehicle kilometres as people will be able to replace trips with online activity, thereby reducing tailpipe emissions and improving air quality.
4.	Reduce risk of flooding and increase resilience of the road and transport network to extreme weather.	Neutral	Positive	**Alternative 1 – Business As Usual** The water environment is improving, though some challenges remain as noted in the River Basin Management Plans. Transport is recognised as a source of water pollution via highway runoff, and this would be anticipated to continue. Highway runoff effects both the water environment and soils. Highway infrastructure and other developments can increase the risk of flooding (due to increased levels of impermeability) and can themselves be vulnerable to flooding and other extreme weather conditions. This option may result in new infrastructure having to be accommodated on land that was previously not part of the highway extent, and which could have had some environmental value. **Alternative 2 – The New LTP** Having carefully reviewed the baseline information and prepared the IIA Framework, it became apparent that more needed to be done to put environmental, economic and social issues at the core of the new LTP.
5.	Facilitate future development while not impacting on greenfield sites and high-quality soils.			

				Therefore, the LTP contains delivery principles, which seek to ensure the LTP minimises any negative effects on environmental, economic and social factors and maximises any positive impacts. Schemes within the LTP will be developed to take account of future changes, such as the predicted temperature rises and increased flooding. Schemes will use good quality, infrastructure-light, resilient designs that will support environmental net gain. The LTP seeks to reduce the level of trips undertaken in the county, thereby reducing the potential for pollution from transport (oil spillages, highway runoff, and detritus from tyre degradation) to negatively affect soils (and the water environment). The emphasis on walking and cycling, along with the much-reduced focus on accommodating private motor vehicles, will reduce the loss of agricultural land / soil resources.
6.	Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net Gain.	Neutral	Positive	**Alternative 1 – Business As Usual** Staffordshire has a wide range of sites designated for nature conservation, including several sites designated for their importance at a European level. There are constant pressures on these sites, from development, visitor numbers, climate change, and invasive alien species, etc. However, there are existing mechanisms to protect designated sites (e.g. Habitat Regulations Assessment), as well as local level initiatives (e.g. Cannock Chase SAC Partnership), which would continue in the absence of a new LTP. It is noted that most elements of biodiversity are not designated. For these areas, transport has the potential to impact on habitats, whether it is through direct land-take for infrastructure (which may contribute to fragmentation); construction and operational disturbance (noise, vibration, light pollution, etc.); and emissions / contamination (air, water and soil). Roadkill is another direct effect regarding how transport can affect species.
7.	Reduce nitrate deposition on Cannock Chase SAC.			

				It is also worth noting that transport interventions can also provide opportunities for increased biodiversity. **Alternative 2 – The New LTP** As part of the recently inserted delivery principles, measures that could negatively affect sites will be assessed. Whilst this requirement exists for Alternative 1, the new LTP provides a shift in focus (away from cars) to active, public and shared travel modes. In so doing, it is likely that there will be reduced disturbance to designated sites and habitats, along with reduced incidences of animal strike / roadkill. Improvements in air quality due to the accelerated uptake of low and zero emission vehicles may help to reduce pollution deposition on designated sites, such as Cannock Chase SAC. The new LTP contains a commitment to demonstrate biodiversity net gain for all schemes that need planning permission.
8.	Conserve and enhance heritage assets and the wider historic environment.	Neutral	Positive	**Alternative 1 – Business As Usual** There are a wide range of historic and cultural heritage features located across Staffordshire. Like everywhere else in the country, there is an ongoing risk of uncoordinated and piecemeal development, resulting in successive erosion of the number and quality of the county's cultural heritage assets. Many of Staffordshire's most exceptional landscape and townscapes benefit from protection through designations such as listed building status. These will persist in the absence of the new LTP. There is a renewed focus on the quality of scheme design, and this trend is likely to continue, though risks from increased urbanisation and infrastructure development remain.

				Alternative 2 – The New LTP The new LTP now contains several delivery principles, which have been developed to put environmental, economic and social factors at the core of the LTP. Having these will ensure that heritage assets are protected and where possible enhanced, designing schemes to respect the context and setting of historic buildings, structures and landscapes. For example, the new LTP seeks to avoid harm to the statutory purposes of the National Landscapes and further their purposes. The new LTP attempts to rebalance streets in favour of people and providing more attractive built and natural environments, with less emphasis on cars, along with greater emphasis on pedestrianisation, increased green spaces and avoidance of sensitive areas. It is anticipated that this will help to improve the tranquility and historic town centres of Staffordshire. New highway infrastructure (i.e. roads) often includes facilitating other developments such as housing, though it is anticipated that overall, during the new LTP period, the focus will be on smaller-scale interventions, such as walking and cycling routes. New roads will only be considered in exceptional circumstances, such as connecting new developments or tackling congestion hotspots.
9.	Promote the prudent use of finite natural resources when undertaking road improvements and maintenance and reduce the level of waste generated.	Negative	Positive	**Alternative 1 – Business As Usual** New highway techniques are creating greater efficiencies in resource use; and adherence to the nine 'Rs'[3] will help even without the new LTP. Energy usage within transport is falling and there will continue to be a steady increase in the uptake of low and zero emission vehicles, which will reduce the use of hydrocarbons. **Alternative 2 – The New LTP**

[3] The '9Rs' are refuse, reduce, reuse, repair, refurbish, remanufacture, repurpose, recycle, recover energy.

				The new LTP has adopted an infrastructure light approach as well as greater emphasis on digital connectivity. This will result in less consumption of natural resources. A greater focus on the nine 'Rs' and a 'circular economy' will see a reduction in the use of materials in design, increase use of recycled and renewable materials, and embed good waste management practices. The emphasis on walking and cycling, as well as the push to grow the uptake of low and zero emission vehicles will reduce the use of natural resources such as hydrocarbons.
10.	Promote strong economic growth.	Positive	Large Positive	**Alternative 1 – Business As Usual** Staffordshire holds a unique strategic position in the centre of the country, with nationally significant roads running through it. It is likely that Staffordshire will remain an attractive location for business. The workforce is benefitting from current schemes to increase digital connectivity as it is helping to reduce commuter transport and enabling increasing levels of home working and e-commerce. It is recognised that issues remain on the transport network, such as public transport provision (e.g. coverage, frequency, integration and reliability) and congested/slow moving traffic that can impact economic efficiency. Staffordshire also has pockets of deprivation. **Alternative 2 – The New LTP** The new LTP has a clear focus on supporting stong economic growth and recognises the many economic strengths that Staffordshire has. It articulates the importance of place-making and making our town centres, places where people want to live and visit.

				The new LTP recognises the importance of improving access and connectivity to jobs and skills, along with the challenges currently facing the transport network, which impacts on the county's economy and needs to be addressed (e.g. congestion and journey time reliability). The LTP argues that a greater number and wider range of digital services will remove the need for some people to travel. This will help to improve social mobility by overcoming barriers to accessing opportunities, including an individual's physical mobility levels and the affordability of travel.
11.	Reduce levels of inactivity and obesity across the population.	Negative	Large Positive	**Alternative 1 – Business As Usual** Staffordshire's population is ageing and there are several health indicators where Staffordshire is, generally, worse than the national average (e.g. obesity). There are also variations in health outcomes in different parts of the county (often linked to deprivation) and it is recognised that high levels of traffic and congestion can also have negative effects on people's health. Similarly, noise can impact on people's mental wellbeing. Overall active lifestyles are below the national average in Staffordshire. The new LTP seeks to increase levels of walking and cycling, as well as ease of access to leisure / recreational facilities. The county has a large Public Rights of Way network, but residents walk and cycle to work less than the national or regional averages. Crime rates are lower in Staffordshire than the England average. Regarding road safety, Staffordshire has been successful in reducing the number and severity of casualties. Road safety, speeding, and anti-social driving remain key concerns for residents. **Alternative 2 – The New LTP**
12.	Promote greater equality of opportunity for all.			
13.	Improve road safety and reduce the number of road traffic collisions, particularly those involving high-risk road users.			
14.	Address fear of crime and antisocial behaviour on the transport networks.			

The new LTP should provide well connected communities that improves social mobility, ensuring that no one is left behind. This will be done by improving the provision of public and shared transport, including making it more affordable, making information (including the fare structure) simpler to understand and readily available. The vehicles themselves will be physically access, helping to reduce barriers to travel, particularly for vulnerable or disadvantaged groups.

The new LTP should contain clear linkages to improving health outcomes, such as reducing tailpipe emissions and promoting active travel. This will benefit everyone, especially vulnerable groups such as children, the elderly, those with existing health conditions, and those on low incomes (who tend to live in areas more heavily impacted by road traffic).

Opportunities for leisure (and subsequent improvements to mental wellbeing) will be provided through the LTP seeking to improve access to green spaces and the countryside. Wellbeing will be further boosted by decreasing the impact of traffic on local communities, providing a cleaner, quieter local environment with improved quality of life. This will make local streets more attractive places for residents to live, work, play, socialise and move within their neighbourhood, supporting thriving communities.

It is hoped that through the improvements delivered as part of the new LTP, there will be a renewed 'sense of place' and 'community pride'. By working with the borough and district councils, we hope there will be an improvement in the provision of local services.

Community safety plays an important role in the new LTP. Despite Staffordshire's low crime rate, residents fear crime and dislike anti-social behaviour. The LTP suggests measures that will support vulnerable and lone travellers, including lighting, natural surveillance and CCTV.

The new LTP should seek to improve road safety in communities, using various measures, including rebalancing local streets to favour walking and cycling rather than cars and goods vehicles. Road safety measures will of course include all road users. However, particular attention will be given to high-risk groups, such as new drivers, motorcyclists and cyclists.

Conclusion on Alternatives

Looking at Table 11, implementing the new LTP would provide more favourable outcomes across the range of IIA objectives. The new LTP will be particularly beneficial in comparison to the Business As Usual approach in that it offers a clear steer to improve health and equalities, reducing tailpipe emissions, and improving community cohesion and the public realm.

Chapter 6. Compatibility between LTP Objective and IIA Objectives

To help ensure that the LTP's vision and strategic objectives are as closely aligned with the IIA objectives as possible, a test of their compatibility was undertaken. This helped to identify potential synergies and inconsistencies, as well as assisting in refining the elements of the LTP. Table 12 shows the scoring scheme that was used to summarise the compatibility between the two sets of objectives.

Table 12: Compatibility Scouring Scheme

Scale	Description
+	Broadly Compatible
X	Potential Conflict
?	No sufficient detail provided to ascertain compatibility
NR	Not Relevant / No Relationship

The results of the assessment are set out in Table 13.

Table 13: Initial Compatibility Assessment Results

	IIA Objectives													
	Improve air quality.	Reduce tailpipe emissions from road transport.	Reduce the dependency on cars, especially for short journeys.	Reduce the risk of flooding and increase the resilience of the road and transport network to extreme weather.	Facilitate future development while not impacting on greenfield sites and high-quality soils.	Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net	Reduce nitrate deposition on Cannock Chase SAC.	Conserve and enhance heritage assets and the wider historic environment.	Promote the prudent use of finite natural resources when undertaking road improvements and maintenance, and reduce the level of waste generated.	Promote strong economic growth.	Reduce levels of inactivity and obesity across the population.	Promote greater equality of opportunity for all.	Improve road safety and reduce the number of road traffic collisions, particularly those involving high-risk road users	Address fear of crime and antisocial behaviour on the transport network.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
LTP Vision	+	+	+	+	?	+	+	+	+	+	+	+	+	+
LTP Strategic Objectives														
1. Facilitate economic growth ...	+	x	x	+	?	NR	NR	NR	x	+	NR	+	NR	NR
2. Improve air quality...	+	+	+	+	NR	+	+	+	NR	x	+	NR	+	NR
3. Create safe, well maintained local roads ...	+	+	+	NR	?	?	+	?	+	x	+	NR	+	+
4. Improve physical and virtual connectivity ...	+	+	+	NR	NR	?	+	?	+	x	NR	+	+	NR

The assessment indicated a good degree of compatibility in all key elements of the LTP. However, there is some potential conflict in facilitating strong economic growth. In this regard, there is a difference between the LTP objective and the IIA objective, where the latter seeks strong economic growth and the former seeks to promote strong economic growth by providing a greener, fairer, more efficient, and integrated transport system.

Due to the nature of the LTP, attention needs to be given to where a scheme is needed to facilitate economic growth to ensure that it:

- Reduces tailpipe emissions from road transport.
- Reduces the dependency on cars, especially for shorter journeys.
- Promotes the prudent use of finite natural resources when undertaking highway improvements and maintenance, and reduce the level of waste generated.

It is likely, and to be expected, that the nature of the LTP and its objectives, will potentially lead to engineering and construction works, and these have the potential for both negative and positive outcomes. In general, areas of uncertainty of compatibility relate for the most part to the environmental objectives, including:

- Facilitate future development while not impacting on greenfield sites and high-quality soils.
- Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net Gain.
- Reduce nitrate deposition on Cannock Chase SAC.
- Conserve and enhance heritage assets and the wider historic environment.

The role of the LTP in contributing to these objectives will depend upon the policy framework and approach to mitigation that the LTP sets for implementation. Table 14 sets out the recommendations that have been made to ensure a fuller coverage of IIA objectives across the LTP vision and objectives.

Table 14: Compatibility recommendations and how they were addressed

LTP element	Recommendation	How was this recommendation addressed?
Vision	Provide greater, yet succinct, clarity on how the LTP interacts across economic, environmental and societal factors.	The original, working vision has been replaced with, "An integrated and efficient transport system that delivers economic prosperity, creates healthy and safe communities, and improves the environment." This demonstrates that economic, environmental and societal factors are at the LTP's core. It also proactive and ambition.
1. Facilitate economic growth …	Greater clarity is needed on the role environmental and societal factors play in facilitating economic growth.	Delivery principles have been created, thereby making our intention explicit regarding the need to protect and enhance natural resources and promote health, equal opportunities and community cohesion.
2. Improve air quality…	No recommendations made.	Not applicable.
3. Create safe, well maintained local roads, footways and cycleways	Make greater reference to the need to reduce resource use and minimise waste, as well as how it can facilitate better health outcomes.	Delivery principles have been created, thereby making our intentions explicit regarding the need to reduce resource use and minimise waste, as well as how it can facilitate better health outcomes. The concept of the 9Rs has been expanded and more detail has been provided regarding how the transport network can improve health and equality outcomes.
4. Improve physical and virtual connectivity …	Commentary is needed that clearly states that the new LTP is seeking to provide opportunities for people to choose not to travel.	Delivery principles have been created, thereby making our intentions explicit regarding the option not to travel as internet services improve.

The results of the compatibility assessment indicate that the LTP's vision and strategic objectives provide a good foundation to ensure that opportunities to maximise economic, environmental and societal benefits within the LTP are taken.

In addressing the recommendations, five delivery principles have been established to ensure that schemes delivered through the LTP have a sound business case, add value, contribute to social good, and protect the natural environment. The principles are:

1. Enable People to Make the Right Travel Choice
2. Create Vibrant, Prosperous and Attractive Places
3. Create Healthy, Safe, and Inclusive Communities
4. Enhance the Natural Environment
5. Adopt an Infrastructure-light Approach

The LTP makes clear linkages between the delivery principles and the LTP's theme objectives.

Chapter 7. Assessment of LTP Theme Objectives

The LTP contains 18 theme objectives; four relate to public and shared transport and they are:

1. Ensure multi-modal connectivity for all, to, from and within rail stations.
2. Improve rail passenger and freight services.
3. Deliver high-quality bus services that are reliable, accessible and easy to use.
4. Provide other public travel options where frequent bus services are not available.

Four relate to the road network and they are:

1. Improve the safety and efficiency of the Strategic Road Network to deliver a positive impact on the local road network.
2. Improve the safety, efficiency and journey time reliability of the local road network.
3. Deliver a whole-life asset management approach to improve the condition of the local road network.
4. Support the efficient movement of freight whilst minimising the adverse impacts it can have on local roads and communities.

Three relate to inclusive and active communities and they are:

1. Ensure the road network provides facilities that make walking, wheeling and cycling convenient and safe for all.
2. Increase the use of the Public Rights of Way network.
3. Deliver promotional activities that complement our active travel infrastructure.

Three relate to land use and transport planning and they are:

1. Integrate land-use planning and transport infrastructure, and ensure development is located where there are, or will be, travel choices.
2. Ensure decisions made on the location and design of new development sites, provide high quality connectivity by active and public transport.
3. Provide high quality active and public transport connectivity when reshaping and revitalising our town centres.

Two relate to digital connectivity and they are:

1. Improve digital connectivity to give people the option not to travel and improve the way the road and transport networks operate.

2. Improve data sharing with partners to enhance the efficient and safe operation of the local road network.

Two relate to the support that will be provided to those residents and businesses that want to switch to low emission vehicles, and these are:

1. Facilitate the transition to low emission vehicles amongst residents and businesses by focusing on off-road charging locations.
2. Support the bus industry by enabling investment in low emission buses and charging infrastructure.

In assessing the theme objectives, consideration has been given to the detail and clarity provided in respect of how their implementation will support the achievement of the LTP's vision and strategic objectives.

A qualitative seven-point scale has been used to assess the significance of effects of the theme objectives and proposals in the LTP as shown in Table 15.

Table 15: Criteria for Assessing Significance of Effects

Assessment Scale	Assessment Category	Significance of Effect
+++	Strong beneficial	Significant
++	Moderate beneficial	
+	Slight beneficial	No significant
0	Neutral or no obvious effect	
-	Slight adverse	
--	Moderate adverse	Significant
---	Strong adverse	
?	Effect uncertain	
+/-	Combination of slight beneficial and adverse effects	Not significant
++ -- Combination of moderate	Beneficial and adverse effects	Significant

Red indicates a serious issue or problem that requires immediate attention and a recovery plan; amber suggests a cautionary approach, such as a potential risk or a need for closer monitoring, but not yet a critical issue; and green is where things are likely to have positive impacts. Where there is no effect, or slight beneficial or slight adverse effect, this has been deemed to have no significant impact.

Table 16 sets out the assessment of the LTP's theme objectives and IIA objectives.

Table 16: Assessment of the LTP's Theme Objectives

LTP Theme Objectives	IIA Objectives													
	Improve air quality.	Reduce tailpipe emissions from road transport.	Reduce the dependency on cars, especially for short journeys.	Reduce the risk of flooding and increase the resilience of the road and transport network to extreme weather.	Facilitate future development while not impacting on greenfield sites and high-quality soils.	Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net Gain.	Reduce nitrate deposition on Cannock Chase SAC.	Conserve and enhance heritage assets and the wider historic environment.	Promote the prudent use of finite natural resources when undertaking road improvements and maintenance and reduce the level of waste generated.	Promote strong economic growth.	Reduce levels of inactivity and obesity across the population.	Promote greater equality of opportunity for all.	Improve road safety and reduce the number of road traffic collisions, particularly those involving high-risk road users	Address fear of crime and antisocial behaviour on the transport network.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1: Ensure multi-modal connectivity for all, to, from and within rail stations.	++	++	+++	0	0	++	++	0	0	++	+	++	0	++
2: Improve rail passenger and freight services.	++	+++	+++	0	0	++	++	0	0	+++	+	++	0	0
3: Deliver high-quality bus services that are reliable, accessible and easy to use.	+++	+++	+++	0	0	++	++	0	0	+++	+	++	+	++
4: Provide other public travel options where	+++	+++	+++	0	0	++	++	0	0	+++	+	++	+	+

frequent bus services are not available.														
5: Improve the safety and efficiency of the Strategic Road Network to deliver a positive impact on the local road network.	+++	+++	+++	+	+	0	0	+	0	+++	0	+	++	0
6: Improve the safety, efficiency and journey time reliability of the local road network.	++	++	++	0	0	0	0	0	0	+++	0	0	+++	0
7: Deliver a whole-life asset management approach to improve the condition of the local road network.	0	+++	++	0	0	+	0	+	+++	++	0	0	0	0
8: Support the efficient movement of freight whilst minimising the adverse impacts it can have on local roads and communities.	+++	+++	+	0	0	++	++	+	0	+++	0	0	+	0
9: Ensure the road network provides facilities that make walking, wheeling and cycling convenient and safe for all.	+++	+++	+++	0	0	++	++	+	0	+	+++	++	--	0
10: Increase the use of the Public Rights of Way network.	+++	+++	+++	0	-	++	++	0	0	+	+++	+	-	0

11: Deliver promotional activities that complement our active travel infrastructure.	+++	+++	+++	0	0	++	++	0	0	+	+++	++	-	0
12: Integrate land-use planning and transport infrastructure, and ensure development is located where there are, or will be, travel choices.	+++	+++	+++	+	++	+	+	++	0	+++	+++	++	+	+
13: Ensure decisions made on the location and design of new development sites, provide high quality connectivity by active and public transport.	+++	+++	+++	+	++	+	+	++	0	+++	+++	++	+	+
14: Provide high quality active and public transport connectivity when reshaping and revitalising our town centres.	+++	+++	+++	+	++	+	+	++	0	+++	+++	++	+	+
15: Improve digital connectivity to give people the option not to travel and improve the way the road and transport networks operate.	+++	+++	+++	++	0	+	+	+	0	+++	-	++	--	+++	0
16: Improve data sharing with partners to enhance the efficient	0	0	+	++	0	0	0	+	+	++	+	+	+	+

and safe operation of the local road network.														
17. Facilitate the transition to low emission vehicles amongst residents and businesses by focusing on off-road charging locations.	+++	+++	+ +	- -	0	0	++	++	+	0	+	--	++	+ / -	0
18: Support the bus industry by enabling investment in low emission buses and charging infrastructure.	+++	+++	++		0	0	+	+	+	0	++	+	++	++	+

The assessment indicated that the LTP performs strongly in several areas. Of particular note, are the areas of addressing air pollution and reducing tailpipe emissions. There is also strong performance in relation to the economy, health, wellbeing, equalities and safety. However, issues that may arise and the changes made to the LTP to address these are set out in Table 17.

Table 17: Potential Issues arising from the Theme Objectives

Theme Objective	Potential Conflict	Changes to the LTP
8. Ensure the road network provides facilities that make walking, wheeling and cycling convenient and safe for all.	Pedestrian and cyclists are amongst Staffordshire's most vulnerable road users in terms of their risk of being involved in a road traffic collision. There is a danger that encouraging more people to use active travel, may increase the numbers involved in collisions.	Reference to be made to meeting LTN/120 design standards, thereby providing segregation where possible. The LTP must emphasise the need to rebalance local streets to favour walking and cycling rather than cars and goods vehicles. Introduce the Road User Hierarchy.
15: Improve data sharing with partners to enhance the efficient and safe operation of the local road network.	Encouraging more people to use digital means of access may lead to people feeling excluded. This might be because they are unable to access or afford a suitable device or sufficient data. Conversely, if people are required to use digital services this can lead to feelings of isolation as they have limited access to social connections. This can negatively impact mental wellbeing, social integration, and overall participation in society.	Digital services are not a one-size-fits-all and this must be reflected in the LTP. It also needs to acknowledge that there are challenges that need to be overcome and the 'digital by default' approach will not work for everyone.
17. Facilitate the transition to low emission vehicles amongst residents and businesses by focusing on off-road charging locations.	The potential conflict of increasing the number of low and zero emission vehicles is that people may feel that it allows them to not change their travel habits and even travel more as they believe that they are not harming the environment. In so doing, they may also become less active.	Careful monitoring of travel habits is required to ensure that the move to low and zero emission vehicles does not increase the number and distance of journeys undertaken. Awareness is still needed to show that low emission vehicles are not the total answer as they still contribute to congestion release particulate matter in the form of brake and tyre dust.

In undertaking this assessment, several measures were also identified that will enhance or support the IIA objectives and these are listed in Table 18.

Table 18: Potential Measures to be included in the LTP which support the IIA Objectives

IIA No.	IIA Objective	Changes to the LTP and/or Recommendations
2	Reduce tailpipe emissions from road transport.	Reference should be made of the potential to utilise green spaces within the highway for the planting of species that could help to sequester traffic emissions. Opportunities should be sought regarding the potential for designing public transport interchanges to include low energy generation (e.g. solar panels etc.) and green infrastructure (e.g. planted roofs). Investigate the potential for conditions to be applied to promote the sourcing of green electricity when making proposals for new electric vehicle charging infrastructure.
4	Reduce risk of flooding and increase resilience of the transport network to extreme weather events.	Any new road / highway improvement scheme should use SuDS where possible. Opportunities to increase permeable areas in scheme design should be explored. Work with partners and statutory bodies to promote greater flood resilience to the transport network, ensuring SuDS and Natural Flood Management are incorporated to reduce flood risk where possible.
5	Facilitate future development while not impacting on greenfield sites and high-quality soils.	Scheme locations and extents should avoid areas of best soils and opportunities taken to remediate contamination.
6	Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net Gain.	During scheme design, consideration should be given to the inclusion of green infrastructure and other measures that could add to biodiversity. Work with partners and statutory bodies to acquire greater opportunities for green infrastructure enhancements and the delivery of green infrastructure-based, natural solutions to aid mitigation requirements. Maximise opportunities for the transport network to contribute to the successful delivery of other plans and new initiatives, such as Staffordshire's Nature Recovery Strategy. Ensure only herbicides that are not harmful to species and their habitats are used.

7	Reduce nitrate deposition on Cannock Chase SAC.	Work with local partners (e.g. Cannock Chase SAC Partnership and Living Landscape Partnership) and statutory bodies to deliver green infrastructure enhancements and the delivery of green infrastructure-based natural solutions to aid mitigation requirements. Maximise opportunities for the transport network to contribute to the successful delivery of other plans and new initiatives, such as the SAC's Management Plan and the Staffordshire Visitor Economy Action Plan.
8	Conserve and enhance heritage assets and the wider historic environment, including buildings, structures, landscapes, townscapes and archaeological remains and their settings.	Ensure careful consideration of the design, location and extent of all schemes is undertaken, considering its potential impact and areas of enhancement. Transport has numerous impacts on the special qualities and natural beauty of landscapes, including landscape and scenic quality, wildness and tranquillity, natural and cultural heritage, as well as public understanding and enjoyment. Work with partners and statutory bodies to minimise the impact of transport on heritage assets and protect and enhance the quality of the environment, including buildings, structures, landscapes, townscapes and archaeological remains, etc. This includes working with National Landscape organisations to further the purposes for the designation. Improve physical access and/or interpretation, understanding and appreciation of Staffordshire's heritage assets as part of transport development where appropriate.
9	Promote the prudent use of finite natural resources when undertaking highway improvements and maintenance and reduce the level of waste generated.	Schemes should be designed with the delivery principles in mind, and greater consideration given to the 9Rs.
11	Reduce high levels of inactivity and obesity across the population.	Ensure consideration is given to enhancing people's ability to take part in physical activity, whether that be via foot and cycle ways, or better access to leisure facilities. Whilst it is recognised that the cost benefit is not so favourable, greater consideration should be given to enhancing Public Rights of Way and on and off-road leisure routes. These have wider health and economic benefits. Work with partners (e.g. Better Health Staffordshire) and statutory bodies (e.g. NHS) to maximise opportunities to increase levels of physical activity in managing, maintaining and improving the transport network.
14	Whilst crime levels are low in the county, fear of crime and antisocial	Consider 'Security by Design' when introducing new schemes or making improvements to existing assets. This will be particularly important at public transport interchanges

	behaviour on the transport network is a barrier to use.	and in the wider public realm. Reference should be placed on the security of lone and vulnerable travellers.

As mentioned above, a series of delivery principles have been established for the LTP and these clearly set how environmental, economic and social issues are at the core of the LTP. These principles will be applied to all schemes from their initial design, through to construction, maintenance and operation.

Where possible, we will specify designs to avoid or mitigate any harmful and enhance any positive effects. Where the LTP performs well in terms of economic, social and environmental factors, is with regards to improving air quality; recognising the whole-life impact of schemes; protecting and enhancing the natural environment, landscapes and townscapes; and conserving natural resources.

There is a need to work closely with partner organisations, including the county's district and borough councils to ensure that consideration of economic, social and environmental factors is made at the earliest possible stage. Full consideration will also be given to the requirements of Local Plans and required statutory processes as necessary.

We believe that the IIA provides reassurance that there are mechanisms and commitments in place to ensure that full consideration is made of wider economic, social and environmental factors.

Chapter 8. Mitigation

The National Policy Planning Framework for England uses a hierarchy of avoidance, mitigation, and compensation to manage the environmental impacts of development. In the hierarchy, avoidance involves preventing harm by ensuring development is located in the lowest-risk areas through a sequential test. If harm is unavoidable, mitigation seeks to reduce the impact through measures that manage risks on-site and avoid increasing them elsewhere. Compensation is considered only as a last resort when significant adverse impacts cannot be avoided or mitigated.

In terms of mitigation, there are a range of measures that could be applied to help reduce or offset any potential significant adverse effects, arising from the implementation of the LTP. While priority is given to mitigating the adverse effects, measures that enhance the positive effects must also be considered.

The types of mitigation that could be applied to LTP delivery, include:

- Refining policies to improve the likelihood of positive effects and to minimise adverse effects;
- Technical measures (such as setting guidelines) to be applied during the implementation phase;
- Identifying issues to be addressed in project assessment for certain types of schemes;
- Proposals for changing other plans and programmes; and
- Contingency arrangements for dealing with possible adverse effects.

Table 19 sets out the approaches that have been used through the development of the LTP to mitigate potential adverse effects.

Table 19: Adopted Mitigation Approaches

Mitigation Approach	Example
Refining policies	Assessment was made of the LTP and recommendations were made in relation to clarifying and bolstering wider aspects of economic, social and environmental factors. The main outcome of this was the creation of the five delivery principles, which put wider environmental, economic and social factors at the core of the new LTP.
Technical measures	The creation of five delivery principles.
Identifying issues to be addressed in project assessment	In addition to this IIA, certain LTP schemes are likely to require further assessment, including but not limited to a HIA, EqIA, CIA and an EIA. Where these are undertaken, they will follow current guidance and best practice.
Proposals for changing other	There is a clear commitment in the LTP to work with partners (including the district and borough councils) to deliver wider environmental, economic and social factors in the county.

plans and programmes	The LTP will add weight to the aims and aspirations of other plans and as such, it has a cumulative beneficial effect. Most notably, in the preparation of new Local Plans.
Contingency arrangements	The IIA and LTP include monitoring regimes. These seek to track progress to deliver the LTP's overall vision, including specific indicators to track any significant social, environmental and economic effects. This will allow identification, at an early stage, of unforeseen adverse effects and allow appropriate remedial action to be undertaken.

In the final step of the hierarchy when significant adverse impacts are unavoidable and cannot be fully mitigated, compensation is considered to offset the residual harm. In the context of loss to the green belt for example, this might involve creating or improving green spaces elsewhere to compensate for development.

Chapter 9. Cumulative, Synergistic and Indirect Effects

The SEA Directive sets out a requirement to consider cumulative, synergistic and indirect effects of implementation of a plan or programme. It also requires that consideration is given to secondary and indirect effects, which occur but are not a direct result of the plan, but have occurred further away from the original effect.

Cumulative effects arise where several proposals or elements individually may, or may not, have significant effect, but in combination have a significant effect. Whereas synergistic effects are when two or more effects act together, creating an effect greater than the sum of the effects if they took effect on their own.

Many of the IIA objectives have the potential to create cumulative effects. Table 20 identifies these. These cumulative effects have considered the earlier recommendations to improve the performance of the LTP.

We have undertaken an assessment, taking account of the likely cumulative impact of the LTP, identifying issues and the potential effects that might arise as a result of a particular policy, and balancing these against those schemes that could prove beneficial or provide mitigation to arrive at an overall cumulative assessment.

Table 20: In Plan Cumulative Effects

IIA No.	IIA Objective	Cumulative Effect	Significance of Effect
1	Improve air quality.	The LTP should have an overall cumulative beneficial effect on air quality. This will be an outcome from policies to promote low emission vehicles, increase levels of walking, cycling, and bus use, and increase the use of digital services. Further benefits will be experienced through more efficient network and traffic management.	Assuming all elements of LTP (e.g. roll out of the LEVI project) will be progressed, low to moderate beneficial effects will be seen in the medium to long term.
2	Reduce tailpipe emissions from road transport.		
3	Reduce the dependency on cars, especially for short journeys.		
4	Reduce the risk of flooding and increase the resilience of the road and transport.	Overall, it is considered that the cumulative effect will be slight adverse. Some aspects of the LTP, such as development of infrastructure, may lead to cumulative adverse effects. For example, development of the highway network is likely to result in an increase in the county's	Overall, slight adverse effect over the medium to long term as schemes / measures are implemented.

		impermeable area and contribute to increased flood risk by increasing runoff.	
5	Facilitate future development while not impacting on greenfield sites and high-quality soils.	The LTP will likely have a range of cumulative beneficial and adverse effects on soil. For example, the development of the highway network provides an opportunity for positive effects, relating to contaminated or brownfield sites (though it also increases impermeable area). The adverse effects may come the potential risk of contamination from run-off and the potential loss of soil / agricultural land.	Anticipated slight beneficial and adverse effects over the medium to long term as schemes / measures are implemented. The adverse effects will be minimised by close working with local planning authorities to encourage new development on brown or grey field sites.
6	Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net Gain.	The LTP might have a mix of cumulative positive and negative effects on biodiversity. For example, increasing green spaces in scheme design will increase biodiversity; and the drive to improve air quality will also provide further benefits to biodiversity, including indirectly within sites designated for nature conservation, through reducing pollution deposition. In terms of the negative effects on biodiversity, aspects such as highway expansion or improvements may result in adverse effects. It should be noted that these types of schemes will also offer some opportunities for enhancement and ultimately achieve biodiversity net gain.	While effects in the short term are likely to be slight adverse, ultimately, if net biodiversity gain is achieved, there will be long term benefits.
7	Reduce nitrate deposition on Cannock Chase SAC.		
8	Conserve and enhance heritage assets and the wider historic environment.	The LTP might have a mix of adverse and beneficial effects on landscapes and townscapes. Policies such as planning for people and place, and reducing congestion will have a beneficial effect. Any adverse effects might come through the development, such as new transport hubs or a freight consolidation centre.	Anticipated slight beneficial and adverse effects over the medium to long term as schemes / measures are implemented.
9	Promote the prudent use of finite natural resources when undertaking road improvements		

	and maintenance and reduce the level of waste generated.		
10	Promote strong economic growth.	The LTP will act as a key driver to economic growth. Most policy areas will result in increased opportunities for people to access jobs, education and key services; and for businesses to access customers, suppliers and new markets. LTP policies seek to ease traffic flows, making journey times more reliable. It may also make business more efficient and adopt new ways to connect with consumers e.g. online, through e-cargo bikes, and delivery hubs. A more efficient road network should make Staffordshire a more attractive location for inward investment.	Anticipated major beneficial effects over the medium to long term as schemes are implemented.
11	Reduce levels of inactivity and obesity across the population.	It is hoped that the LTP will act to promote health and wellbeing and equalities through providing greater access to services and employment opportunities, as well as greater opportunities for active travel. There is also a clear emphasis on reducing vehicle numbers and vehicle speeds. Improvements to air quality and a reduction in noise levels will also benefit health. Some parts of the population though may not be able to take full advantage e.g. the elderly in terms of active travel. There also remains uncertainty around affordability of public transport and the cost of digital connectivity may be an issue for some groups.	
12	Promote greater equality of opportunity for all.		

13	Improve road safety and reduce the number of road traffic collisions, particularly those involving high-risk road users.	The new LTP should have beneficial effects on safety, crime and anti-social behaviour on the road and transport networks. Policies that promote public, shared and active travel will create a sense that streets are people oriented and not just there to accommodate car movements. This rebalance will increase a sense of community cohesion, a sense of place and a feeling that our public realm is safer, respected and valued.	Anticipated moderate beneficial effects over the medium to long term as schemes / measures are implemented.
14	Address fear of crime and antisocial behaviour on the transport network.		

Consideration has also been given to the cumulative effects of other plans being implemented alongside the LTP. Some of the main ones are outlined in Table 21.

Table 21: Cumulative effects with other plans

Plan	Potential for Cumulative effects with LTP
Staffordshire Health and Wellbeing Strategy	The new LTP sets out a range of policies which have a clear focus on improving air quality and increasing levels of walking and cycling. These will help enable Staffordshire's residents to lead healthy lives and have additional benefits in terms of mental health and wellbeing. The LTP also seeks to reduce travel habits, especially in relation to car use. An indirect consequence of this, will be that, by placing greater emphasis on pedestrians and engendering a 'sense of place', will further help improve the health of the population. It is anticipated that cumulative effects between the new LTP and the Staffordshire Health and Wellbeing Strategy will be moderate beneficial.
Staffordshire Communities Strategy	The new LTP contains policies that promote public, shared and active transport, creating a sense that streets are for people and not just there to accommodate car movements. This rebalance will increase the sense of community cohesion, a sense of place and a feeling that our public realm is safer, respected and valued. The new LTP will act to promote health and wellbeing and equalities through providing greater access to services and employment opportunities, as well as greater opportunities for active travel. It is anticipated that cumulative effects between the new LTP and the Staffordshire Communities Strategy will be moderate beneficial.

Staffordshire Economic Strategy	The new LTP will act as a key driver to economic growth. Most policy areas will result in increased opportunities for people to access jobs, education and key services; and for businesses to access customers, suppliers and new markets. LTP policies seek to ease traffic flows, making journey times more reliable. It may also make business more efficient and adopt new ways to connect with consumers e.g. online, through e-cargo bikes, and delivery hubs. A more efficient road network should make Staffordshire a more attractive location for inward investment. It is anticipated that cumulative effects between the new LTP and the Staffordshire Economic Strategy will be moderate beneficial.
Adopted and emerging Local Plans	The new LTP states that we are keen to work collaboratively with the district and borough councils, stakeholders, partner organisations, local groups, businesses, communities and residents, to deliver its vision. It also states that working collaboratively with a range of stakeholders will enable us to progress measures that impact on land use planning and digital connectivity, as well as transport. In so doing, we can develop a coordinated approach to improving air quality, supporting economic growth, connecting communities and providing excellent quality of life for all. It is anticipated that cumulative effects between the new LTP and the county's Local Plans could be significantly beneficial.

Chapter 10. Cross-Boundary Effects

The lack of detail with respect to future transport schemes has restricted consideration of potential cross boundary effects. The measures, relating to air quality and water quality are those which most obviously have implications for areas outside of Staffordshire.

Chapter 11. Monitoring

Monitoring the significant environmental effects of the LTP's implementation, and taking any necessary remedial action, is a requirement of the SEA process. It is also a requirement that this IIA report (Environmental Report) describes the proposed monitoring regime. A monitoring framework has been finalised in the Post Adoption Statement, which takes account of the responses from consultees and any changes in the baseline situation.

Table 22 below lists the indicators that were suggested prior to the publication of the final LTP. These could be used to monitor the LTP's progress in relation to wider environmental, economic and social factors.

Table 22: Indicative Monitoring Programme

IIA Obj. No.	IIA Objective	Indicators	Targets
1	Improve air quality.	Number of AQMAs	Reduce
		Deaths attributed to air pollution	
2	Reduce tailpipe emissions from road transport.	CO2 emissions from road transport	Reduce
		Distance travelled by car or van	
		Annualised index of cycling trips	Increase
		Number of bus passengers	
3	Reduce the dependency on cars, especially for shorter journeys.	Distance travelled by car or van	Reduce
4	Reduce risk of flooding and increase resilience of the road and transport network to extreme weather.	Proportion of drainage provision for transport schemes (new or improvements) incorporating best practice SuDS or upstream storage NFM	Increase
		Area of high flood risk/floodplain constructed upon by transport schemes	Reduce
5	Facilitate future development while not impacting on greenfield sites and high-quality soils.	Area of brownfield sites used for highways schemes	Increase
6	Protect and enhance protected habitats, sites, species, valuable ecological networks; promote ecosystem resilience and functionality; and deliver Biodiversity Net Gain.	Area of green infrastructure (greenways, etc.)	Increase
		Net gain in biodiversity (using the Defra metric) due to transport schemes	Increase (10%)
7	Reduce nitrate deposition on Cannock Chase SAC.	Nitrate Deposition on Cannock Chase SAC	Reduce

8	Conserve and enhance heritage assets and the wider historic environment.	Town centre Travel Plans	Increase
		Number of improvements made to heritage assets within the local road network	Increase
9	Promote the prudent use of finite natural resources when undertaking highway improvements and maintenance and reduce the level of waste generated.	Recycled highway assets	Increase
		Embodied carbon	Reduce
10	Promote strong economic growth.	Journey time reliability	Increase
11	Reduce levels of inactivity and obesity across the population.	Annualised index of cycling trips	Increase
12	Promote greater equality of opportunity for all.	Access to keys services	Increase
13	Improve road safety and reduce the number of road traffic collisions, particularly those involving high-risk road users.	Number and severity of road traffic collisions	Reduce
14	Address fear of crime and antisocial behaviour on the transport networks.	Levels of reports crime on the public transport network	Reduce

Chapter 12. Conclusion

During the development of the LTP, colleagues preparing the IIA have been in frequent dialogue with the team writing the LTP. This has helped put wider issues at the heart of the LTP process from the outset. These issues have been strengthened further with the inclusion of the five delivery principles.

The LTP has been revised following the IIA process and now, in comparison to continuing under the BAU approach, provides a more favourable approach across the range of IIA objectives. The LTP performs strongly in several areas of wider environmental, economic and social factors. Of note are the areas of addressing air pollution and reducing carbon emissions. There is also strong performance in relation to economy, health, wellbeing, equalities and safety. Overall, it is considered that the LTP represents a well-balanced approach in terms of wider performance across the full range of potential key effects and should help ensure that the LTP's vision is delivered.