Somerset Council

LOCAL TRANSPORT PLAN 4

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1 INTRODUCTION

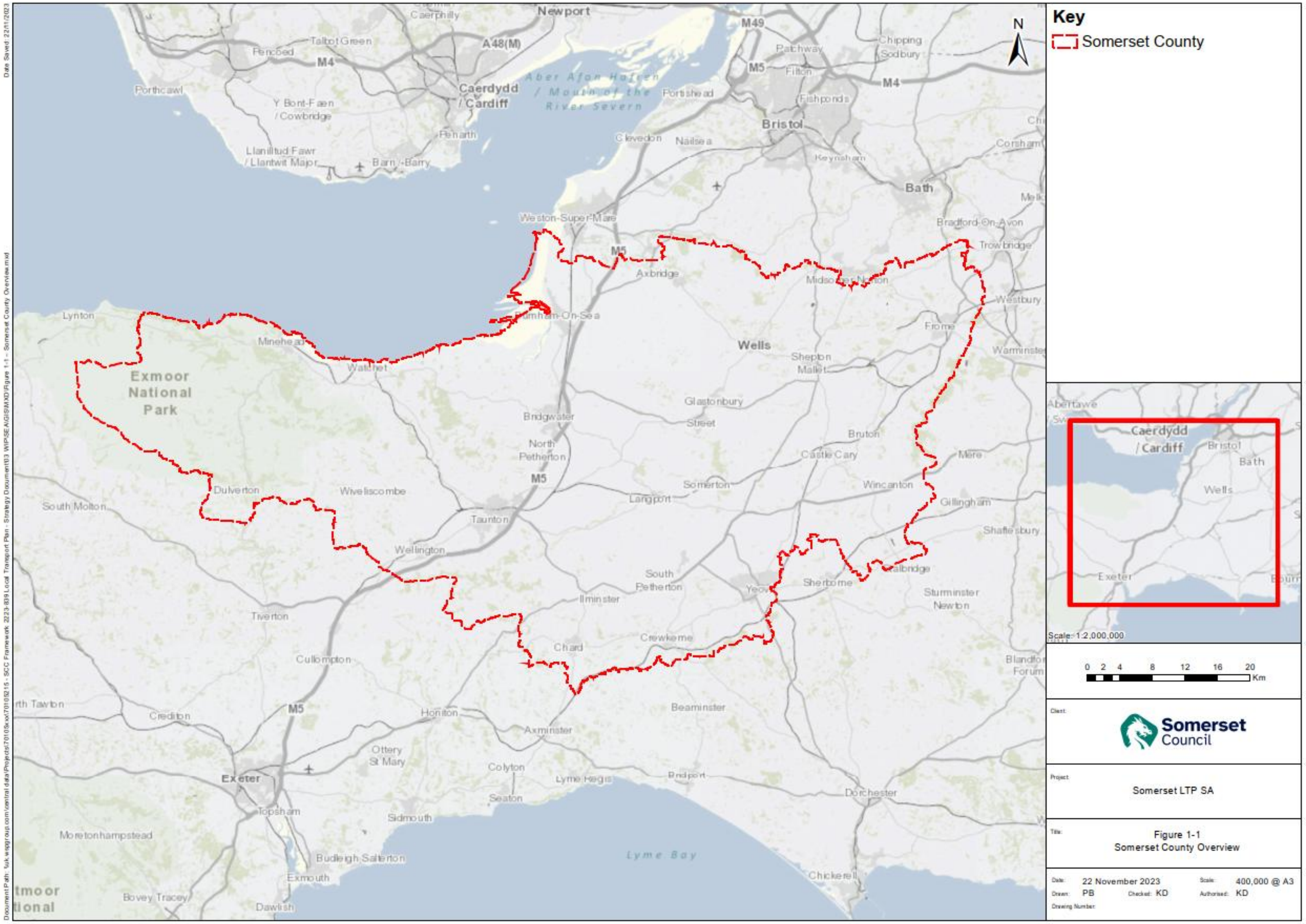
1.1 OVERVIEW

1.1.1. Somerset Council (herein referred to as SC) are currently preparing their fourth Local Transport Plan (LTP4) that will primarily focus on the period from 2025. This will replace the existing LTP3 which was adopted in 2011, covering the period up to 2026. **Figure 1-1** sets out SC's boundary hence illustrating the spatial context.

1.1.2. The LTP4 is a statutory plan setting out the policies and measures for transport across Somerset. Reducing carbon emissions will be the key priority for the LTP4. Through the new LTP4, SC hopes to bring together its multi-faceted transport systems into a more established and sustainable integrated network.

1.1.3. The LTP4 will communicate Somerset's transport vision for 2050 and set the high-level pathway to achieving that vision. There are opportunities for alignment between policy areas such as planning, economic development, infrastructure, transport, improving road safety, active travel, parking, public health, biodiversity and climate mitigation/resilience.

Figure 1-1 - Somerset Council Boundary



1.2 LOCAL TRANSPORT PLANS

1.2.1. The Government's 1998 White Paper on transport, 'A New Deal for Transport: Better for Everyone'[1], introduced the concept of Local Transport Plans (LTPs) to steer the development of national transport policies at the local level. The Transport Act 2000[2] (now amended by the Local Transport Act 2008[3]) then made it a statutory requirement for local transport authorities outside of London to produce LTPs having regard to Government guidance and policies on the environment.

1.2.2. The more recent Local Transport Act 2008[3] gave local authorities the freedom to decide for themselves how many years future LTPs should cover, including the option to set different time spans for the Strategy and implementation plan elements of the LTP.

1.2.3. The Local Transport Act 2008[3] makes particular reference to climate change mitigation and adaptation, but states that authorities should consider how their strategies and implementation plans relate to all relevant environmental issues, including air quality, noise, landscape and biodiversity.

1.3 SUSTAINABILITY APPRAISAL

1.3.1. The Strategic Environmental Assessment (SEA) / Sustainability Appraisal (SA) process is carried out during the preparation of certain plans and strategies including local transport plans, local plans and spatial development strategies. Its role is to promote sustainable development by assessing the extent to which emerging plans will help to achieve relevant environmental, economic and social objectives.

1.3.2. SEA is used to describe the application of environmental assessment to plans and programmes in accordance with the 'Environmental Assessment of Plans and Programmes Regulations' (SI 2004/1633, known as the SEA Regulations)[4].

1.3.3. SEA is mandatory for plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste or water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent of projects listed in the Town and Country Planning (Environmental Impact Assessment) Regulations[5].

1.3.4. SEA only considers the environmental effects of a plan whilst SA also considers a plan's wider economic and social effects in addition to its environmental impacts. It is obligatory that SAs meet all of the requirements of the SEA Regulations.

[1] Department for Transport, A new deal for transport: better for everyone - White Paper, 1998 [online] available at:https://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/about/strategy/whitepapers/previous/anewdealfortransportbetterfo5695
[2] Transport Act 2000 [online] available at: https://www.legislation.gov.uk/ukpga/2000/38/introduction
[3] Local Transport Act 2008 [online] available at: https://www.legislation.gov.uk/ukpga/2008/26/contents
[4] SI 2004 No. 1633, The Environmental Assessment of Plans and Programmes Regulations 2004 [online] Available at: http://www.legislation.gov.uk/uksi/2004/1633/pdfs/uksi_20041633_en.pdf
[5] The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 [online] Available at: http://www.legislation.gov.uk/uksi/2017/571/introduction/made

1.3.5. The approach adopted for the SA element of the LTP4 follows that set out in the Practical Guide to SEA[6] and the Planning Practice Guidance to SEA[7]. SAs do however need to meet all of the requirements of the SEA Regulations, so a separate strategic environmental assessment should not be required.

1.3.1. **Appendix A** sets out more specifically how this report has met the requirements of the SEA Regulations

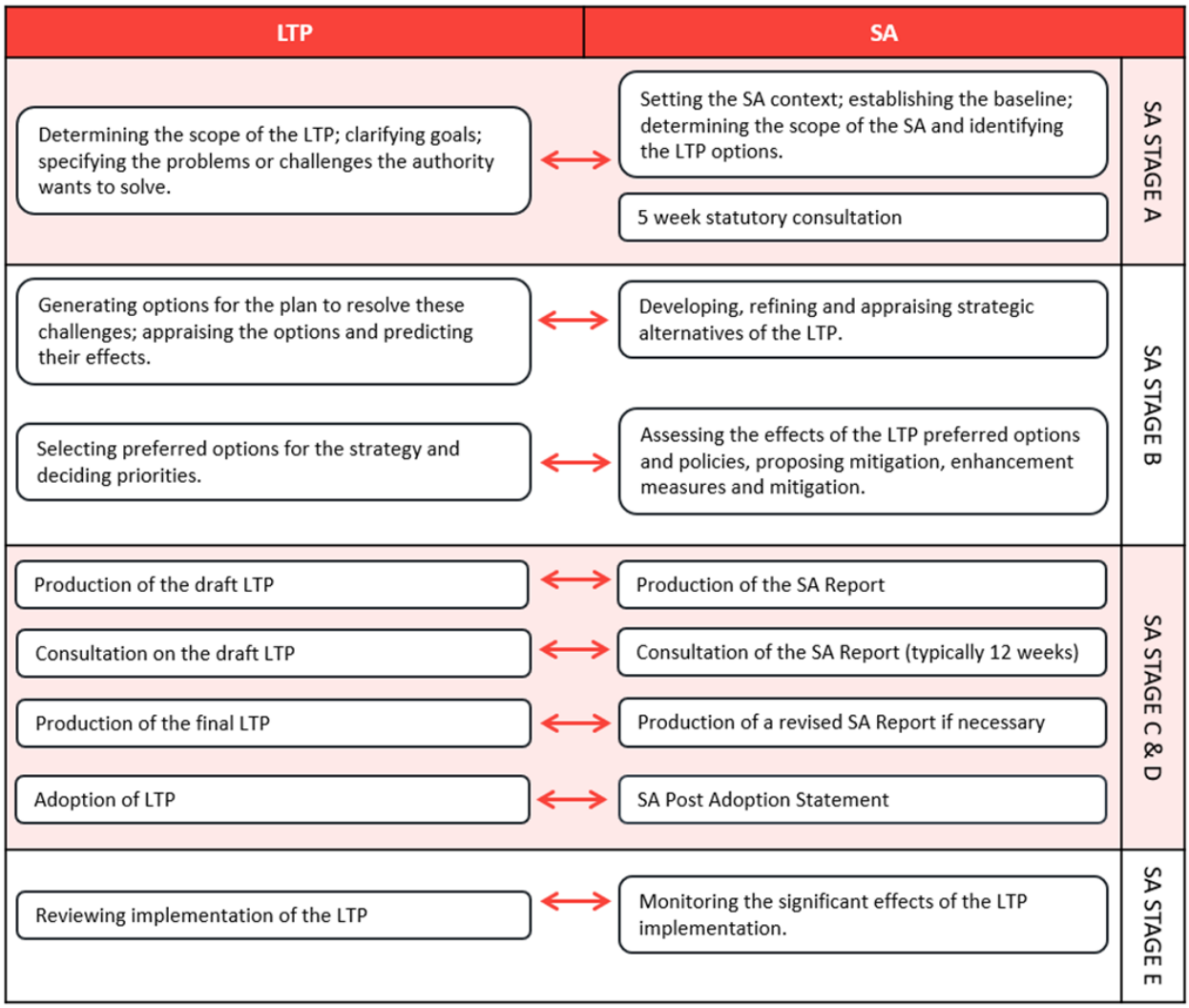
1.3.2. The key stages of the SA process are as follows:

- **Stage A:** Setting the context and objectives, establishing the baseline and deciding on scope (completed in May 2024 following consultation with the SEA statutory consultees i.e. Historic England, Natural England and the Environment Agency);
- **Stage B:** Developing and refining strategic alternatives and assessing their effects;
- **Stage C:** Preparing the Environmental Report (this stage);
- **Stage D:** Consulting on the draft plan or programme and the Environmental Report and prepare a Post Adoption Statement; and
- **Stage E:** Monitoring the significant effects of implementing the plan or programme on the environment.

1.3.3. Details on how this aligns with the LTP process are set out in **Figure 1-2**. This Report represents Stages B and C of the SEA process up to the 12-week consultation of the SA report alongside the draft LTP4.

[6] Office of the Deputy Prime Minister (2005) A Practical Guide to the Strategic Environmental Assessment Directive. available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf
[7] Department for Communities and Local Government (2015) Strategic environmental assessment and sustainability appraisal. Available at: http://planningguidance.communities.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/

Figure 1-2 - LTP and SA Stages



1.4 PURPOSE OF THE REPORT

1.4.1. This report sets out the second stage of the SEA/ SA process, which is the assessment of the Draft LTP4 and the alternatives considered (SEA Stage B), and preparation of the Draft SA Report (SEA Stage C). The first stage of the SEA process (Stage A), Scoping, was completed in May 2024.

1.4.2. Stages B and C include the following:

- Assessment of draft visions, objectives, and measures;
- Assessment of reasonable alternatives;
- Assessment of cumulative effects;
- Outlining initial mitigation and enhancement measures;
- Outlining recommendations; and
- Setting out next steps.

1.4.3. More detail on the SEA methodology is provided in Section 3.

2 SOMERSET COUNCIL LOCAL TRANSPORT PLAN 4

2.1 BACKGROUND

2.1.1. Somerset is located in in the south west of England and is predominantly rural in nature, with a number of urban areas including Taunton, Yeovil, Bridgewater and Frome, settlements in Wells, Street, Glastonbury, and Shepton Mallet, and coastal towns in Minehead, Burnham on Sea and Highbridge, Chard, Crewkerne and Wellington. **Figure 1-1** sets out SC's boundary.

2.1.2. Somerset has a diverse highways network with over 4,000 miles of highway. This includes trunk roads (maintained by National Highways), A and B roads, urban streets and rural lanes. The Council also maintains Public Rights of Way (PRoW) and a range of assets to operate the network, such as streetlights, signs and traffic signals.

2.1.3. The county's strategic road network includes the M5 and the A303. The M5 motorway provides a north–south route from Birmingham to Exeter, with five junctions in Somerset. The A303, provides the second strategic link into the South West and links to Taunton via the A358. Many roads on the local highway network, including the A37, A38, A39, A358, A370 and A370, support strategic and longer distance connectivity.

2.1.4. Somerset is also served by several railway lines that enable travel within Somerset and beyond. This includes connections to important cities across the country including Bristol, Birmingham, Exeter, London and Reading. There are also a handful of long-distance coach services that serve Somerset.

2.1.5. The existing LTP3 and associated SEA were approved in 2011. SC's LTP3 is applicable between 2011-2026 and requires a refresh to ensure that the overarching Strategy and policy statements remain consistent with the emerging LTP and to reflect a changed policy, funding and transport scheme delivery environment since 2011.

2.1.6. The emerging LTP4 provides the key mechanism for expressing how transport interventions will help SC to achieve its vision and Strategic Objectives. The LTP4 will provide a strategy for the development of implementation plans; the first will be a short-term action plan (3 years), with further revisions of specific policies within the implementation plans during the life of the LTP4.

2.2 VISION, OBJECTIVES AND ELEMENTS OF THE DRAFT LTP4

The Vision

2.2.1. The vision for transport in Somerset has been articulated as follows:

"Somerset Council will build a fairer, greener, resilient, more flourishing and connected transport network. We will enable growth and investment, greater choice, improved reliability and safety the help deliver more pleasant, healthier and active places for our communities."

2.2.2. As part of the development of the draft LTP4, four draft vision themes have been formulated. A number of objectives have been developed for each vision theme from evidence, consultation and national/regional targets.

2.2.3. The draft LTP vision themes and associated objectives are outlined in **Table 2-1**.

Table 2-1 - LTP4 Vision Themes and Objectives

Vision Themes	Objectives
Sustainable First Choice	Deliver a walking, wheeling and cycling county by growing the network of attractive routes and street designs that prioritise people. Provide everyone with a wider range of travel choices so that people have more flexibility and choice over how they travel, supported through better information and behaviour change activities. Improve the number and quality of bus and rail routes and schedules to increase sustainable travel. Prioritise sustainable new development that puts the principles of the LTP at its heart.
A Great and Healthy Place to Live	Safer streets for all, with a target of 50% reduction in those killed or seriously injured (KSIs) on Somerset's roads by 2030. Provide safer access to schools so more children and young people can walk and wheel to school. Provide people with better opportunities to become healthy and active to improve people's physical and mental wellbeing. Build on Somerset's ecology and heritage to improve access to green space, recreation and tourism.
Reduce Environmental Impacts	The LTP enables the transition towards net zero transport by 2050. Enable cleaner air and deliver electric vehicle charging infrastructure to increase zero emission vehicles uptake. Work with partners to deliver Somerset Council's Climate and Ecology Visions and Local Nature Recovery Strategy to improve nature, encouraging biodiversity and embracing the county's rural character.
Reliable and resilient Network	Provide a well-maintained network that respond well to weather events, enabling people to safely travel around the network. We will work with partners to protect and enhance strategic connectivity to and through the county and to implement changes that increase the reliability of public transport. We will work with partners to build greater economic and development opportunities through a better connected and more resilient transport network.

2.2.4. The LTP4 will comprise two elements, the Long Term 'Strategy' and the 'Action Plan'.

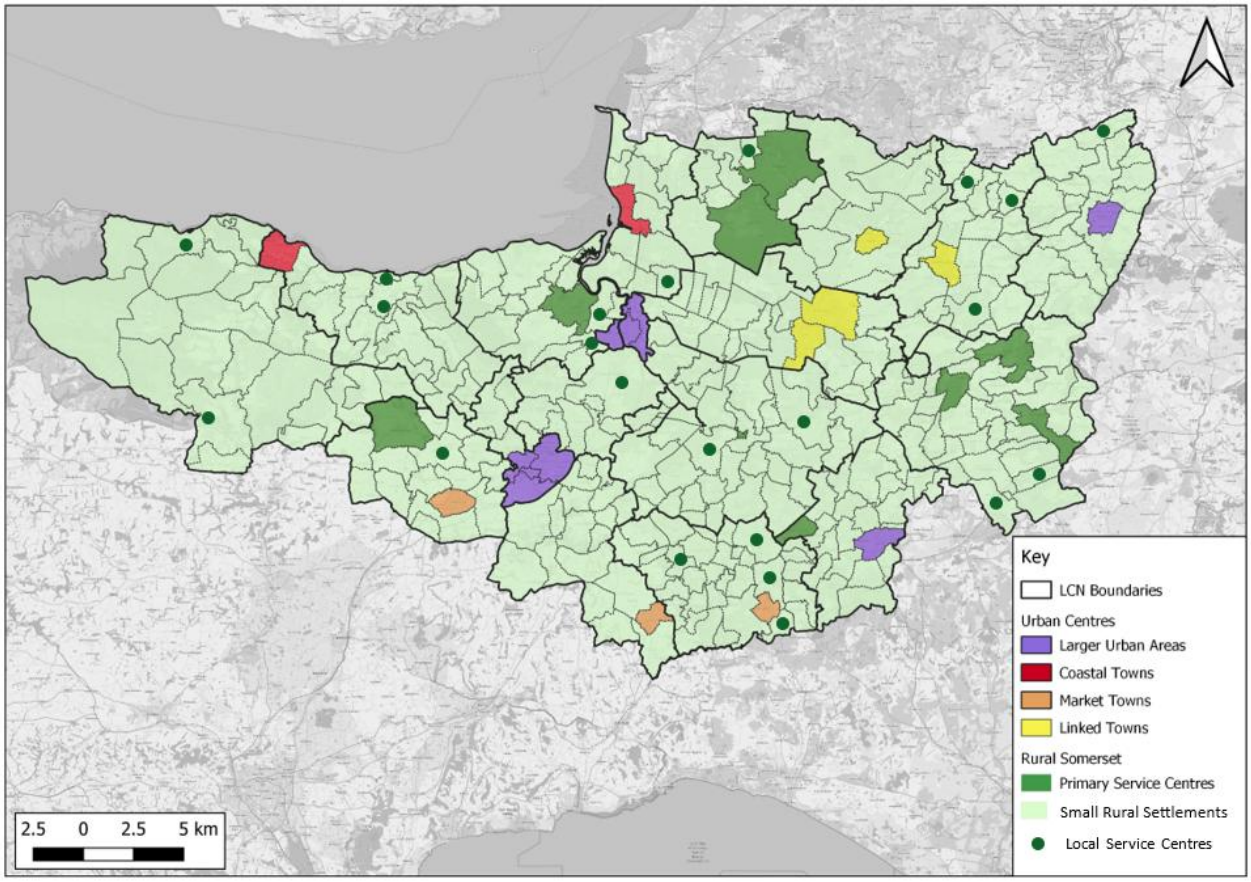
The Strategy

2.2.5. In addition to considering Somerset's strategic transport network, the draft LTP4 Strategy takes a place-based approach to addressing local problems and opportunities. Based on this approach, different 'place' types have been identified as follows:

- **Larger Urban Areas** including Taunton, Yeovil, Bridgewater and Frome;
- **Urban Areas**, including:
  - Linked Settlements of Wells, Street, Glastonbury and Shepton Mallet;
  - Coastal Towns of Minehead, Burnham on Sea and Highbridge;
  - Mid-sized Towns of Chard, Crewkerne & Wellington
- **Rural Areas**, including:
  - Primary Service Centres;
  - Local Service Centres; and
  - Smaller Rural Settlements.

2.2.6. The spread of these place types across Somerset is shown on **Figure 2-1** below:

Figure 2-1 – Place types across Somerset



Source: Somerset Council. Local Transport Plan 4. Draft for Consultation. May 2024.

2.2.7. The draft LTP4 Strategy describes how these individual places function and identifies policies under each of the vision themes for these distinct areas. Policies in relation to the overall network are also included.

2.2.8. For full details of the policies included within the Strategy, see **Appendix E**.

The Action Plan

2.2.9. An Action Plan has also been developed alongside the LTP4 Strategy. The Action Plan includes measures that are grouped under the overall network and place types, structured by the four vision themes and associated objectives outlined in **Table 2-1** above. The measures within the Action Plan have also been outlined by place type, in line with the LTP4 Strategy.

2.2.10. For full details of the measures included within the Action Plan, see **Appendix F**.

3 METHODOLOGY

3.1 INTRODUCTION

3.1.1. Sustainability Appraisal is an iterative process that is undertaken during the preparation of a plan. Its role is to promote sustainable development by assessing environmental, social and economic impacts, as well as mitigating any potential significant adverse effects that the plan might otherwise have.

3.2 IDENTIFYING SUSTAINABILITY ISSUES

SUSTAINABILITY CONTEXT

3.2.1. As outlined in Section 2, the first stage of the SA process was the undertaking of the SA scoping process (SA Stage A). The SA Scoping Report presented the sustainability context of Somerset's draft LTP4 by providing a plan level description of the environmental and sustainability conditions and a review of the relevant policy framework. The report presented baseline information across the SA topics and identified key sustainability issues and opportunities, which helped to form the SEA Framework.

3.2.2. Scoping Consultation was undertaken with Natural England, Historic England and the Environment Agency (the Statutory Consultees) on this report for a 5-week statutory period. After the consultation process was completed, any necessary amendments were made, and a finalised version of the report was issued.

3.2.3. **Table** 3-1 below summarises the sustainability context of the draft LTP4 which was identified as part of the scoping process. The plans, policies and programmes identified in the Scoping Report, as well as the baseline for the topics listed below can be found in **Appendix C** to this SA Report.

Table 3-1 - Sustainability Issues and Opportunities

Topic	Summary of Sustainability Issues and Opportunities
Population and Equalities	▪ Transport issues affect different groups to varying extents, and there is evidence showing that the barriers to accessing and using transport can be exacerbated by age, ethnicity and gender. ▪ The rural nature of large parts of the county could pose significant challenges in providing good services for all residents. There will, therefore, be a need for increased access to transport. ▪ The population of Somerset is increasing both in number and age profile. ▪ Changing work habits such as remote, internet-based jobs and working from home are likely to reduce transport demand, but may also increase social isolation, which could increase reliance on alternative social interaction. ▪ With an increasing ageing population in Somerset, there is likely to be additional strain on the county's services and infrastructure; this is likely to be exacerbated with a higher-than-average number of people living in rural areas. ▪ The change in working habits has also affected traditional 5/2-day shift patterns for public transport with one in 10 local bus services in the UK cancelled in 2022[8].
Human Health	▪ The population of the county is ageing; older people may not have access to appropriate forms of transport to access healthcare, community, and social care facilities. ▪ There are high levels of physical inactivity and obesity in Somerset. ▪ There are health inequalities and disparities across the county.
Economy and Employment	▪ If employment remains more concentrated in urban centres, this could put increased pressure on transport systems as commuting distances increase. ▪ The working age population is lower than the average and there are high levels of economic inactivity. ▪ There is a low density of jobs within Somerset compared to regional and national averages.
Community Safety	▪ Crime on public transport in the UK is on the rise, particularly with regards to sexual assault, violent crimes and disruption. ▪ As the population within Somerset increases there are expected to be a greater number of vehicles on the county's roads, which may result in an increase in the number of collisions and those KSI on roads. ▪ There are areas across the county which have high levels of crime deprivation. ▪ Children in the most deprived neighbourhoods are nearly three times more likely to be KSI as a pedestrian compared to non-deprived neighbourhoods[9]. ▪ There are opportunities to increase the safety of active transport modes such as cycling and walking. ▪ Vulnerable road uses such as cyclist and pedestrians are more likely to be casualties.
Biodiversity and Natural Capital	▪ There are a wide range of statutory local, national and international sites designated for nature conservation in Somerset, which may be affected by increased transport infrastructure development. Habitats and wildlife corridors outside of these protected areas are especially at risk of being lost, damaged or fragmented by transport development. ▪ New transport routes will need to be carefully planned so that they do not cause adverse effects on ecosystems with high (potential) ecosystem services provision. ▪ Given that ecosystem services are the benefits that nature provides to people, areas of high (potential) provision are often the green and blue spaces close to centres of population, as well as connecting habitats that link these with more remote designated habitats and landscapes. ▪ There is a need to working towards halting the decline in species abundance by 2030, and then increase abundance by at least 10% to exceed 2022 levels by 2042.
Landscape and Townscape	▪ Transport infrastructure has the potential to cause direct and indirect impacts on designated landscapes, eroding the character and quality of the landscapes, increasing pollution and eroding the visual amenity for residents and visitors alike. ▪ Future growth in some locations could risk compromising landscape and townscape character and features, however a landscape-led design with GI principles in place, could play a key role in the enhancement of the natural environment, visual amenity and physical and mental health of its people. ▪ Somerset's coastline is constantly changing due to sea level rise and climate change.
Historic Environment	▪ There is potential for development to encroach on assets, particularly affecting the settings of assets through increased noise and visual effects. ▪ New and/or upgraded transport infrastructure across Somerset has the potential to affect the survival, fabric, condition and setting of cultural heritage assets (both above and below ground) in addition to increased pressure from population growth.

[8] The Guardian (2033) Almost one in 10 local bus services axed over last year in Great Britain. Available online at: https://www.theguardian.com/uk-news/2023/jan/24/almost-one-10-local-bus-services-axed-last-year-great-britain?utm_source=substack&utm_medium=email

[9] Centre for Transport Studies, Road Safety Research Briefing 1: Children and Traffic: Those in deprived areas still at disproportionate risk. Available online at: https://www.ucl.ac.uk/transport/sites/transport/files/deprivation-and-road-safety-children.pdf

	▪ Highly significant archaeological remains, whether designated or not, normally require preservation in situ. This clearly has implications and can represent a significant constraint to future scheme design, which should respect, retain and protect the remains (e.g. through avoidance and redesign). ▪ Vehicle damage and pollution can adversely affect both listed buildings and scheduled monuments, so reducing vehicle movements within historic urban areas is also an important area to address.
Air Quality	▪ The number of vehicles on the roads is likely to increase as the population rises, putting air quality and AQMAs at further risk of degradation. ▪ More severe and frequent heat episodes as a result of climate change can contribute to the worsening of air quality. ▪ Whilst electric cars should have positive effects for air quality in terms of NO2 reductions, there is concern that electric vehicles, which are currently heavier than 'conventional' vehicles, may generate more particulate (PM10) pollution from brake and tyre wear. ▪ Air quality issues across Somerset can be addressed via a modal shift towards less polluting methods of transport (low carbon transport initiatives) and inclusive of active transport (e.g. cycling, walking etc.) thereby leading to a higher standard of air quality.
Climate Change and Greenhouse Gases	▪ Transport is the largest contributor to greenhouse gas emissions in the UK, with the largest contributor being domestic transport. ▪ There is a need to ensure climate resilience of the transport infrastructure in Somerset. The extent of future climate change will be strongly affected by the amount of greenhouse gases that the population chooses to emit. ▪ In rural areas of Somerset, particularly, where there are limited local facilities and fewer public transport services, many people are reliant on private transport which contributes to greenhouse gas emissions.
Water Environment	▪ The physical and chemical quality of water resources is an important aspect of the natural environment and can be adversely affected by pollution associated with surface water runoff from new or existing transport infrastructure, as well as by changes to waterbodies which can affect their quality as a habitat. ▪ Of the 111 water bodies, just 8% are achieving 'good' status, falling far short of the WFD target. ▪ Climate change is likely to increase the occurrence of flooding from all sources and hence raise the flood risk in Somerset. ▪ Increased development (including transport infrastructure) can increase flood risk on a local and catchment scale. ▪ Upgrading existing infrastructure provides the opportunity to improve pollution control, include the reduction of litter.
Noise	▪ Increased transport development and infrastructure may adversely impact sensitive receptors and increase current noise levels in areas adjacent to roads and rail lines. ▪ Excessive noise exposure from transport can cause stress and sleep disturbance and is often perceived as a nuisance. This can result in adverse effects on human health. ▪ Transport noise can adversely affect biodiversity including nesting and feeding habits of many species. ▪ Increased noise exposure can also have negative impacts on designated sites including the National Landscapes, and other designated sites with road or rail noise reducing amenity within these areas.
Material Assets	▪ It is important that any future development of the transport network across Somerset does not have adverse impacts or lead to the degradation or sterilisation of the best and most versatile land, as this is important for the UK's self-sufficiency in food production. ▪ Minerals are a finite resource and materials will be required for any new transport infrastructure, with subsequent waste produced. ▪ There is currently a large reliance on road transport for importing and exporting minerals across the UK, which is unlikely to change. ▪ There is a continued increase in renewable energy supplies across Somerset, of which needs to be managed efficiently to ensure the capacity requirements of this transition are met.

FUTURE EVOLUTION OF THE BASELINE

3.2.4. The population across Somerset is anticipated to increase by 9.4% (to 609,868) by mid-2033[10]. , and the proportion of people aged 65 years and over is expected to rise to 28% by 2035[10], increasing pressure on health and community facilities.

3.2.5. The rising population in the county is accelerating the need for the delivery of additional housing, services and infrastructure. Growth in jobs is also anticipated in order to close the gap between increases in population and the need for employment.

3.2.6. With a growing population and increased development the potential for generating waste is increasing. Additionally, economic growth and rising population within Somerset will place additional pressures upon agricultural land. It is likely that land available for development will become more of a premium and intensify competition for land amongst developers. This is likely to also increase the demand for development on greenfield land.

3.2.7. Another issue facing Somerset is climate change. Key challenges include flooding from a variety of sources, extreme weather events, increases in hotter, drier summers, and increases in annual precipitation in the County. Climate change also has the potential to further fragment and deteriorate the region's ecosystems and biodiversity and increase risk to agricultural areas through degradation, as well as increased coastal and flood-plain flood events and water shortages.

3.2.8. Somerset Council have declared a climate and ecological emergency, with aims for a carbon neutral Somerset by 2030 and aims to build resilience and adapt to the changing climate. This includes reducing the carbon impact of the transport network. Whilst transport emissions have reduced over previous years, the transport sector is still the largest emitter in Somerset. Emissions in Somerset are anticipated to continue to decrease in line with targets, however the rate of decrease is anticipated to be slow[11].

3.2.9. The historic environment is increasingly under threat from development pressures. In addition to loss of green infrastructure and heritage assets, new infrastructure to provide for a growing population affects visual amenity and heritage setting.

3.2.10. Increasing population and development within Somerset is anticipated to place strain on water resources and may lead to a decrease in water quality. Increased development and population will also increase the number and likelihood of properties being at risk of flooding.

3.2.11. Biodiversity across Somerset and the UK has seen declines in species abundance, distribution, and loss of local wildlife sites. Development in rural areas of the county is likely to encourage car use, given these areas are likely to have limited existing transport infrastructure available. This may have knock-on effects on habitats sensitive to air quality and disturbance. The Environment Act[12] 2021 specifies a mandatory 10% increase in biodiversity net gain (BNG) for new developments.

[10] Office for National Statistics, Subnational population projections for England: 2018-based.
[11] Climate Resilient Somerset (2019) Towards a Resilient Somerset, Somerset's Climate Emergency Strategy. Available at: https://www.somerset.gov.uk/environment-and-food-safety/climate-and-ecological-emergency/somersets-climate-emergency-strategy/
[12] Environment Act (2021). Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

Biodiversity on development sites will need to be preserved, with additional mitigation put in to increase biodiversity.

3.2.12. Beyond BNG requirements, the UK Government has set out objectives of halting biodiversity loss by 2030, and then increase abundance by at least 10% to exceed 2022 levels by 2042 and to protect 30% of our land and sea also by 2030. Actions towards meeting these targets ought to result in improvements to biodiversity within Somerset.

SUSTAINABILITY APPRAISAL FRAMEWORK

3.2.13. A Sustainability Appraisal Framework has been produced to guide the assessment process of the LTP4. The framework (set out in **Table 3-2** below) summarises the main sustainability issues in Somerset across each environmental topic, and the subsequent sustainability objectives and appraisal questions to be used to assess emerging strategy objectives and action plans.

Table 3-2 - Sustainability Appraisal Framework

SA Objective	Issues & Opportunities	Proposed Objective	Supporting Appraisal Question – Will the LTP4…
Population & Equalities	▪ Transport issues affect different groups to varying extents. Evidence shows that the barriers to accessing and using transport can be exacerbated by age, ethnicity and gender. ▪ The rural nature of large parts of the county could pose significant challenges in providing good services for all residents. There will, therefore, be a need for increased access to transport which in turn provide access to services. ▪ The population of Somerset is increasing both in number and age profile. ▪ Changing work habits such as remote, internet-based jobs and working from home are likely to reduce transport demand, but may also increase social isolation, which could increase reliance on alternative social interaction. ▪ With an increasing ageing population in Somerset, there is likely to be additional strain on the county's services and infrastructure; this is likely to be exacerbated with a higher-than-average number of people living in rural areas.	**SA1:** To increase the inclusivity, capacity and connectivity of the transportation network to support future demographic changes for both rural and urban populations	Will the LTP4: ▪ Help to reduce inequalities, particularly for those people and communities most vulnerable? ▪ Improve access to services, facilities and transport for all inclusively (including disabilities, hidden disabilities, dementia, and autism)? ▪ Proportionately support both rural and urban communities ▪ Support diversity? ▪ Support population growth?
Human Health	▪ The population of the county is ageing; older people may not have access to appropriate forms of private transport to access healthcare, community, and social care facilities. ▪ There are high levels of physical inactivity and obesity in Somerset. ▪ There are health inequalities and disparities across the county.	**SA2:** To protect and enhance both physical and mental health and wellbeing through better access to public transport, supporting active travel and encouraging healthy lifestyles.	Will the LTP4: ▪ Provide better access to healthcare, community and social care facilities? ▪ Promote healthier active lifestyles? ▪ Increase walking and cycling? ▪ Promote health enhancing environments, behaviours and activities for local communities? ▪ Help prevent risks to human health, which arise from noise and air pollution? ▪ Help prevent social isolation in both the rural and urban setting? ▪ Improve access to parks, natural and historic places to improve mental wellbeing?
Economy & Employment	▪ If employment remains more concentrated in urban centres, this could put increased pressure on transport systems as commuting distances increase. ▪ The working age population is lower than the average and there are high levels of economic inactivity. ▪ There is a low density of jobs within Somerset compared to regional and national averages.	**SA3:** To provide greater connectivity across Somerset and high quality streets and public spaces to support key sectors, attract inward investment and support economic success.	Will the LTP4: ▪ Support economic growth? ▪ Support access to jobs and training opportunities? ▪ Improve access to employment centres? ▪ Support regeneration of town and district centres? ▪ Support the tourism industry?
Community Safety	▪ Crime on public transport in the UK is on the rise, particularly with regards to sexual assault, violent crimes and disruption. ▪ There are areas across the region which have high levels of crime deprivation. ▪ As the population within Somerset increases there are expected to be a greater number of vehicles on the county's roads, which may result in an increase in the number of accidents and those KSI on roads. ▪ Children in the most deprived neighbourhoods are nearly three times more likely to be KSI as a pedestrian compared to non-deprived neighbourhoods[9]. ▪ Vulnerable road uses such as cyclist and pedestrians are more likely to be casualties.	**SA4:** To promote safe transport through reducing collisions, improving safety and reducing crime across the transport network.	Will the LTP4: ▪ Improve overall safety across the transport network? ▪ Ensure that residents feel safe, particularly after dark? ▪ Support designing out crime principles? ▪ Help reduce levels of crime deprivation? ▪ Improve road safety and reduce the number of people KSI on the roads, particularly children from deprived backgrounds?

	▪ There are opportunities to increase the safety of active transport modes such as cycling and walking.		
Biodiversity & Natural Capital	▪ There are a wide range of statutory local, national and international sites designated for nature conservation in Somerset, which may be affected by increased transport infrastructure development. Habitats and wildlife corridors outside of these protected areas are especially at risk of being lost, damaged or fragmented by transport development. ▪ New transport routes will need to be carefully planned so that they do not cause adverse effects on ecosystems with high (potential) ecosystem services provision. ▪ Given that ecosystem services are the benefits that nature provides to people, areas of high (potential) provision are often the green and blue spaces close to centres of population, as well as connecting habitats that link these with more remote designated habitats and landscapes. ▪ The UK's EIP (2023) target of halting biodiversity loss by 2030 may be impacted by transport development.	**SA5:** To protect and enhance protected habitats, species and valuable ecological networks that contribute to ecosystem functionality in Somerset. **SA6:** To maintain and enhance the county's biodiversity and the provision of ecosystem services from the county's natural capital..	Will the LTP4: ▪ Cause damage to locally and nationally designated sites though infrastructure provision, traffic or maintenance? ▪ Maintain and enhance biodiversity in the region? ▪ Seek opportunities for at least 10% biodiversity net gain through green infrastructure? ▪ Increase provision of ecosystem services from the county's natural capital? ▪ Prevent fragmentation of habitats and promote ecological networks? ▪ Result in developments which will improve biodiversity on site?
Landscape & Townscape	▪ Transport infrastructure has the potential to cause direct and indirect impacts on designated landscapes, eroding the character and quality of the landscapes, increasing pollution and eroding the visual amenity for residents and visitors alike. ▪ Future growth in some locations could risk compromising landscape and townscape character and features, however a landscape-led design with green infrastructure principles in place, could play a key role in the enhancement of the natural environment, visual amenity and physical and mental health of its people. ▪ Somerset's coastline is constantly changing due to sea level rise and climate change.	**SA7:** To protect and enhance townscapes, landscapes and seascapes of natural and/or visual importance, including the rural environment and town centres.	Will the LTP4: ▪ Respect, maintain and strengthen local character and distinctiveness? ▪ Improve the quality and condition of the townscape and landscape? ▪ Incorporate green infrastructure into design? ▪ Protect and enhance the special character of Exmoor National Park and designated National Landscapes?
Historic Environment	▪ There is potential for development to encroach on historic assets, particularly affecting their setting through increased noise and visual effects. ▪ New and/or upgraded transport infrastructure across Somerset has the potential to affect the survival, fabric, condition and setting of cultural heritage assets (both above and below ground) in addition to increased pressure from population growth. ▪ Highly significant archaeological remains, whether designated or not, normally require preservation in situ. This clearly has implications and can represent a significant constraint to future scheme design, which should respect, retain and protect the remains (e.g. through avoidance and redesign). ▪ Vehicle damage and pollution can adversely affect both listed buildings and scheduled monuments, so reducing vehicle movements within historic urban areas is also an important consideration. ▪ Transport infrastructure can impact on the character of historic landscapes, townscapes and seascapes. ▪ Appropriately designed transport infrastructure, streets and public realm can contribute to heritage-led regeneration, the vitality and viability of town centres, and sustainable heritage-based tourism. ▪ While well designed transport infrastructure may ensure access and enjoyment to heritage assets, poorly designed schemes can result in severance. ▪ Transport may have implications for assets on the Heritage at Risk register, either now or in the future.	**SA8:** To protect and enhance the historic environment, including heritage assets (designated and non-designated) and their unique settings.	Will the LTP4: ▪ Conserve and/or enhance heritage assets, their setting and the wider historic environment? ▪ Improve the quality and condition of the historic environment? ▪ Respect, maintain and strengthen local character and distinctiveness? ▪ Result in the loss of buried and unknown historic assets and artifacts? ▪ Secure appropriate public access an enjoyment to heritage assets? ▪ Have implications for heritage assets on 'at risk' registers, or result in new assets becoming at risk?

Air Quality	▪ The number of vehicles on the roads is likely to increase as the population rises, putting air quality and AQMAs at further risk of degradation. ▪ More severe and frequent heat episodes as a result of climate change can contribute to the worsening of air quality. ▪ Whilst electric cars should have positive effects for air quality in terms of NO_2 reductions, there is concern that electric vehicles, which are currently heavier than 'conventional' vehicles, may generate more particulate (PM_{10}) pollution from brake and tyre wear. ▪ Air quality issues across Somerset can be addressed via a modal shift towards less polluting methods of transport (low carbon transport initiatives) and inclusive of active transport (e.g. cycling, walking etc.) thereby leading to a higher standard of air quality.	**SA9:** To protect and enhance air quality by reducing NO_2 emissions from the transport network.	Will the LTP4: ▪ Support measures to reduce levels of air pollution? ▪ Support measures for the reduction of congestion and traffic levels particularly in AQMAs and congestion hot-spots?
Climate Change & Greenhouse Gases	▪ Transport is the largest contributor to greenhouse gas emissions in the UK, with the largest contributor being domestic transport. ▪ In rural areas of Somerset, particularly, where there are limited local facilities and fewer public transport services, many people are reliant on private transport which contributes to maintaining a high level of transport related greenhouse gas emissions. ▪ There is a need to ensure climate resilience of the transport infrastructure in Somerset. ▪ There is a need to adapt to climate change and ensure that the transport network is resilient to rising temperatures, extreme weather and flooding.	**SA10:** Ensure that Somerset Council is resilient to the effects of climate change. **SA11:** To reduce greenhouse gas emissions across the transport network, support national and local decarbonisation initiatives and incorporate climate change adaptation to help maximise resilience.	Will the LTP4: ▪ Support low carbon and energy efficient design? ▪ Increase the resilience of infrastructure and material assets to the impacts of climate change (including flood risk, extreme weather, heat and cold)? ▪ Support the council's Net Zero ambitions by 2030? ▪ Support low carbon, energy efficient design? ▪ Reduce levels of embodied carbon?
Water Environment	▪ The physical and chemical quality of water resources is an important aspect of the natural environment and can be adversely affected by pollution associated with surface water runoff from new or existing transport infrastructure, as well as by changes to waterbodies which can affect their quality as a habitat. ▪ Of the 111 water bodies, just 8% are achieving 'good' status, falling far short of the WFD target. ▪ Climate change is likely to increase the occurrence of flooding from all sources and hence raise the flood risk in Somerset. ▪ Increased development (including transport infrastructure) can increase flood risk on a local and catchment scale. ▪ Upgrading existing infrastructure provides the opportunity to improve pollution control, include the reduction of litter. ▪ The plan should aim to ensure that new and existing transport infrastructure and networks remain safe and operational with the current and anticipated flood risk, even beyond the plan period.	**SA12:** To reduce the risk and vulnerability to flooding. **SA13:** To maintain and enhance water quality by reducing levels of pollution form the transport network.	Will the LTP4: ▪ Reduce the risk of flooding? ▪ Increase surface runoff? ▪ Result in the reduction of water quality? ▪ Support the protection and enhancement of water bodies?
Noise	▪ Increased transport development and infrastructure may adversely impact sensitive receptors and increase current noise levels in areas adjacent to roads and rail lines. ▪ Excessive noise exposure from transport can cause stress and sleep disturbance and is often perceived as a nuisance. This can result in adverse effects on human health. ▪ Transport noise can adversely affect biodiversity including nesting and feeding habits of many species. ▪ Increased noise exposure can also have negative impacts on designated sites including the National Landscapes, and other designated sites with road or rail noise reducing amenity within these areas.	**SA14:** To reduce exposure to transport related noise and vibration, including noise pollution and nuisance.	Will the LTP4: ▪ Support measures to reduce levels of noise pollution? ▪ Support measures for the reduction of congestion and traffic levels particularly in areas with sensitive noise receptors?
Material Assets	▪ It is important that any future development of the transport network across Somerset does not have adverse impacts or lead to the degradation or	**SA15:** To reduce the amount of waste produced, minimise the amount sent to	Will the LTP4: ▪ Support the use of sustainable materials?

	sterilisation of the best and most versatile land, as this is important for the UK's self-sufficiency in food production. ▪ Minerals are a finite resource and materials will be required for any new transport infrastructure, with subsequent waste produced. ▪ There is currently a large reliance on road transport for importing and exporting minerals across the UK, which is unlikely to change. ▪ There is a continued increase in renewable energy supplies across Somerset, of which needs to be managed efficiently to ensure the capacity requirements of this transition are met.	landfill and promote sustainable use of resources. **SA16:** To ensure the efficient use of land,	▪ Support the reuse of existing infrastructure? ▪ Promote a circular economy? ▪ Minimise the amount of waste? ▪ Support the use of brownfield land? ▪ Protect and enhance land quality? ▪ Result in the loss of agricultural land?

3.3 SA REPORT METHODOLOGY

3.3.1. Stage B comprises of the assessment of the draft LTP4, against the SA objectives identified within the Scoping Report. As per the SEA regulations, the SA also needs to consider and compare all reasonable alternatives as the plan evolves and assess these against the baseline environmental, economic and social characteristics of the county. Reasonable alternatives are the different realistic options considered by the plan-maker in developing the draft LTP4.

3.3.2. Stage C involves the reporting of the assessment process through the preparation of the SA Report (this report). This SA Report therefore comprises the assessment of:

- Compatibility assessment of the vision and objectives;
- Assessment of the LTP4 draft Strategy policies and the Action Plan;
- Alternative scenarios;
- Intra and inter project cumulative effects.

COMPATIBILITY ASSESSMENT

3.3.3. Testing the compatibility of the draft LTP's vision themes and objectives against the SA Appraisal Framework helps to identify both potential synergies and inconsistencies. This information can help in developing and refining the objectives of the draft LTP4.

3.3.4. **Section 4** comprises the findings of this compatibility assessment.

ASSESSMENT OF EFFECTS OF THE DRAFT LTP4

3.3.5. The assessment of vision themes, objectives and measures in the draft LTP4 Strategy and Action Plan has considered the following:

- Overall effect significance (negative, positive, uncertain, potential for both negative and positive effect or negligible)
- Nature of effect (direct, indirect)
- Spatial Extent (local, regional, national)
- Reversibility of effect:
  - Reversible: The receptor can return to baseline condition without significant intervention
  - Irreversible: The receptor would require significant intervention to return to baseline condition
- Duration (short, medium or long term) – Short term: 0-5 years, Medium term: 5-10 years (up to the end of the plan period) Long term: 10+ years (beyond the plan period).

3.3.6. **Table** 3-3 sets out the key to the assessment.

Table 3-3 – Key to Assessment

Effect Significance	Key
Potential for significant positive effects	**++**
Potential for minor positive effects	**+**
Potential for minor negative effects	**-**
Potential for significant negative effects	**--**
Uncertain effects – Uncertain or insufficient information on which to determine the appraisal at this stage	**?**
Potential for both positive and negative effects	**+/-**
Negligible / No effect	**0**

3.3.7. It should be noted that where uncertain and negligible effects have been identified, it has not been possible to determine the nature of effect, the spatial extent, the reversibility or the duration of effect. In this instance, the effect criteria cells have been left blank and a score of '0' given.

ASSESSMENT OF POLICIES AND ACTION PLAN MEASURES

3.3.8. The assessment of the policies within the draft LTP4 Strategy has been undertaken in line with the places and by objective themes which have been assessed together. The assessment considered policies that have been grouped under each of the place types and the four vision themes / objectives. The performance of each policy has been assessed against each SA objective, assessing the outcome of the application of those policies rather than the draft LTP as a whole. A summary of the plan as a whole has also been outlined.

3.3.9. Similarly, the assessment of the action plan within places and themes have been standalone assessments, hence an assessment of the application of the action plan has also been carried out. The assessment considered action plan measures that have been grouped under the place types and the vision themes / objectives and assessed against each SA objective. A summary of action plan measures as a whole has also been outlined.

ASSESSMENT OF ALTERNATIVES

3.3.10. The SEA Regulations require that an assessment of reasonable / realistic alternatives is undertaken.

3.3.11. For the LTP4, the reasonable alternatives have been assessed against the SEA objectives on a topic-by-topic basis to identify likely significant environmental, social and economic effects using an appraisal matrix. In line with the SEA Regulations, the SEA must detail which of the identified effects are likely to be significant (whether this is significantly positive or negative).

3.3.12. The identification of reasonable alternatives through the draft LTP4 SA process focused on options around the approach to investment options and strategic approach options to achieve plan objectives. Three reasonable alternatives were carried forward for assessment, option 2D detailed a place-based approach to increasing investment in transport projects; option 3C focused on a

rural/urban 'decide and provide' approach; and 3D focused on a place-based 'decide and provide' approach.

3.3.13. A high-level summary of effects on each of the SEA objectives were provided and each scored using the Key to Assessment set out in **Table 3-1** above. The assessment of alternatives is reported **Section 7**.

CUMULATIVE EFFECTS

3.3.14. The SEA Regulations require that cumulative effects are considered when identifying likely significant effects. Therefore, a number of plans and policies (local, regional and national) have been reviewed for potential cumulative effects, in addition to potential cumulative effects that could occur as a result of the implementation of the draft LTP4 as a whole.

3.3.15. In addition, the assessment has considered the cumulative effects of neighbouring transport developments, including those beyond the borough boundary.

3.3.16. The assessment of cumulative effects has been reported in **Section 8** of this report.

MITIGATION, ENHANCEMENT, AND MONITORING MEASURES

3.3.17. The SEA Regulations require that mitigation measures are considered to prevent, reduce or offset any significant adverse effects on the environment as a result of implementing the plan.

3.3.18. Mitigation measures have been identified in relation to the assessment of the draft strategy policies and action plan measures. These include both proactive avoidance of adverse effects and actions taken after potential effects have been identified. These are set out in **Section 9** of this report.

3.3.19. **Section 9** also includes enhancement measures, which aim to optimise positive impacts and enhance sustainability. The mechanism for delivery of mitigation and enhancement will ensure the prevention, reduction and offset of any significant adverse effects and promotion of enhancement opportunities on the environment.

3.3.20. The SEA Regulations require that monitoring is undertaken on a plan so that the significant effects of implementation can be identified and remedial action imposed, as well as measuring the benefits of enhancement. The purpose of the monitoring is to provide an important measure of the sustainability outcome of the final plan, and to measure the performance of the plan against sustainability objectives and targets. Monitoring is also used to manage uncertainty, improve knowledge, enhance transparency and accountability, and to manage sustainability information. **Section 9** outlines potential monitoring measures.

3.4 ASSUMPTIONS AND LIMITATIONS

3.4.1. The assessment of policies, measures, and policy alternatives has been undertaken as a desk-based exercise using the baseline information from the Scoping Report. No site visits have been undertaken specifically for the purposes of the SA.

3.4.2. WSP have ensured that effects are predicted accurately; however, this can be challenging given limited understanding of precisely how the plan will be implemented. Given uncertainties there is inevitably a need to make some assumptions, however, these are made carefully and explained in detail within the assessment text.

3.4.3. A proportionate and precautionary approach will be taken in the identification and evaluation of potential significant effects based on the level of information available and the presence of key sensitive receptors.

3.4.4. In some instances, given reasonable assumptions, it is not possible to predict ‘significant effects’, but it is possible to comment on the potential positive and negative effects of the draft plan and its alternatives in more general terms.

4 COMPATABILITY ASSESSMENT OF VISION THEMES AND OBJECTIVES

4.1 INTRODUCTION

4.1.1. This section assesses the compatibility of the draft LTP4 vision themes and objectives against the SA Appraisal Framework objectives outlined in **Table 3-2**.

4.1.2. The vision themes and objectives have been individually tested against the SA Appraisal Framework objectives to identify both potential synergies and inconsistencies. This information can help in developing and refining the objectives of the LTP.

4.1.3. **Table 4-1** below sets out the key to appraisal, whilst **Table** 4-2 overleaf sets out the findings of the compatibility testing of the vision themes and objectives.

Table 4-1 – Key to Compatibility Assessment

Effect	Key
Compatible	✓
Incompatible/ potential conflict	x
No relationship	**0**
Uncertain/ more than one potential outcome	**?**

Table 4-2 – Compatibility Assessment of Vision Themes and Objectives

Vision Theme	SA1: Population and Equalities	SA2: Human Health	SA3: Economy and Employment	SA4: Community Safety	SA5: Biodiversity	SA6: Natural Capital	SA7: Landscape and Townscape	SA8: Historic Environment	SA9: Air Quality	SA10: Climate Change	SA11: Greenhouse Gases	SA12: Flood Risk	SA13: Water Quality	SA14: Noise	SA15: Waste	SA16: Efficient Use of Land
Sustainable First Choice	✓	✓	✓	✓	?	?	✓	✓	✓	✓	✓	?	?	✓	0	?
A Great and Healthy Place to Live, Work and Visit	✓	✓	0	✓	✓	✓	✓	✓	?	?	?	0	0	?	0	0
Reduce Environmental Impacts	✓	✓	0	0	✓	✓	✓	✓	✓	✓	✓	✓	?	✓	0	0
Reliable and Resilient Transport Network	✓	✓	✓	?	?	?	?	?	✓	?	✓	?	?	✓	?	?

4.2 COMPATIBILITY ASSESSMENT SUMMARY

4.2.1. In general, the vision themes and objectives have performed well against most of the SA objectives and clearly demonstrate their compatibility. Whilst the assessment has not identified any incompatible effects, a number of uncertainties have been identified.

4.2.2. On the whole, the Vision and Objectives have predominantly resulted in compatibility as it covers the three key pillars of sustainability (economy, social and environment) and aims to tackle key issues such as employment, community safety, and GHG emissions, which aligns with the aims and aspirations of the SA objectives.

4.2.3. Due to its strong environmental focus, Reduce Environmental Effects is the most compatible across all objectives. SC aim to reach net-zero carbon emissions (by 2050), whilst protecting and improving the local environment. This will involve facilitating residents safe (SA4) and convenient use of active travel modes, including walking and cycling which will increase access to services, employment, and education (SA3), whilst also boosting physical activity levels and overall health and wellbeing (SA2). Reduction in emissions (SA11) through reduced private vehicle usage will also directly benefit air quality (SA9) in the local area, as well as indirectly supporting biodiversity assets across the city region (SA5). Additionally, implementing SC's Local Nature Recovery Plan will contribute to improving biodiversity and natural capital (SA5 and SA6).

4.2.4. SA1 and SA2 (Population and Equalities and Human Health) is also met by all Vision and Objectives. Improvements to the transport network in terms of usability, maintenance, and connectivity will benefit all users, including rural communities and future generations.

4.2.5. Uncertain effects have resulted for community safety (SA4), biodiversity (SA5), natural capital (SA6), landscape and townscape (SA7), historic environment (SA8), air quality (SA9), climate change (SA10), greenhouse gases (SA11), flood risk (SA12), water quality (SA13), noise (SA14), waste (SA15), and efficient use of land (SA16). The objectives highlighted as having uncertain effects have included no direction as to the likely effects on these SA objectives. As a result, uncertain effects have been reported. However, as this is a high-level objective, there is no certainty to how such development might arise, and there may be potential for developments to bring about positive effects on these objectives.

5 ASSESSMENT OF LTP4 POLICIES

5.1 INTRODUCTION

5.1.1. This assessment of the Draft LTP4 policies is summarised below and presented in full in **Appendix E**.

5.1.2. The assessment considered policies that have been grouped under the "our network" plus the place types and the four vision themes / objectives. The places and objectives assessed are:

- Our Network;
  - Sustainable First Choice
  - A Great and Healthy Place to Live, Work and Visit
  - Reduce Environmental Impacts
  - Reliable and Resilient Transport Network
- Larger Urban Areas, including Taunton, Yeovil, Bridgwater and Frome;
  - Sustainable First Choice
  - A Great and Healthy Place to Live, Work and Visit
  - Reduce Environmental Impacts
  - Reliable and Resilient Transport Network
- Linked Towns of Wells, Street, Glastonbury and Shepton Mallet;
  - Sustainable First Choice
  - Reduce Environmental Impacts
  - Reliable and Resilient Transport Network
- Coastal Towns of Minehead, Burnham on Sea and Highbridge;
  - Sustainable First Choice
  - A Great and Healthy Place to Live, Work and Visit
  - Reduce Environmental Impacts
  - Reliable and Resilient Transport Network
- Mid-sized Towns of Chard, Crewkerne & Wellington;
  - Sustainable First Choice
  - A Great and Healthy Place to Live, Work and Visit
  - Reduce Environmental Impacts
  - Reliable and Resilient Transport Network
- Rural Somerset (Primary Service Centres, Local Service Centres and Smaller Rural Centres);
  - Sustainable First Choice
  - A Great and Healthy Place to Live, Work and Visit
  - Reduce Environmental Impacts
  - Reliable and Resilient Transport Network

5.1.3. A matrix approach has been used for the assessment which has used the significance criteria identified in **Table** 3-3. **Table 5-1** overleaf provides an overview on the performance of the LTP4 vision themes, including their objectives against each SEA objective and **Table 5-2** shows the summary of effects based on each SEA objective.

5.2 SUMMARY OF POLICY ASSESSMENT FINDINGS

Table 5-1 - Assessment of Policies

Place	Objective	SA1: Population and Equalities	SA2: Human Health	SA3: Economy and Employment	SA4: Community Safety	SA5: Biodiversity	SA6: Natural Capital	SA7: Landscape and Townscape	SA8: Historic Environment	SA9: Air Quality	SA10: Climate Change	SA11: Greenhouse Gases	SA12: Flood Risk	SA13: Water Quality	SA14: Noise	SA15: Waste	SA16: Efficient Use of Land
Our Network	Sustainable First Choice	+	+	+	+	+/-	-	+	+/-	+/-	?	+/-	?	?	+/-	?	-
	A Great and Healthy Place	+	+	?	++	0	0	+	0	+	0	+	0	0	+	0	0
	Reduce Environmental Impacts	0	+	+	+/-	++	?	+	+/-	+	++	+	?	?	++	?	?
	Reliable and Resilient Network	+/-	0	+	++	0	0	0	0	+/-	+	+/-	0	0	+/-	?	0
Larger Urban Areas	Sustainable First Choice	++	+	++	0	+	0	+	+	++	0	+/-	?	?	+/-	-	?
	A Great and Healthy Place	+	+	+	++	0	0	+	+	+	0	+/-	0	0	+/-	-	?
	Reduce Environmental Impacts	+	+	0	-	0	0	+	0	++	0	+	0	0	+	0	0
	Reliable and Resilient Network	+	+	+	+	0	0	0	0	+/-	?	0	?	?	+/-	?	?
Linked Settlements	Sustainable First Choice	+	+	+	+	-	-	+	+/-	+/-	?	+/-	?	?	+/-	-	-
	Reduce Environmental Impacts	+	+	0	0	++	+	+	+	++	+	+	+	+	+	0	0
	Reliable and Resilient Network	+	+	+	+	-	-	0	0	+/-	?	+/-	?	?	+/-	?	?
Coastal Towns	Sustainable First Choice	+	+	+	++	0	0	+	+	+	0	+	?	?	0	?	?
	A Great and Healthy Place	+	+	+	+	-	-	+	+	+	?	-	?	?	+/-	-	-
	Reduce Environmental Impacts	+	+	+	0	0	0	0	0	+	0	+	0	0	+	0	0
	Reliable and Resilient Network	+	+	0	+	-	0	+/-	-	0	?	0	?	?	0	?	?
Chard, Crewkerne and Wellington	Sustainable First Choice	++	++	++	+	-	--	+/-	+/-	+/-	?	+/-	?	?	+/-	-	-
	A Great and Healthy Place	+	+	+	+	0	0	+	0	+	0	0	0	0	+	?	?
	Reduce Environmental Impacts	+	+	0	0	0	0	0	0	+	0	+	0	0	+	0	0
	Reliable and Resilient Network	+	+	+	+	0	0	0	0	+	?	0	?	0	0	0	0
Rural Somerset	Sustainable First Choice	++	++	++	+	-	--	+/-	+/-	+/-	?	+/-	?	?	+/-	-	-
	A Great and Healthy Place	++	+	+	++	+/-	+/-	+	+	+/-	0	+/-	?	0	+	0	0
	Reduce Environmental Impacts	+	+	+	0	0	0	0	0	+	0	+	0	0	+	0	0
	Reliable and Resilient Network	+/-	+	-	0	0	0	+	+	+	0	0	0	0	+	0	0

Table 5-2 - Summary of Policy Significant Effects

SA Objective	Number of Significant Effects			Summary of Significant Effects
	++	--	?	
SA1: Population and Equalities	4	0	0	Significant positive effects have been identified for four policies; Larger Urban Areas – Sustainable First Choice, Chard, Crewkerne and Wellington – Sustainable First Choice, Rural – Sustainable First Choice, and Rural – A Great and Healthy Place. Generally, these policies contribute to improving the transport network for future generations, improving resilience to changes in population needs. They also contribute to improving connectivity across Somerset, including providing links between rural and urban areas both within and outside of the County. These improvements will also improve access to local facilities and town centres. It is also anticipated that developments of new infrastructure (such as mobility hubs, active travel upgrades and train station upgrades) may include accessibility improvements, improving accessibility of public transport particularly for people with mobility aids or access issues. Additionally, Larger Urban Areas – Sustainable First Choice also aims to improve access to public transport through capping bus fares and improving the shared car network. It is anticipated this will improve access for those who may rely on public transport. Specifically, Rural – A Great and Healthy Place also contributes to improving a sense of community within the area reducing loneliness amongst rural communities.
SA2: Human Health	2	0	0	Two significant positive effects have been identified for human health. These effects have been identified for both Chard, Crewkerne and Wellington – Sustainable First Choice and Rural – Sustainable First Choice. These policies both contribute to developing public and active transport across Somerset, encouraging residents and visitors to take part sustainable transport, improving physical activity rates and therefore physical health. Additionally, these policies contribute to improving air quality as a result of encouraging a modal shift will also improve physical health, particularly for children, the elderly, pregnant women and those with respiratory conditions exacerbated by poor air quality.
SA3: Economy and Employment	3	0	1	Larger Urban Areas – Sustainable First Choice, Chard, Crewkerne and Wellington – Sustainable First Choice, and Rural – Sustainable First Choice have all resulted in significant positive effects on economy and employment. Generally, these policies improve access to public and active transport networks and expand their connectivity. Improving access and connectivity between these services will improve access across the County, including to services, town centres and employment opportunities. Improving journey times and public transport reliability is also anticipated to improve access to employment. Rural – Sustainable First Choice, specifically works with the tourism and leisure industry to promote sustainable travel may promote these services to tourists, improving the economy of these sectors within rural areas. Uncertain effects have been identified for Our Network – A Great and Healthy Place as exact measures within town centre parking strategies are currently unknown. If parking provision is reduced, this may result in discouragement of town centre uses if parking levels are not in line with community needs.
SA4: Community Safety	5	0	0	Five policies have resulted in significant positive effects on community safety; Our Network – A Great and Healthy Place, Our Network – Reliable and Resilient Network, Larger Urban Areas – A Great and Healthy Place, Coastal Towns – Sustainable First Choice; and Rural Somerset – A Great and Healthy Place. Generally, these policies increase the safety of the transport network, particularly for road and pedestrian users. This is anticipated to reduce the number of accidents and KSI on Somerset's roads. There are also anticipated improvements to reducing the far of crime in areas of improved cycle parking.
SA5: Biodiversity	2	0	0	Two significant positive effects have been identified under Our Network – Reduce Environmental Impacts and Linked Settlements – Reduce Environmental Impacts. These policies have identified that improvements to habitats and therefore species in Somerset and reductions to environmental impacts of the road network (including noise) will reduce impacts on biodiversity, particularly species living in hedgerows close to the road network.
SA6: Natural Capital	0	2	1	Two significant negative effects have been identified under Chard, Crewkerne and Wellington - Sustainable First Choice and Rural Somerset – Sustainable First Choice. It has been identified that there is potential for negative effects on natural capital as a result of the development of the new railway stations and parking facilities that requires land take. This may result in permanent loses of natural capital. However, the scale and nature of this is likely to be determined by individual scheme design and location. One uncertain effect has been identified for Our Network – Reduce Environmental Impacts as exact measures for improving biodiversity are currently unknown. However, there is potential that these measures may also contribute to improving natural capital within the County.

SA7: Landscape and Townscape	0	0	0	No significant positive effects have been identified for landscape and townscape. The majority of policies have resulted in minor positive effects. Effects have been detailed in full in **Appendix E**.
SA8: Historic Environment	0	0	0	No significant positive effects have been identified for historic environment. Generally, policies have resulted in negligible, mixed positive and negative effects, or minor positive effects. Effects have been detailed in full in **Appendix E**.
SA9: Air Quality	3	0	0	Three significant positive effects have been identified under Larger Urban Areas - Sustainable First Choice, Larger Urban Areas - Reduce Environmental Impacts, and Linked Settlements - Reduce Environmental Impacts due to the potential improvements to journey times and public transport. This is likely to reduce the use of private vehicles and reduce congestion on Somerset's roads, improving air quality. Additionally, removing the air quality exceedances in Yeovil and Taunton will result in significant positive effects on air quality, and encouraging electric vehicle use will also contribute to improving air quality within Somerset's urban areas.
SA10: Climate Change	1	0	9	One significant positive effect has been identified under Our Network - Reduce Environmental Impacts due as it is anticipated that reducing carbon in the maintenance of the highways network will contribute to positive effects on climate resilience. This will contribute to reducing the levels of embodied carbon within the transport network, as well as directly reducing carbon emissions. Nine uncertain effects have been identified for this objective across the policies, as it is currently unclear if climate resilience measures, such as SuDS, will be implemented within new trails and maintenance strategies. This is likely to be determined by individual scheme design that may arise from the LTP.
SA11: Greenhouse Gases	0	0	0	No significant positive effects have been identified for greenhouse gases. Generally, policies have resulted in mixed positive and negative effects or minor positive effects. Effects have been detailed in full in **Appendix E**.
SA12: Flood Risk	0	0	13	Thirteen uncertain effects have been identified for this objective across the policies, as it is currently unclear where developments may arise and if this will be within or in close proximity to a flood zone. Additionally, any flood risk mitigation measures are currently unknown. This will likely be determined by individual schemes that may arise from the LTP.
SA13: Water Quality	0	0	11	Eleven policies have resulted in uncertain effects on water quality across the policies. For Coastal Towns – A Great and Healthy Place has resulted in uncertain effects as it is currently unclear whether the development of the coast to Bridgewater and Taunton route will reduce water quality. There is potential that construction close to the coast may result in increased pollution of water courses from surface run off if located in close proximity to a water body. The remaining policies have resulted in uncertain effects as the exact locations of development are currently unknown. There is potential that construction may result in increased pollution of water courses from surface run off if located in close proximity to a water body. For both policies, any increase in hard standing may result in increased surface run off and lead to increased pollution during operation.
SA14: Noise	1	0	0	Significant positive effects have been identified from Our Network – Reduce Environmental Effects. This policy directly works to reduce noise from the Strategic Road Network, reducing noise across the County, particularly along highly congested and highly utilised routes.
SA15: Waste	0	0	8	Eight uncertain effects have been identified for waste across the policies. Uncertain effects have been identified as there is potential for development to result in additional waste during the construction period, however it is currently uncertain if development that may arise, including new walking and cycling trails and maintenance, will utilise circular economy principles.
SA16: Efficient Use of Land	0	0	8	Eight uncertain effects have been identified for efficient use of land across the policies as it is currently unclear whether the development of new public transport infrastructure (including corridors and mobility hubs) will require additional land for development. There is potential for land take or loss of greenfield land within these developments, particularly if arising in rural areas. However, this is likely to be determined by individual scheme design.

6 ASSESSMENT OF ACTION PLAN

6.1 INTRODUCTION

6.1.1. The assessment of LTP4 actions are summarised below and presented in full in **Appendix F**. A matrix approach has been used for the assessment which has used the significance criteria identified in **Table 6-1** below. It should be noted that measures have been assessed as a whole against each of the objectives, divided into six 'place' categories: Our Network; Larger Urban Areas; Linked Settlements; Chard, Crewkerne and Wellington; Coastal Towns and Rural Somerset

6.1.2. **Table 6-2** provides an overview on the performance of the action plan measures against each SA objective. For the purpose of the SA, significant effects are deemed to be the following:

- Significant Positive effects;
- Significant Negative effects; and
- Uncertain effects.

6.1.3. Further details on the insignificant effects (i.e. minor positive, minor negative, mixed and neutral effects) are detailed in **Appendix F.** The Appendix also sets out the nature of effects such as magnitude, spatial extent, and duration.

Table 6-1 – Significant of Effect

Effect Significance	Key
Potential for significant positive effects	**++**
Potential for minor positive effects	**+**
Potential for minor negative effects	**-**
Potential for significant negative effects	**--**
Uncertain effects – Uncertain or insufficient information on which to determine the appraisal at this stage	**?**
Potential for both positive and negative effects	**+/-**
Negligible / No effect	**0**

6.2 SUMMARY OF EFFECTS

Table 6-2 provides an overview on the performance of each Place and Objectives against each of the SA objective. **Table 6-3** outlines significant effects based on each SA objective.

6.3 SUMMARY OF ACTION PLAN ASSESSMENT

Table 6-2 - Assessment of Action Plan

Place	Objective	SA1: Population and Equalities	SA2: Human Health	SA3: Economy and Employment	SA4: Community Safety	SA5: Biodiversity	SA6: Natural Capital	SA7: Landscape and Townscape	SA8: Historic Environment	SA9: Air Quality	SA10: Climate Change	SA11: Greenhouse Gases	SA12: Flood Risk	SA13: Water Quality	SA14: Noise	SA15: Waste	SA16: Efficient Use of Land
Our Network	Sustainable First Choice	+	+	+	+	0	0	+/-	+/-	+	+	+	?	?	+	?	?
	A Great and Healthy Place	+	+	+	++	0	0	+	+	+/-	+	+	0	0	+	0	0
	Reduce Environmental Impacts	+	+	?	+	++	+	+	+	+	+	++	?	?	++	?	?
	Reliable and Resilient Network	+/-	+	+	+	0	0	0	0	+	+	+	+	0	0	+	+
Larger Urban Areas	Sustainable First Choice	+/-	+	+	+/-	?	?	+/-	+/-	+	+	+	0	0	+	?	?
	A Great and Healthy Place	+	++	+	++	?	?	+/-	+/-	+/-	+	+	?	?	+	?	+/-
	Reduce Environmental Impacts	+/-	+	+	+/-	0	0	+/-	+/-	++	+	+	0	0	+	0	0
	Reliable and Resilient Network	+	+	++	+	?	?	+/-	+/-	+	+	+	0	0	+	0	0
Linked Settlements	Sustainable First Choice	++	+	+	++	+	0	+/-	+/-	+	+	+	?	?	+	?	?
	A Great and Healthy Place	+	+	+	++	+/-	+/-	?	?	+/-	+	+	?	?	+	?	?
	Reduce Environmental Impacts	+	+	+	0	0	0	0	0	+	+	+	0	0	0	0	0
	Reliable and Resilient Network	+	+	+	+	?	0	0	0	+	+	+	?	?	0	?	?
Coastal Towns	Sustainable First Choice	++	+	+	+	0	0	+/-	+/-	+	+	+	0	0	+	0	0
	A Great and Healthy Place	+	+	+	++	?	?	++	?	+	+	+	?	?	+	?	?
	Reduce Environmental Impacts	+	+	+	0	0	0	0	0	+	+	+	0	0	+	0	+
	Reliable and Resilient Network	+	+	0	++	0	0	+	0	+/-	+	+	0	0	+	0	0
Chard, Crewkerne and Wellington	Sustainable First Choice	+	+	++	+	?	?	?	?	+	+	+	?	?	+/-	?	?
	A Great and Healthy Place	+	+	+	++	0	0	+/-	+/-	+	+	+	?	?	+	?	+
	Reduce Environmental Impacts	+	+	+	0	0	0	0	+	+	+	+	0	0	+	0	0
	Reliable and Resilient Network	+	+	+	+	0	0	0	0	+	0	0	0	0	?	0	0
Rural Somerset	Sustainable First Choice	++	+	+	++	?	?	?	?	+	+	+	?	?	+/-	?	?
	A Great and Healthy Place	++	+	+	+	?	?	+/-	+/-	?	+	+	?	?	+	?	?
	Reduce Environmental Impacts	+	+	+	+	0	0	0	0	+	+	+	0	0	+	0	0

Table 6-3 - Summary of Action Plan Significant Effects

SA Objective	Number of Significant Effects			Summary of Significant Effects
	++	--	?	
SA1: Population and Equalities	4	0	0	Four significant positive effects resulting from measures in the action plan have been identified, resulting from improving bus stop facilities, 20mph zones and enhancing mobility options improves accessibility and inclusivity, benefitting groups with mobility challenges or disabilities and can enhance connectivity and reduce transportation barriers, promoting inclusivity and equitable access to transport and health services such as Glastonbury Community Hospital. In addition, car share networks enhance social inclusion by providing flexible and accessible transportation options that cater to diverse mobility needs and preferences. By offering on-demand access to shared vehicles, car share networks empower individuals to travel independently, connect with their communities and access opportunities.
SA2: Human Health	1	0	0	One significant positive effect has been identified resulting from measures in the action plan on SA2, resulting from increased opportunities for active travel through walking and cycling infrastructure. These include improved physical and mental health outcomes. Additionally, road safety plans and 20mph zones contribute to safer road environments, reducing the risk of accidents and injuries and further promoting public health.
SA3: Economy and Employment	2	0	1	Two significant positive effects have been identified under the objectives in Larger Urban Areas - Reliable and Resilient Network and Chard, Crewkerne and Wellington – Sustainable First Choice. Significant support SA3 as efficient public transportation networks with bus priority and enhanced corridors have been found to have significant positive effects on the economy and employment. These improvements provide better access to businesses, employment centres, and commercial areas, attracting investment and supporting local businesses. They also increase footfall in town centres and enable workforce mobility, leading to job creation. One uncertain effect has been identified under ‘Our Network, Reduce Environmental Impact’ as implementing measures to reduce carbon emissions from highways may require investment, which could create job opportunities in green technology sectors and create opportunities for improving green skills. Improving traffic signals can lead to smoother traffic flow, potentially benefiting the economy by reducing congestion-related costs.
SA4: Community Safety	8	0	0	Community safety can be enhanced through improved bus facilities, reliable DRT services, secure cycle parking, well-designed railway stations, and enhanced road safety. Bus facilities provide shelter, lighting, and comfort, while DRT services offer alternative transportation options for vulnerable populations. Secure cycle parking reduces theft and vandalism, while well-designed railway stations offer convenient transportation. Road safety, traffic-free walkways, and well-designed active travel routes foster active travel and reduce car dependency, creating safer environments for all road users.
SA5: Biodiversity	1	0	8	Uncertain effects have been identified for SA5 as promotion of active travel through enhanced facilities and infrastructure, as well as more accessible and reliable public transport can indirectly contribute towards preserving biodiversity through decreasing reliance on car travel, reduced emissions and improved air quality, the direct impact on biodiversity is relatively uncertain. Improved road safety or reduced vehicle dominance may reduce instances of animal strike. One significant positive has been identified under ‘Our Network, Reduce Environmental Impact’ as exploring opportunities to improve biodiversity directly addresses this criterion by potentially enhancing habitat quality, promoting species diversity and reconnecting previously fragmented habitats. Design techniques which integrated green infrastructure with grey infrastructure can achieve biodiversity net gain as well as other co-benefits such as climate change resilience, surface water control and pollution prevention. In addition, lighting and noise may interrupt circadian rhythms and/or activities of certain species, so reducing these nuisances may help more species to thrive.
SA6: Natural Capital	0	0	7	Uncertain effects have been identified for SA6 as the location, size, scale and land required to support both the Yeovil Bus Station Mobility Hub and Taunton Bus Station Mobility Hub is unknown at this stage. There could be potential for loss of natural capital assets as a result of these developments. However design has potential to include green infrastructure and other natural assets on site.
SA7: Landscape and Townscape	1	0	3	Uncertain effects have been identified for SA7 as enhancing bus, rail, or active travel facilities can impact landscape and townscape, depending on design and integration with the character and environment of surrounding townscapes and landscapes.

				One significant positive effect was identified under ‘Coastal Towns - A Great and Healthy Place’ as enhancing road safety and reducing traffic speed can positively impact the landscape and townscape by creating safer and more aesthetically pleasing environments. Additionally, improvements to the public realm will help to improve the townscape setting in Minehead.
SA8: Historic Environment	0	0	4	Uncertain effects have been identified for SA8 as improved air quality can hasten the degradation of historic assets through reducing likelihood of corrosion, soot and particulate deposition, chemical damage and aesthetic damage such as discoloration and loss of detail as a result of air pollution. However, if land take is required, there is potential for adverse effects on heritage assets (particularly buried and unknown assets) and their setting. Additionally, there are likely to be temporary adverse effects on heritage assets during construction particularly through dust generation. Effects will be determined by scheme level design.
SA9: Air Quality	1	0	1	One significant positive effect has been identified on SA9 as zero emission vehicles and buses reduce emissions, improving air quality. Promoting EV adoption and providing charge points can reduce transportation sector emissions. Implementing freight strategies in town centres can improve efficiency, reduce congestion, and minimise idling, reducing pollutants. One uncertain effect was identified under ‘Rural – A Great & Healthy Place’ as encouraging active and public transportation modes and reducing vehicle traffic can lead to improvements in air quality by reducing emissions of pollutants such as nitrogen oxides and particulate matter. This can have positive effects on respiratory health and overall air quality in rural areas. In addition, mobile services in rural areas may reduce the need to travel by private vehicle, therefore reducing emissions. However, increased car parking facilities may also encourage use of private vehicles. It is uncertain at this time how may spaces will be allocated and whether these will provide EV charging points.
SA10: Climate Change	0	0	0	The effects identified were not considered significant and have been outlined in **Appendix F**.
SA11: Greenhouse Gases	1	0	0	One significant positive has been identified under ‘Our Network – Reduce Environmental Impact’ as implementing measures to reduce carbon emissions from highway maintenance activities, such as using low-emission vehicles and equipment or adopting sustainable construction practices, directly reduces greenhouse gas emissions. Moreover, enhancing biodiversity along road/highways infrastructure through green infrastructure, habitat restoration, or vegetation management can help sequester carbon dioxide.
SA12: Flood Risk	0	0	11	There are uncertain effects for flood risk as new developments creating safer streets for walking and cycling can indirectly influence surface water flood risk by increasing impermeable surfaces. Areas may be at risk of flooding and sea-level rise in coastal locations.
SA13: Water Quality	0	0	11	There are uncertain effects on SA13 as public transport infrastructure, such as bridges, tunnels, and embankments, can alter hydrological patterns and impact water bodies. Runoff from railways and roads, including dust, wear and tear from tyres and other particulate matter and railways may introduce pollutants into waterways, affecting water quality and aquatic habitats.
SA14: Noise	1	0	1	There are uncertain effects upon noise as a result of A38 route treatments as the measure is likely to introduce both engineered solutions and engagement/enforcement solutions to improve road safety which may help to reduce the speed of vehicles on the roads, indirectly reducing noise depending on scheme design and location. One significant positive has been identified under ‘Our Network – Reduce Environmental Impact’ as transitioning to electric or low-emission vehicles (if available) for highways maintenance could potentially reduce noise pollution associated with maintenance activities compared to traditional Internal Combustion Engine (ICE) vehicles. Renewing and upgrading traffic signals can optimise traffic flow, potentially reducing congestion and idling at intersections. By improving traffic efficiency, this action may indirectly contribute to lowering noise levels associated with vehicle engines idling or accelerating, particularly in congested areas. In addition, enhancing biodiversity along highways through new approaches to delivery and maintenance, such as planting vegetation or creating green infrastructure, can help mitigate noise pollution through sound absorption.
SA15: Waste	0	0	12	Uncertain effects have been identified for waste as there is potential for development arising from some objectives. However, the use of materials and generation of waste from development is currently unclear and is likely to be dependent upon scheme designs.
SA16: Efficient Use of Land	0	0	10	There are uncertain effects on efficient use of land as enhanced vehicle parking may result in both land take and an expansion of grey infrastructure associated with car-dependent development, which may not preserve valuable land or promote compact sustainable growth in rural areas dependent on design and location. Some objectives may consider land use patterns and development that promotes sustainable growth and preserves natural and cultural landscapes. By coordinating transportation planning with land use planning efforts, these plans help minimise urban sprawl and protect open/natural spaces.

7 ASSESSMENT OF ALTERNATIVES

7.1 INTRODUCTION

7.1.1. The SEA Regulations require an assessment of the plan, and its reasonable alternatives, taking into account the objectives and the geographical scope of the plan. The assessment of the alternatives does not need to take into account all possible alternatives, but only those that are realistic.

7.2 ASSESSMENT OF ALTERNATIVE LTP4 OBJECTIVES

7.2.1. As stated above, for any alternatives to be reasonable they need to meet the objectives of the plan, which are set out earlier in **Section 2**. Individual interventions/ measures cannot be considered a reasonable alternative in and of themselves, as they would not meet the objectives for the plan as a whole.

7.2.2. With this in mind, the identification of reasonable alternatives through the SEA process focused on options around the approach to investment options and strategic approach options to achieve plan objectives.

7.2.3.

7.2.4. **Table** 7-1 provides a summary of the alternative approach to investment options identified for the LTP4.

Table 7-1 – Approach to investment options

Option	Description	Comments	Carry forward?
1. Do Nothing	No investment in sustainable transport modes.	Not aligned with LTP vision and objectives, such an approach would do little to improve accessibility and inclusivity.	No
2. Increasing investment in public, shared and active transport	Not building roads – increasing travel choices Increased focus on active travel, shared, and public transport.	Positive contribution to a number of the vision themes, with benefits across different place types. Modes may vary across geography which is suitable for a place-based LTP.	Yes
3. Decide and provide	Base interventions on travel patterns, emerging opportunities, and engagement with local and regional stakeholders.	Positive contribution to a number of the vision themes, with benefits across different place types. Interventions may vary across geography which is suitable for a place-based LTP.	Yes
4. Increased investment focused on one sustainable travel mode (i.e. only public transport or active travel)	Carbon: Reduce, avoid, shift, improve LTP investment focused on a single mode choice. For example, investment predominantly focused on active travel or new major public transport system.	This would support a range of objectives but is unlikely to assist on all (i.e. a focus on active travel is good for enabling healthy behaviours but will likely have a small positive on access and inclusivity – and visa-versa if focused on public transport only). The most appropriate mode varies by geography, so such an approach unlikely to be suitable for a place-based LTP.	No

7.2.5. **Table** 7-2 provides a summary of the alternative options for the strategic approach options for the LTP4.

Table 7-2 – Strategic approach options

Option	Description	Comments	Carry forward?
A. Do nothing	Continue "predict and provide" strategy of predicting where transport might increase and providing new roads and junctions to accommodate the traffic.	Not aligned with LTP vision and objectives.	No
B. Increase delivery through partnerships and collaborations	Single strategy for all of Somerset	Not aligned with LTP vision and objectives.	No
C. A rural/urban approach	Separate strategies for rural and urban areas within Somerset.	Contributes to LTP vision and objectives, and such schemes align with district council priorities and likely to be deliverable.	Yes
D. A place-based approach	A strategy that is place-based.	Contributes to LTP vision and objectives, and such schemes align rural/urban priorities and likely to be deliverable.	Yes

7.2.6. Carrying forward the reasonable options above, **Table** 7-3 then brings them together to identify reasonable plan-level alternatives to meet the objectives of the plan.

Table 7-3 - LTP alternatives

	C. A rural/urban approach	**D.** A place-based approach
2. Increasing investment in public, shared and active transport	**2C** Investment into a mix of public, shared, and active transport projects, with separate strategies for rural and urban areas within Somerset. No focus on building roads. Not taking forward for assessment through the SEA as this alternative may lead to unequal resource allocation that doesn't accurately meet the needs of the rural and urban populations.	**2D** A place-based approach to increasing investment in a mix of public, shared, and active transport projects. No focus on building roads. Take this alternative forward through assessment through the SEA.
3. Decide and provide	**3C** A strategy where interventions are based on travel patterns, emerging opportunities, and engagement with local and regional stakeholders, with separate strategies designed to meet the needs of rural and urban areas of Somerset. Take this alternative forward through assessment through the SEA.	**3D** A place-based approach where interventions are based on travel patterns, emerging opportunities, and engagement with local and regional stakeholders. Take this alternative forward through assessment through the SEA.

7.2.7. Based on the table above, Options 2D, 3C, and 3D were taken forward for assessment through the SA process.

7.3 ASSESSMENT OF ALTERNATIVE ACTION PLAN INTERVENTIONS

7.3.1. **Table** 7-4 below sets out the findings of the assessment of the alternatives.

Table 7-4 – Assessment of alternatives

SA Objective	Option 2D residual significance	Option 3C residual significance	Option 3D residual significance	Description of potential effects
SA1: Population & Equalities	**+/-/?**	**+/-/?**	**+/-/?**	It is assumed that all of the options could result in the delivery of some new infrastructure and increase the capacity and connectivity of the transportation network, however, at this stage the precise scale and location of it is unknown.. In the short-term, the construction phase of such projects may negatively impact access to the transport network for some demographics, as works may result in temporary diversions, and increased traffic. It is assumed that, in line with national and local planning policy, any proposals would seek to avoid and minimise accessibility impacts and provide enhancements where possible. Therefore, a minor negative effect has been identified for all options. As Option 2D does not focus on building new roads, and instead focuses on investing in a mix of public, shared, and active transport projects, the likely disruption may be less than options 3C and 3D, which do not rule out larger infrastructure projects such as building new roads. All options are likely to have minor positive effects on populations and equalities through introducing improvements, at varying scales, to the transport network. Which is likely to increase capacity and connectivity in Somerset. Improvements that remove barriers to transport networks and improve accessibility will likely ensure that members of the community feel supported when accessing the transport network or using it to access other services. At this stage, all three options have the potential for minor positive and negative effects. Additionally, all options have an element of uncertainty given the strategic nature of the options and lack of information in terms of location and scale of infrastructure.
SA2: Human Health	**+/**	**+/-**	**+/-**	In the short-term, during construction, the delivery of new or enhanced infrastructure could result in disturbance to communities with a negative effect on health and wellbeing due to an increase in emissions and subsequent reduction in air quality during construction, alongside a possible disruption to accessing healthcare facilities. This is likely to be temporary and, in line with national and local planning policies, it is assumed that any proposals would seek to avoid or minimise disturbance to the local population. A minor negative effect has therefore been identified for all Options. Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads, and therefore there will be little-to-no disturbance to the community associated with the construction of new roads. Improvements to accessibility will likely ensure that members of the community feel safer when accessing the transport network or using it to access other services. Improvements to and creation of active travel routes are likely to improve people's health by encouraging exercise. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads, which could have negative effects on the community during the construction and operation phase. However, it is expected that best practice construction measures will be used to avoid or mitigate negative effects. Similarly to option 2D, improvements to the travel network will likely ensure that members of the community feel safer when accessing the transport network or using it to access other services. In the short-term there is likely to be some temporary minor negative effects during the construction phase as a result of increased disturbance to the community; however, it is likely that there is suitable mitigation to ensure that any residual effects are not significant but this is uncertain at this stage. In the long-term all of the options are likely to have a positive effect on health and well-being through improved opportunities for active travel. Option 2D is likely to have a positive effect of greater significance but this is uncertain. At this stage, the potential for minor positive and negative effects have been identified for Options 3C and 3D, and minor positive for option 2D.
SA3: Economy & Employment	**+/-/?**	**+/-/?**	**+/-/?**	The three options are expected to require investment, which may negatively affect the economy in the short term. Maintenance and operation of some of the proposed interventions are also likely to require investment. However, these improvements will likely return the investment over the medium to long term. In the short-term, during construction, the delivery of new or enhanced infrastructure could also result in disruption to the transport network and negatively affect access to employment. This is likely to be temporary and in the longer term the measures are likely to improve overall access to employment areas and promote more sustainable transport use.

				Additionally, In the short-term during construction, the delivery of new or enhanced infrastructure could result in disturbance to communities with a negative effect on accessing employment. This is likely to be temporary and in the longer term the measures are likely to improve overall access to employment areas and promote more sustainable transport use. Options 3C and 3D are likely to result in the delivery of more infrastructure, such as new roads, and therefore are likely to have a negative effect of marginally greater significance than option 2D. However, this negative effect is still identified as minor due to the temporary nature of construction related disruption. At this stage, the potential for minor positive and negative effects have been identified for all of the options, with an element of uncertainty, given the strategic nature of the options and lack of information in terms of location and scale of infrastructure and proposed improvements.
SA4: Community Safety	**+**	**+**	**+**	All three of the options could, at varying scales, result in an increase in investment in public, shared and active transport. The options are also likely to contribute to the reduction of traffic on the roads. Therefore, all three options are likely to improve community safety, at different scales, depending on the level of improvements proposed. Option 2D is likely to result in a positive effect of greater significance for community safety due to increased investment in improving active travel routes compared to the other options. This may include projects focused on community safety such as safe crossings and reducing overall traffic on the road. Option 3C and 3D place greater emphasis on travel patterns, emerging opportunities, and engagement with local and regional stakeholders and are therefore likely to identify areas with high incident counts and prioritise improvement measures in those areas. Overall, all three options are likely to include measures that seek to enhance access to sustainable transport modes and reduce the number of vehicles on the roads and will therefore have a minor long-term positive effect on safety.
SA5: Biodiversity	**-/+/?**	**-/+/?**	**-/+/?**	Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. This is unlikely to lead to increased levels of disturbance, whereas, options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads, which may increase levels of disturbance during the construction phase. In the long term, option 2D could result in less vehicles on the roads with indirect positive effects on this SA topic through reduced disturbance from road vehicles and improved air quality. Conversely, enhanced and/ or additional walking and cycling routes could result in increased physical disturbance if they pass through or improve access to sensitive receptors. Options 3C and 3D may also lead to less private car usage as strategies are based on local travel patterns and opportunities, with indirect positive effects on this SA topic through reduced disturbance from road vehicles and improved air quality At this stage, the potential for minor positive and negative effects have been identified for all the options with an element of uncertainty given the strategic nature of the options and lack of information in terms of location and scale of infrastructure.
SA6: Natural Capital	**-/+/?**	**-/+/?**	**-/+/?**	Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. This is unlikely to lead to increased levels of disturbance, whereas, options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads, which may increase levels of disturbance during the construction phase. In the long term, option 2D could result in less vehicles on the roads with indirect positive effects on this SA topic through reduced disturbance from road vehicles and improved air quality. Conversely, enhanced and/ or additional walking and cycling routes could result in increased physical disturbance if they pass through or improve access to sensitive receptors. Options 3C and 3D may also lead to less private car usage as strategies are based on local travel patterns and opportunities, with indirect positive effects on this SA topic through reduced disturbance from road vehicles and improved air quality At this stage, the potential for minor positive and negative effects have been identified for all the options with an element of uncertainty given the strategic nature of the options and lack of information in terms of location and scale of infrastructure.
SA7: Landscape & townscape	**+/-**	**+/-**	**+/-**	Option 2D places greater emphasis on a place-based approach to increasing investment in a mix of public, shared, and active transport projects, straying away from building roads. Improvement to active travel modes may have a positive impact on the community's relationship with landscapes if individuals spend more time outside. This could have a minor indirect impact on landscapes if increases in active travel improve the value put on nature and there is new appreciation of, and incentive to protect, these spaces. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads. Option 3C aims to have separate strategies for rural and urban areas of Somerset, whereas option 3D takes a place-based approach. A place-based approach may be better suited to picking up nuances associated with the local landscape and townscape. In the short-term this could result in increased levels of disturbance during the construction phase to the landscape and townscape; however, it is likely that there is suitable mitigation to ensure that any residual effects are not significant, in line with national and local planning policies.

				For all options, in the long-term, they could result in less vehicles on the roads with indirect positive effects through reduced vehicles on the road. There is also the potential benefit of a greater scale of improvements to the public realm and positive impacts on townscape. It is therefore difficult to identify any significant differences between the options in terms of the nature and scale of effects on the landscape and townscape. At this stage the potential for minor positive (long-term through reduced vehicles and improved public spaces) and negative effects (through short-term temporary disturbance during construction) have been identified for all the options.
SA8: Historic environment	**+/-**	**+/-**	**+/-**	Option 2D places greater emphasis on active travel and not building roads, whereas longer-term infrastructure projects such as building roads is not ruled out for options 3C and 3D. In all cases, it is expected that maintenance works would likely take place. In line with national and local planning policy it is assumed that the any proposals would seek to conserve and enhance the historic environment, including the significance of heritage assets (designated and non-designated) and their setting. In the longer-term, it is anticipated that all options would result in less vehicles on the road and improvements to the public realm, particularly for option 2D which focuses on active travel. A reduction in vehicles on the road and an increase in use of sustainable and active transport, may have indirect positive effects on the historic environment through reduced disturbance and atmospheric emissions from road vehicles. Options 3C and 3D also have the potential for indirect positive effects on the historic environment through improvements in connectivity. This may result in a wider reaching sustainable transport network, increasing access to historic assets. Given the strategic nature of the options and lack of information in terms of location and scale of infrastructure, it is difficult to identify any significant differences between Options 2C, 3C and 3D in terms of the nature and scale of effects. At this stage, the potential for minor positive and negative effects have been identified for all these options.
SA9: Air quality	**+**	**+/-**	**+/-**	Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. This increased investment in sustainable and/or active transport may result in more widespread improvements to the existing active and sustainable transport network, which may result in a reduction of air pollutants across a wider area. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads. In the short-term this could have temporary negative effects on air quality during the construction period; however, it is expected that best practice construction measures will be used to avoid or mitigate negative effects. In the longer-term, all of the options could result in less vehicles on the roads which could result in positive effects on this SA topic through improved air quality. At this stage, the potential for minor positive and minor negative effects have been identified for options 3C and 3D, and minor positive effects have been identified for option 2D.
SA10: Climate change	**+**	**+**	**+**	It is assumed that all of the options could result in the delivery of some new infrastructure, however, at this stage the precise scale and location of it is unknown. In line with national and local planning policy, it is assumed that any proposals would be designed and built to be resilient and adaptable to the impacts of climate change. All three of the options seek to promote the use sustainable transport, active travel, and public transport at varying scales. Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. This increased investment in sustainable and/or active transport may result in more widespread improvements to the existing active and sustainable transport network, which may result in a reduction of greenhouse gases across a wider area. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads. In the short-term this could have temporary negative effects on climate change during the construction period due to an increase in greenhouse gas emissions; however, it is expected that best practice construction measures will be used to avoid or mitigate negative effects. In the longer-term, all of the options could result in less vehicles on the roads which could result in positive effects on this SA topic through the reduction of greenhouse gases. It is expected that all of the options will have a long-term positive effect on climate change mitigation through improved access to sustainable transport modes, a reduction in private vehicle use, and promotion of active travel, and therefore greenhouse gas emissions.
SA11: Greenhouse gases	**+**	**+**	**+**	It is assumed that all of the options could result in the delivery of some new infrastructure, however, at this stage the precise scale and location of it is unknown. In line with national and local planning policy, it is assumed that any proposals would be designed and built to be resilient and adaptable to the impacts of climate change. All three of the options seek to promote the use sustainable transport, active travel, and public transport at varying scales.

				Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. This increased investment in sustainable and/or active transport may result in more widespread improvements to the existing active and sustainable transport network, which may result in a reduction of greenhouse gases across a wider area. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads. In the short-term this could have temporary negative effects on climate change during the construction period due to an increase in greenhouse gas emissions; however, it is expected that best practice construction measures will be used to avoid or mitigate negative effects. In the longer-term, all of the options could result in less vehicles on the roads which could result in positive effects on this SA topic through the reduction of greenhouse gases. It is expected that all of the options will have a long-term positive effect on climate change mitigation through improved access to sustainable transport modes, a reduction in private vehicle use, and promotion of active travel, and therefore greenhouse gas emissions.
SA12: Flood risk	**?**	**?**	**?**	Uncertain effects have been identified for flood risk as it is currently unclear where developments may arise and if this will be within or in close proximity to a flood zone. Additionally, any flood risk mitigation measures are currently unknown. Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads which could indirectly impact waterbodies and could have negative effects on flood risk water quality by decreasing permeability and increasing the risk of surface flooding. However, it is expected that best practice construction measures will be used to avoid or mitigate negative effects.
SA13: Water quality	**+**	**-/+**	**-/+**	Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads. In the short-term this could indirectly impact waterbodies and could have temporary negative effects on water quality through waste or runoff entering the watercourse; however, it is expected that best practice construction measures will be used to avoid or mitigate negative effects. There is also the potential for positive effects through the incorporation of sustainable drainage measures into new infrastructure which contribute to the sustainable management of water. In the longer-term, all of the options could result in less vehicles on the roads with indirect positive effects on this SA topic through improved air quality and reduced contaminated run off from road surfaces as a result of vehicles. At this stage, the potential for minor positive and minor negative effects have been identified for options 3C and 3D, and minor positive effects have been identified for option 2D.
SA14: Noise	**+**	**+/-**	**+/-**	Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads, and therefore there will be little-to-no noise pollution associated with the construction of new roads. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads, which could have negative effects on noise pollution during the construction and operation phase. However, it is expected that best practice construction measures will be used to avoid or mitigate negative effects. Overall, all three of the options will have a long-term positive effect on this SA topic through improved access to sustainable transport modes and promotion of active travel, and therefore less vehicles on the roads generating noise. Option 2D is likely to have a positive effect of greater significance but this is uncertain. In line with national and local planning policy, it is assumed that any proposals would be designed and built to minimise noise pollution.
SA15: Waste	**-**	**-**	**-**	Construction associated with the alternative options and their maintenance during operation is expected to involve the use of resources and generation of waste. However, the scale of resource use and waste is currently unknown, as is the extent to which recycled resources can be used or waste will be recyclable. As a result, minor negative effects have been predicted for the options. It is expected that best practice construction measures will be utilised to mitigate the impacts of waste, and recycled and recyclable materials will be used where possible during construction. There is little to differentiate between the options at this stage, taking a precautionary approach it is assumed that there is the potential for minor long-term negative effects through the loss of some greenfield and agricultural land.
SA16: Efficient use of land	**-**	**-**	**-**	Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. Options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement. This could result in the delivery of new infrastructure, such as roads which may require additional land take. It is anticipated that the delivery of new strategic walking and cycling trails

				may also require additional land take. The precise location of developments is currently unknown, however there is potential that this may result in loss of agricultural or BMV land within Somerset. At this stage, the potential for minor negative effects have been identified for all options.

7.4 OUTLINE REASONS FOR SELECTION OR REJECTION OF ALTERNATIVES

7.4.1. All three of the options seek, at varying scales, an improvement in public, shared and active transport. Option 2D places a greater emphasis on active travel and investment into a mix of public and shared transport projects, with no focus on building roads. Whereas options 3C and 3D base interventions on travel patterns, emerging opportunities and stakeholder engagement.

7.4.2. Whilst options 2D, 3C and 3D represent reasonable alternatives to the Preferred Approach, they have not been selected. This is primarily because the Preferred Approach optimises the potential benefits of the LTP4 with regard to the expected, and realistic funding for implementing the policies and interventions in the plan.

7.4.3. Option 2D is unlikely to have any significant negative or positive effects against any of the SA Objectives. A number of minor positive, minor negative, and uncertain effects were identified for Option 2D.

7.4.4. Options 3C and 3D score similarly, with no significantly positive or significantly negative effects, and a number of minor positive, minor negative, and uncertain effects.

8 CUMULATIVE EFFECTS

8.1 INTRODUCTION

8.1.1. The SEA Regulations require that cumulative effects are considered when identifying likely significant effects. Cumulative effects arise, for instance:

- Where several individual policies and sites have a combined effect on an objective; or
- Where several policies and sites each have insignificant effects but together have a significant effect.

8.1.2. The significance of cumulative effects resulting from a range of activities, or multiple incidences of one activity, may vary based on factors such as the nature of the proposed sites and policies and the sensitivity of the receiving communities and environment.

8.1.3. This section therefore presents the findings of the following:

- Consideration of how different proposed visions and objectives within SC LTP4 may interact and cause cumulative effects on a receptor (Intra-project effects); and
- How the proposed visions and objectives within SC LTP4 could cause cumulative effects in association with other plans, policies and projects in the surrounding area (Inter-project effects).

8.1.4. The assessment has been undertaken using the methodology outlined in **Section 3.3.**

8.2 INTRA-PROJECT EFFECTS

8.2.1. The SEA assessment of visions and objectives drew out potential intra-project cumulative effects. These have been identified in **Table 8-1**.

Table 8-1 - Intra-Project Cumulative Effects Summary

SA Objective	Effects	Summary
SA1: Population and Equalities	+	Positive cumulative effects are anticipated for population as the LTP4 vision themes, objectives and Action Plan develop SC's transport infrastructure for current and future generations. All vision themes (Reliable and Resilient Network, A Great and Healthy Place to Live, Reduce Environmental Impacts, and Reliable and Resilient Network) include objectives to inclusively improve transport and active travel facilities across the County. The LTP4 also provides improved transport accessibility to communities, including rural areas, as well as improving the reliability of the transport network and public transport.
SA2: Human Health	+	There are potential positive cumulative effects on health as a result of all LTP4 objectives and the Action Plan. The strategy and action plan contribute to improving healthy lifestyles due to increased physical activity through active travel and air quality improvements, as well as improving mental wellbeing through improved access to services, leisure and transport. Additionally, the LTP4 works to reduce the number of KSI on the County's roads, further improving physical health.
SA3: Economy and Employment	+	Positive cumulative effects are anticipated for economy and employment. The LTP4 improves transport and active travel connectivity across the County, improving access to employment locations and town centres, as well as rural and coastal areas. The vision themes and Action Plan also improve connectivity to the wider region, improving access to employment. There are also positive cumulative effects anticipated as a result of improvements to journey time reliabilities. The development of improved transport links is also likely to improve town centre and rural economies.
SA4: Community Safety	+	Positive cumulative effects are anticipated for community safety as a result of vision themes Sustainable First Choice, A Great and Healthy Place to Live, and Reliable and Resilient Network, as well as the Action Plan. The LTP4 is likely to improve user safety for both pedestrian and road users, including children, reducing the number of KSI on Somerset's roads. The LTP4 also contributes to improving the safety of public transport services and facilities, including for vulnerable communities. Additionally, the LTP4 is likely to result in cumulative improvements to secure cycle parking, reducing theft and vandalism.
SA5: Biodiversity	+/-	There is the potential for negative cumulative effects on biodiversity if multiple large scale developments were to come forward. Depending upon the number and type of options selected and their proposed location, there is potential for a cumulative loss of land, which could lead to damaged and segregated habitats. However, there is the potential for positive cumulative effects. These developments may provide biodiversity enhancements through reductions in habitat disturbance, as well as preserving habitats and species through improved air quality.
SA6: Natural Capital	+/-	There is potential for negative effects upon natural capital as a result of developments that may come forward. Developments could result in land take, resulting in loss of natural capital. Additionally, construction work has the potential to disturb these areas through noise, dust spoiling and air quality reductions. However, positive cumulative effects may occur as there is potential that improvements to air quality across the County as a result of options and objectives may reduce degradation of natural capital and preserve this asset.
SA7: Landscape and Townscape	+/-	There is the potential for negative cumulative effects on landscapes and townscapes if multiple developments were to come forward in close proximity to greenbelt land, parks and open spaces and areas with high landscape or townscape values. During construction of these new developments there is the potential for disturbance to the setting and tranquillity of these areas. However, positive cumulative effects may arise due to high quality design of the proposed developments and improvements to the public realm, parks and open spaces and the natural environment.
SA8: Historic Environment	+/-	There is the potential for negative cumulative effects on the historic environment if multiple developments were to come forward in close proximity to heritage assets. During construction of these new developments there is the potential for disturbance to the historic environment due to noise, vibration and temporary reductions in air pollution (dust soiling). However, positive cumulative effects may arise due to the historically sensitive design of proposed developments to fit in with the setting of any surrounding designated heritage assets. The LTP4 may also result in a cumulative increase in protection and preservation of heritage assets in the County, particularly through improved air quality and reduced traffic movements. This could result in better understanding and appreciation of the historic environment.
SA9: Air Quality	+/-	Temporary negative cumulative effects have the potential to result during the construction phase, if multiple developments, with overlapping construction periods, were to come forward. Construction of these developments may reduce the air quality through an increase in particulate matter and dust.

		However, the development of new public transport infrastructure and active travel infrastructure will enable more people to use public transport modes instead of the use of a private car, helping to improve air quality. Therefore, there is also the potential for positive cumulative effects to result if multiple developments were to come forward. Additionally, the Cleaner Air objective, contributes to improving air quality within the County.
SA10: Climate Change	**+/-**	The addition of increased use of hard standing surfaces as part of the proposed developments will increase surface water runoff. Therefore, a number of new developments could result in potential negative cumulative effects on flooding, particularly if developments are located within flood zone 2 or 3. However, there is potential that developments may include climate resilience measures, including sustainable urban drainage systems (SUDs) which will help to reduce overall flood risk and improve resilience. If climate resilience measures are included within multiple developments, there is potential for positive cumulative effects.
SA11: Greenhouse Gases	**+/-**	If multiple developments were to come forward there is the potential for negative cumulative effects on GHGs, due to the construction required for new developments. In the longer term, there is potential that if multiple developments were to arise, positive cumulative effects on GHGs may arise due to the improvement in infrastructure reducing the number of private vehicles on roads, as well as reducing congestion on the County's roads.
SA12: Flood Risk	**+/-**	There are potential negative cumulative effects on flooding if multiple developments were to arise within flood zone areas. Developments could result in an increase in impermeable surfaces, increasing flood risk. Flood risk measures are likely to be development specific, but there may be cumulative benefits if implemented across multiple developments.
SA13: Water Quality	**+/-**	There is potential for negative cumulative effects if multiple developments were to come forward. There is potential for cumulative increase in surface water runoff, and impacts on surface water and groundwater, particularly from physical alteration as a result of development from the action plan. Water quality measures are likely to be specific to each development, but there may be cumulative benefits as a result of traffic reductions, reducing pollution load in runoff, or the inclusion of SuDS, if implemented across multiple developments.
SA14: Noise	**+/-**	The development of transport interventions may result in potential positive cumulative effects on noise. The improvement of public transport and active travel corridors is likely to reduce the number of private vehicles and congestion on the County's roads, reducing noise. However, there is potential for negative cumulative effects on noise if multiple developments were to arise at the same time as during construction there are likely to be cumulative increases in noise. Additionally, there is potential for cumulative increases in traffic noise during construction as a result of delays and increased congestion.
SA15: Waste	**-**	There is potential for negative cumulative effects arising from developments that may come forward. If a number of developments were to arise at the same time that require additional materials, there is potential for negative effects.
SA16: Efficient Use of Land	**-**	There is potential for negative cumulative effects arising from developments that may come forward. If a number of developments were to arise at the same time that require additional materials and additional land take, there is potential for negative effects. Land take may result in loss of BMV or agricultural land, depending on the location of development

8.3 INTER-PROJECT EFFECTS

8.3.1. **Table** 8-2 below outlines the sources of potential inter-cumulative effects, whilst **Table** 8-3 details the cumulative effects identified for each of the SA Topics in relation to these policies and plans. This uses the same key to effects as set out in **Table 8-1** above.

Table 8-2 - Sources of Inter-Cumulative Effects

Policy or Plan	Plan Details
Somerset Council Plan 2023 – 2027	The Plan raises awareness of several challenges facing the county's communities, including worse education outcomes for children from lower income homes or those with additional needs, lack of affordable housing, and issues with access to local jobs and services.
Somerset Council, Improving Lives Strategy 2019-2028	The vision for Somerset is that over the next ten years, SC want organisations to work together as a partnership to create: ■ A thriving and productive Somerset that is ambitious, confident and focused on improving people's lives ■ A county of resilient, well-connected and safe and strong communities working to reduce inequalities ■ A county infrastructure that supports affordable housing, economic prosperity, and sustainable public services ■ A county and environment where all partners, private and voluntary sector, focus on improving the health and wellbeing of all communities
Somerset Growth Plan 2017-2030	The Plan aims to: ■ Create a shared ambition and vision for sustainable and productive growth ■ Support the delivery of infrastructure and housing to enable growth to take place ■ Increase the scale, quality and sustainability of economic opportunity in Somerset ■ Ensure participation and access to these opportunities for local residents
Heart of the South West (HotSW) Local Enterprise Partnership (LEP) (2014) Strategic Economic Plan 2014 – 2030	The Plan sets out how the SW LEP will maximise economic growth and contains three core aims: ■ Creating the conditions for growth – Improving our infrastructure and services to underpin growth ■ Maximising productivity and employment opportunities – Stimulating jobs and growth across the whole economy ■ Capitalising on distinctive assets – Utilising our distinctive assets to create opportunities for business growth and better jobs ■ These core aims are underpinned by cross cutting aims of environmental sustainability and social inclusion.
Peninsula Transport Strategy	Peninsula Transport is a shadow sub-national transport body, bringing together the five lead transport authorities in the peninsula; Cornwall, Devon, Plymouth, Somerset and Torbay to transform the economic

	potential of the region. The vision for the peninsula is to: transform transport across the peninsula, enabling our society and economy to thrive and our unique and outstanding environment to flourish. The Peninsula Transport Strategy is focused on establishing a more resilient and accessible transport system for the south west, boosting economic growth while supporting more sustainable ways to travel. Over the next 30 years our work will focus on: ■ Easier journeys: establishing a customer focussed integrated public transport system to make travel easy and accessible. Our work will also seek to enable improved connectivity of active travel with bus and rail services. ■ Going electric: affordable zero-emission transport through a reliable electric vehicle charging network and alternative fuel choices for road freight and buses ■ A connected peninsula: safe, reliable, resilient and sustainable links to and throughout the peninsula, allowing for climate adaptation ■ Completing the transport network: improving connections within a safe and fully integrated transport network on a path to net zero Together with an implementation plan, currently under development, the strategy will help to advise government on the unique transport needs of the peninsula and advocate for delivery of transport projects that will make a real difference to the region.
Rail Strategy for the South West	The Strategy sets out five priority themes: ■ Improving choice: making rail the natural choice for passengers and freight through quicker, simpler and more affordable journeys ■ Reducing emissions: switching passengers and freight to rail to relieve pressure on roads ■ Supporting demographic change: making stations more accessible and growing the rail network to connect new communities as the population expands ■ A resilient network: continuing to highlight risks of disruption to the rail network in vulnerable areas ■ Underpinning growth: making the region's towns and cities more accessible by rail
South West Rural Mobility Strategy	This Strategy, developed jointly by the Peninsula Transport and Western Gateway Sub-national Transport Bodies (STBs) sets out mobility policy for the whole South West of England to support the levelling-up of local rural communities and economies. It identifies an ambitious vision for the future of rural mobility and a set of policies and proposals to achieve it.
Somerset Bus Strategy 2018-2026	The aim for the Bus Strategy (2018-2026) is: ■ Maintain services that are most essential in meeting transport needs where the commercial market is unable to provide viable services

	▪ Work closely with communities, operators and Government to change established models of rural bus service provision for the benefit of our communities
Somerset E-Bike Strategy	Somerset E-bike and E-cargo bike Strategy's 2035 Vision is that: 'By 2035, Somerset will create an environment that supports the use of e-bikes and e-cargo bikes. Representing a central part of the mobility mix, use of e-bikes and e-cargo bikes should be commonplace across the county for people and organisations alike, inclusive of all'.
Somerset Electric Vehicle Charging Strategy	The Somerset EV Charging Strategy recognises that a reduction in total vehicle miles travelled, and electrification of surface transport is needed to meet both climate and air quality goals. Being a mostly rural county, Somerset faces a number of specific challenges and there is a risk that more rural locations are left behind in the shift to EV. However, there is greater dependence on car travel, with longer trip distances than urban areas, providing a significant opportunity to reduce carbon emissions. This document sets out a strategy for the Somerset local authorities to help effectively deliver the necessary electric vehicle charging network for Somerset.
Somerset's Future Transport Plan	Somerset's Local Transport Plan (named Somerset's Future Transport Plan) sets out our long-term strategy for getting the best from transport. The Future Transport Plan sets out our transport policy for the next 15 years. It describes the challenges we face and the policies, strategies, plans and investments that will help us tackle these challenges. It covers the period between 2011 and 2026 and replaces Somerset's Second Local Transport Plan.
Bridgwater, Taunton and Wellington: Future Transport Strategy 2011-2026	The Bridgwater, Taunton and Wellington Future Transport Strategy acknowledges that good transport links to, in and around this area are fundamental to its economic and social vitality. The need to provide better transport options has been recognised for a number of years and has resulted in a long-term action plan.
Active Travel Strategy 2012	Somerset's Active Travel Strategy has been written to inform the Future Transport Plan and brings together the individual modal strategies for cycling, walking, information, and communication with a shared vision for Somerset residents to cycle and walk more often and more safely. The aim for the strategy is to enable the population of Somerset to make active travel choices by making these options easier to access and more attractive to use. An updated strategy is currently in development.
Somerset and Devon Mobility Hub Strategy	There are two core aims of this strategy: ▪ To ensure interoperability of mobility hub sites across a hierarchy of mobility hub types, each feeding into one another and allowing seamless integration between modes to enable end-to-end journeys; and ▪ To improve user experience by strategically locating mobility hubs where there are existing or predicted areas of economic,

	community or transport activity, reducing the need for complex journeys and use of a private car.
Local Cycling and Walking Infrastructure Plans	Local Cycling and Walking Infrastructure Plans are 10-year, focused plans for developing a cycle and walking network within the local area. There are three LCWIPs: one each for Bridgwater, Taunton and Yeovil with further being planned.
Safe Roads in Somerset: Road Safety Strategy 2017-2026	The Road Safety Strategy supports the overall vision of Somerset Council to increase prosperity and ensure that SC continues to care for and protect the people of Somerset and its visitors. The Strategy adopts a Safe System approach to road safety, seeking to ensure that no human is killed or seriously injured because of a road crash.
Neighbouring Local Plans and Strategies	Local District Council plans influencing development include: Sedgemoor Local Plan (2011-2032), Mendip Local Pan (2006-2029), South Somerset Local Plan (2006-2038), Taunton Deane Local Plan (2011-2028) and West Somerset Local Plan (2016-2032). Gloucestershire's Local Transport Plan, Wiltshire Local Transport, Devon and Torbay and Dorset Local Transport Plan, all 2011-2026, set out the future direction for managing transport in neighbouring areas.
Somerset Rail Strategy	Currently in development, the Somerset Rail Strategy will replace the Rail section of the Passenger Transport Strategy.
Nationally Significant Infrastructure Projects (NSIPs)	There are 17 Nationally Significant Infrastructure Projects in the South West region, including decided and pre-application developments including: ▪ A358 Taunton to Southfields ▪ The West Somerset Tidal Lagoon ▪ A303 Stonehenge ▪ A303 Sparkford to Ilchester Dualling ▪ A30 Temple to Higher Carblake Improvement ▪ Seabank 3 CCGT ▪ Avon Power Station 950MW Output ▪ Hinkley Point C New Nuclear Power Station ▪ Hinkley Point C Connection ▪ Hinkley Point C New Nuclear Power Station Material Change 1 ▪ Portishead Brand Line – MetroWest Phase 1 ▪ Bere Alston to Tavistock Railway Reconnection and Associated Trails ▪ A30 Chiverton to Carland Cross Scheme ▪ Lime Down Solar Project ▪ A417 Missing Link ▪ M5 Junction 10 Improvements Scheme ▪ Xlinks Morrocco-UK Power Project

Table 8-3 - Inter-Project Cumulative Effects Summary

SA Objective	Effects	**Summary**
SA1: Population and Equalities	**+/-**	Positive cumulative effects may result from the provision of new infrastructure and transport schemes, improving access and connectivity to community facilities and services, especially for the people who cannot drive or do not have access to a private car. Further positive cumulative effects would result following the introduction of the new public transport schemes (e.g. neighbouring local transport plans). This will enable people who cannot drive or own a private car to have greater access to education, jobs, healthcare, education, and community facilities, particularly in rural areas. However, new transport schemes and improved access to transport infrastructure have the potential to create disproportionate environmental burdens on certain communities, such as increased air and noise pollution, or fragmented access to green spaces, particularly if development occurs within the same locality, and time frame. These impacts can disproportionately affect marginalised communities and exacerbate existing inequalities. Disparities in transport infrastructure investment can also result in uneven economic development, exacerbating regional inequalities. Moreover, there is potential for negative cumulative effects to arise if multiple developments across the city region and in the wider area result in overcrowding. This would place a strain on the capacity of the developing transport network, inhibiting its convenience for users and preventing residents from accessing the highest level of benefit from it.
SA2: Human Health	**+/-**	Positive cumulative effects may include more accessible public transportation, pedestrian-friendly infrastructure, and safe cycling routes which promote active transportation and physical exercise, improving health and wellbeing. In addition, accessible and efficient transportation can positively impact health by reducing stress, increasing social connections, and providing access to recreational opportunities and essential services. However, transport plans, local development plans, and infrastructure projects can all affect air quality through increased traffic emissions, industrial activities, or changes in land use. Poor air quality is linked to various health problems, including respiratory diseases and cardiovascular diseases. Cumulatively, these factors can exacerbate air pollution and its health impacts, especially in areas where multiple projects or plans intersect. In addition, increased roadworks can increase congestion, exacerbating stress on users.
SA3: Economy and Employment	**+**	Positively, nationally significant infrastructure projects, such as major transportation hubs, highways, and railways, can have far-reaching economic impacts by improving regional connectivity and accessibility. These projects often require significant investment and generate employment opportunities not only during the construction phase but also in ongoing operations and maintenance. Furthermore, enhanced transportation networks can attract businesses, investors, and skilled labour to the region, spurring economic development and creating a multiplier effect on employment across various sectors.
SA4: Community Safety	**+**	Coordinated transport plans can lead to well-designed roads, traffic calming measures, and improved signage, enhancing safety for motorists, pedestrians, and cyclists. It is assumed that all schemes under wider local plans and transport plans will be built to a high standard of safety. There is potential for positive cumulative effects on community safety through the wide implementation of high-quality design and relevant safety measures. An improved public realm may also help to generate a greater sense of pride and ownership in the community, resulting in potential reduction in crime and anti-social behaviour.
SA5: Biodiversity	**+/-**	There is potential for cumulative negative effects on biodiversity. Should multiple developments, across similar timeframes come forward, loss damage or fragmentation of habitats would be anticipated. Equally the temporary cumulative air quality emissions from the construction of multiple developments would indirectly harm natural capital assets across the region. Infrastructure projects can fragment habitats and disrupt wildlife corridors, construction and maintenance of transport infrastructure can negatively impact biodiversity through soil erosion, pollution run-off and altered hydrological regimes. Positive cumulative effects may result through mandatory Biodiversity Net Gain over multiple development plans. Any biodiversity lost onsite should be mitigated by improving the quality or management of the rest of the site or deliver offsite compensation of better biodiversity value. This will bring improvements to biodiversity across the wider region. Further positive cumulative effects may result from the development of sustainable transport schemes under neighbouring local transport plans. This will increase access to public transport modes, reducing the use of a private car, and therefore reducing greenhouse gas emissions, journey times and congestion, resulting in increased tranquillity and air quality.
SA6: Natural Capital	**+/-**	Transportation plans and infrastructure projects can to habitat destruction, pollution, and fragmentation. In infrastructure projects can alter hydrological regimes, affecting water availability and quality. Disruptions to natural water flow and increased runoff from impermeable surfaces can degrade water resources, compromising their value as natural capital. Positive cumulative effects may result through mandatory Biodiversity Net Gain or green infrastructure integration over multiple development plans. This will bring improvements to biodiversity and ecosystem services across the wider region such as climate change mitigation and flood control. In addition, transport infrastructure and plans may connect people to nature, greenspaces and outdoor recreation, enhancing cultural ecosystem services.

SA7: Landscape and Townscape	**+/-**	Plans and infrastructure projects such as roads, railways, and buildings can alter the physical characteristics of the landscape. Cumulative development may result in the loss of natural habitats, fragmentation of green spaces, and changes to the visual character of the area. However, sensitively designed plans and projects can positively enhance landscape and townscapes through enhancing identity, designing with local characteristics in mind and preserving existing heritage assets.
SA8: Historic Environment	**+/-**	Proposals in the LTP4 and other plans have the potential to interact and have cumulative effects on the historic environment. Particularly if developments are constructed at the same time and within the setting of the same heritage asset (designated or non-designated). In line with national and local planning policy any proposal would be required to conserve and enhance the historic environment, including designated and non-designated heritage assets. As a result, it is considered that significant negative cumulative effects are unlikely. There is also potential for positive cumulative effects to arise as improvements to the transport network could reduce the number of vehicles on the roads and also improve and encourage sustainable access to the historic environment. Ultimately, the nature and significance of effects will be dependent on the precise location, scale and design of development and implementation of mitigation at the project level.
SA9: Air Quality	**+/-**	Temporary negative cumulative effects have the potential to result during the construction phase if multiple developments arise simultaneously as a result of these plans. Air quality will be adversely affected through the emission of dust and particulate matter via construction activities. However, in the long-term, positive cumulative effects will result through the introduction of more sustainable developments, including the shift away from private vehicle usage and towards active travel and public transport under neighbouring local transport plans
SA10: Climate Change	**+/-**	Infrastructure projects play a crucial role in enhancing community resilience and adaptation to climate change impacts. Cumulative development that incorporates climate resilience measures, such as flood defences, stormwater management systems, and green infrastructure, can reduce vulnerability to extreme weather events and climate-related hazards.
SA11: Greenhouse Gases	**+/-**	Local strategies and infrastructure projects influence land use patterns and urban form, which in turn can impact energy consumption, emissions, and climate resilience. Sprawling development characterised by low-density, car-dependent suburbs can increase vehicle miles travelled, energy consumption, and emissions. Conversely, compact, mixed-use development with efficient transportation networks and access to public transit can reduce travel distances, promote active transportation, and lower emissions associated with commuting and daily travel. Cumulative transportation plans and infrastructure projects that prioritise road-based transport over sustainable alternatives such as public transit, cycling, and walking can lead to increased emissions, exacerbating climate change. Coordinated efforts to invest in low-carbon transportation options and promote modal shifts towards more sustainable modes can help mitigate emissions. NSIPs including Lime Down Solar Project and Hinkley Point C New Nuclear Power Station can mitigate carbon emissions via low-carbon energy generation. However, cumulative infrastructure development may increase demand for materials like concrete, steel, and asphalt, which have high embodied carbon emissions as well as increased indirect emissions associated with operation and maintenance of assets over their lifecycle.
SA12: Flood Risk	**+/-**	Cumulative changes in land use, such as urbanisation and expansion of impervious surface coverage, can reduce infiltration capacity and increase stormwater runoff, leading to higher flood volumes and frequencies. However, plans and projects may involve the construction of roads, bridges, culverts, and drainage systems, which can modify the flow of water through natural watercourses and exacerbate flood risk downstream. However, plans and projects may also integrate with green infrastructure or other integrated drainage systems that enhance capacity and reduce surface water run-off through upgrading existing systems.
SA13: Water Quality	**+/-**	There is potential for cumulative increase in surface water runoff and flood risk, and impacts on surface water and groundwater, particularly from physical alteration as a result of development. Drainage and water quality measures are likely to be specific to each development, but there may be cumulative benefits if implemented across the region. Cumulative development without adequate stormwater management measures can degrade water quality in neighbouring water bodies.
SA14: Noise	**-**	Cumulative development of transportation networks neighbouring areas can lead to increased traffic volumes and congestion, increasing noise levels. Additionally, the construction and operation of transportation projects can contribute to intermittent noise increases, particularly from construction-related noise. As the transport plans support a modal shift, there is potential for a cumulative reduction in noise pollution.
SA15: Waste	**0**	There is potential for negative cumulative effects on waste as large-scale projects in combination with development across the wider region, could lead to a large cumulative production and disposal of waste during construction. There is potential for developments under local plans and transport plans to encourage the sustainable use of resources and encourage re-use and recycling initiatives to minimise waste going to landfill.

SA16: Efficient Use of Land	**+/-**	There is potential for negative cumulative effects on the efficient use of land as a number of large-scale projects coupled with other development in the wider region could lead to a large cumulative loss of land, some of which may not be brownfield land. Policies to have an opportunity, however, to influence proposals in a positive way relating to the efficient use of resources, for instance through mandating the re-use of existing facilities and materials before building from new.

9 MITIGATION, ENHANCEMENT AND MONITORING

9.1 MITIGATION AND ENHANCEMENT MEASURES

9.1.1. Mitigation of significant negative effects of the plan and enhancement of positive effects are a key purpose of SA. The SEA Regulations require that mitigation measures are considered to prevent, reduce or offset any significant adverse effects on the environment of implementing the plan. The measures are known as 'mitigation' measures. Mitigation measures include both proactive avoidance of adverse effects and actions taken after potential effects are identified.

9.1.2. The mitigation measures proposed in **Table 9-1** are designed to avoid or reduce the effects identified as potentially negative through the policy assessments on the SA Objectives. The table also includes enhancement measures, that aim to optimise positive impacts and enhance sustainability.

9.1.3. As this is the SA draft reporting stage, these measures are subject to change as the preferred objectives and measures are refined and updated. Vision and Objective specific mitigation measures have been included within **Appendix E**, with Action Plan specific mitigation included within **Appendix F**.

Table 9-1 - Proposed Mitigation and Enhancement Measures

SA Objective	Mitigation/Enhancement
SA1: Population & Equalities	Assistance should be given to establish and develop peer-to-peer charging networks. Development of attractive walking and cycling environments should consider inclusive design guidance. Development of the Highway Asset Management Plan should consider inclusive design guidance. Development should consider inclusive design guidance. Digital access training should cater for all groups within the community. Cycle parking should be inclusive for all users. Cycle parking should be as close to accessible entrances as possible and no further away than Disabled car parking. Cycle parking locations must never obstruct footways, drop kerbs, doorways or access to bus stops. Stands should support all types of bikes e.g. adapted bikes and hand cranked bikes. Consideration should be made for removing other barriers towards active travel for disabled people and low income groups, such as affordability. Ensure all bus stops are fully accessible for people with disabilities, including wheelchair ramps and tactile paving. Active travel infrastructure should be accessible and inclusive. Cycleways should provide enough space for adapted cycles such as tricycles, tandems and wheelchair cycles. Removal of on-street parking should be carefully considered not to discriminate against equality groups. Adequate parking for disabled users should be maintained. Improved lighting should be considered to improved feelings of safety for those (particularly women) walking to and from their cars. The measures could be enhanced through improving EV infrastructure design, ensuring pavement space is accessible to all users and not obstructed by increased EV charging cables and other associated street infrastructure. Install a mix of fast and ultra-fast EV chargers to cater to different user needs, particularly at high footfall locations such West Mendip hospital and Mendip retail centres. Cycleways where possible should integrate with local bike-hire schemes if available to ensure accessibility and equity of access Provide ramps, tactile paving, and other facilities to ensure the station is accessible to all users, including those with disabilities. Ensure that stations and bus stops are well-lit for safety, with adequate shelter and seating.
SA1: Population & Equalities **SA2: Human Health** **SA4: Community Safety**	Educational measures will need to be in place to support the introduction of e-scooters to the city regions highways. Some users will be inexperienced and therefore pose a higher risk to road safety, necessitation the provision of mandatory training resources. Consider road design enhancements, traffic flow optimisation, alternative routes and public education campaigns to reduce congestion resulting from road safety improvement measures such as 20mph zones.
SA3: Economy & Employment	Ensuring an adequate service of rural public transport should be considered within the LTP to maintain access to rural areas. Install a mix of fast and ultra-fast EV chargers to cater to different user needs, particularly at high footfall locations. Consideration should also be given to affordability of travel. Engage with bus and rail operators to synchronise timetables, minimising waiting times for transfer between different modes of transport.
SA4: Community Safety	Development of e-scooter schemes should include safety measures to minimise accidents involving e-scooters. Development should incorporate designing out crime principles, including lighting. Create centralised freight hubs outside of town centres where goods can be transferred to smaller, less intrusive delivery vehicles for final mile delivery. Dedicated bus lanes along the corridor should be considered, to prioritise bus movement and reduce delays caused by traffic congestion, implement traffic signal priority for buses at intersections to minimise waiting times and improve schedule adherence and consider implementing bus-only routes or sections of road during peak hours to further reduce congestion and improve travel times. Install covered or sheltered bike parking to protect bicycles from the elements and encourage year-round use. Install adequate lighting and security cameras around charging stations to ensure user safety, especially during nighttime
SA5: Biodiversity	Consideration needs to be given to the potential effects of construction of developments (noise, vibration and air pollution) on biodiversity, including designated sites. In addition, a lighting strategy should be prepared to minimise light spill onto retained or newly created habitat features.

	Consideration needs to be given to the potential effects of increased movements (noise) on biodiversity, including designated sites. Consideration at all stages should be given to the waste hierarchy, for example, prioritising reuse and recycling and reducing use of virgin materials.
SA5: Biodiversity **SA6: Natural Capital**	Consideration needs to be given to the potential effects of vegetation clearance on biodiversity. Clearance should occur on a localised scale and ensure no loss of habitat. Opportunities to explore biodiversity enhancement should maximise co-benefits such as mitigating flood risk, reducing urban heat, providing quality greenspaces, reconnecting habitats and removal of invasive species. Moreover, species planted should be carefully selected. Enhance the route with landscaping, including carefully selected trees, shrubs, and flowers. Schemes should be designed with future climate risks in mind, including increased likelihood of flooding in addition to sea level rise.
SA5: Biodiversity **SA7: Landscape & Townscape** **SA8: Historic Environment**	Consideration needs to be given to the potential effects of lighting on biodiversity, landscapes and heritage assets, including designated sites. In addition, a lighting strategy should be prepared to minimise light spill onto retained habitat features and local assets. Well designed active travel routes could present opportunities to enhance habitat, ecological networks through habitat creation and improve the quality of visual amenity of the landscape and heritage assets by managing public access to or from the historic features within Somerset.
SA7: Landscape & Townscape	Cycle parking and other associated street furniture should also seek to improve wayfinding and provide permeability across the transport network, especially for those with mobility constraints e.g. wheelchair users, pushchair users. New bus stations or cycle parking facilities should be designed to not interfere with public realm and local characteristics.
SA7: Landscape & Townscape **SA12: Flood Risk** **SA13: Water Quality**	Green infrastructure such as sustainable urban drainage systems can improve resilience to flooding through controlling water, improve air quality, reduce the transportation of road-related pollution to the water environment and also create space for nature.
SA8: Historic Environment	Schemes should be sensitively designed in order to enhance the setting of heritage assets. Where land take is required, archaeological surveys and trial trenching should be undertaken to determine any potential impacts on buried/ unknown remains. Ensure that new infrastructure designs are in harmony with the existing townscape. Use materials, colours, and styles that complement the local architecture and history.
SA9: Air Quality	Consider road design enhancements, traffic flow optimisation, alternative routes and public education campaigns to reduce congestion resulting from road safety improvement measures such as 20mph zones. Parking should be limited and should include EV charge points.
SA10: Climate Change **SA11: Greenhouse Gases**	Sustainable urban drainage solutions should also be incorporated into design to further increase resilience to flooding and climate change.
SA11: Greenhouse Gases	E-scooter charging stations should consider the use of renewable energy sources such as solar PVs. Where possible, integrate renewable energy sources, such as solar panels, to power the EV chargers and reduce carbon footprint. Install adequate lighting and security cameras around charging stations to ensure user safety, especially during nighttime.
SA12: Flood Risk	Green infrastructure such as sustainable urban drainage systems can improve resilience to flooding through controlling water, reducing the transportation of road-related pollution to the water environment and also by creating space for nature. The A38 is vulnerable to flooding, having experienced flooding events and benefitted from flood protection works previously. The outcomes of the vision could be enhanced through incorporating drainage methods to minimise flood risk within development.
SA12: Flood Risk **SA13: Water Quality**	As flood risk is a key risk in relation to climate change, any intervention that introduces physical infrastructure (either new infrastructure or upgraded) should provide flood defence opportunities or flood risk benefit where practicable through green infrastructure which can also reduce the transportation of pollutants to aquatic environments. Sustainable urban drainage solutions should also be incorporated into design to further increase resilience to flooding and climate change. The outcomes of the vision could be enhanced or mitigated through green infrastructure such as incorporating sustainable urban drainage systems, to attenuate surface water but also filter road pollutants and provide space for nature and biodiversity.
SA14: Noise	Conduct regular water quality testing in nearby watercourses to detect changes in salinity and pollutant levels. If new road surfaces are considered as part of this package, low-noise options should be considered in the first instance.
SA15: Waste	Scheme designs where possible should reduce virgin material consumption and where possible prioritise re-use or recycling of materials

SA15: Waste **SA16: Efficient use of Land**	The reuse of existing materials should be done so under conditional circumstances, including contamination assessments. Consideration at all stages should be given to the waste hierarchy, for example, prioritising reuse and recycling and reducing use of virgin materials
SA16: Efficient use of Land	Where land take is required, preference should be given to brownfield land/ previously developed land and avoidance of the best and valuable land. Proposed sustainable transport infrastructure such as cycle lanes, bus lanes and footpaths, should where appropriate, prioritise the reallocation of the highway network. Design the infrastructure to be scalable, allowing for easy expansion as EV adoption may increase in the future.

9.2 MONITORING MEASURES

9.2.1. The SEA Regulations require that monitoring is undertaken on a plan so that the significant effects of implementation can be identified, and remedial action imposed. The purpose of the monitoring is to provide an important measure of the sustainability outcome of the final plan, and to measure the performance of the plan against sustainability objectives and targets. Monitoring is also used to manage uncertainty, improve knowledge, enhance transparency and accountability, and to manage sustainability information.

9.2.2. The aim of monitoring is to check whether the plan is having the significant effects that were predicted in the SA, and to deal with any unforeseen problems.

9.2.3. **Table 9-2** below sets out some of those monitoring measures which would be suitable in monitoring those uncertain residual effects outlined above.

Table 9-2 – Potential Monitoring Measures

SA Objectives	Key Performance Indicators	Targets
SA1: Population & Equalities	Improving accessibility and inclusivity of the transport network	Increase the number of users of all stated routes, by sustainable transport and active travel.
SA2: Human Health	Enabling healthy behaviours and improving wellbeing by monitoring physical activity levels Utilisation of transport route to essential services and green space/green infrastructure, and the network of footpaths in the rural part of the county. % of residents of who travel to work by foot or cycle	Increasing the number of active adults and children by 50%. Increasing the number of residents of who travel to work by foot or cycle by 50%.
SA3: Economy & Employment	Condition of local highways Reliability of the transport network	DfT road conditions data Reducing number of delays and improving punctuality of public transport
SA4: Community Safety	Improving transport safety and security	A decrease in reported accidents associated with roads and the wider transport network. 50% reduction in KSIs
SA5: Biodiversity	Biodiversity net gain achieved through implementation of the plan. Condition of designated sites e.g. SSSI's, SAC's, SPA's, etc.	No deterioration, or loss of coverage, of designated habitats.

SA6: Natural Capital	Condition status of SSSIs The loss of any areas that are safeguarded for minerals.	No deterioration, or loss of coverage, of designated habitats and safeguarded areas.
SA7: Landscape & Townscape	Area of landscapes and seascapes benefiting from conservation and enhancement measures resulting from plan interventions.	No greenfield land lost or damaged due to interventions.
SA8: Historic Environment	The number of historic assets (statutory and non-statutory) negatively affected by the interventions. The number of historic assets (statutory and non-statutory) benefitting from conservation and enhancement measures resulting from plan interventions. The number of visitors to historic assets.	No historic assets negatively affected by the interventions. Increased number of visitors to the historic environment.
SA9: Air Quality	Net zero transport Increase use of zero emission vehicles Tackling climate change and protecting and enhancing the natural and built environment - Clean Air Number of locations that exceed legal NOx limit - Air Quality annual monitoring reports	Reducing carbon emissions from transport Encouraging use of EVs and investing in EV infrastructure. No locations exceeding the NOx legal limit.
SA10: Climate Change	Carbon emissions from transport. Number of publicly available EV charge points	For all relevant interventions to incorporate suitable climate change resilience and mitigation measures. To increase publicly available EV charging infrastructure.
SA11: Greenhouse Gases	Levels of greenhouse gas emissions.	Greenhouse gas emissions associated with interventions to not exceed baseline. For all relevant interventions to incorporate suitable climate change resilience and mitigation measures.
SA12: Flood Risk	Number of interventions supported by a flood risk assessment.	Decrease in the number of reports of flooding affecting transport infrastructure.

SA13: Water Quality	Condition of designated and undesignated waterbodies.	No deterioration of water quality in local waterbodies.
SA14: Noise	Local noise monitoring	Not exceeding permitted noise levels.
SA15: Waste	Utilisation of circular economy principles to reduce the amount of additional waste during construction.	Utilisation of recycled/re-used materials where possible. Maximum uptake of recycling/re-using waste material from construction.
SA16: Efficient use of Land	Coordinating transportation planning with land use planning efforts to help minimise urban sprawl and protect open/natural spaces.	Agricultural and/or BMV land within Somerset to not reduce from the baseline.

10 RECOMMENDATIONS

10.1.1. This section sets out the recommendations identified throughout the SA assessment. These have been taken from the SA Assessment and Report. It should be noted that these are different from the mitigation measures outlined in **Section 9**, as they focus on potential changes to the LTP, rather than measures identified in response significant effects.

10.1.2. These changes will be considered by SC during the preparation of the LTP4.

10.1.3. **Table 10-1** below outlines these recommendations.

Table 10-1 – Local Transport Plan 4 Recommendations

Item	Recommendations	Source Document
Our Network – Sustainable First Choice	The Policy should clarify the ways in which transport will become increasingly accessible for people of all ages and abilities. Specification on accessibility features could be set out.	Appendix E
Our Network – Reduce Environmental Impacts	Specifications could be included to state that streetlighting updates will be designed sensitively to avoid negative effects upon biodiversity, heritage assets and local communities.	Appendix E
Our Network – Reliable and Resilient Network	Specification could be included as to what disruptive events will be mitigated against. The policy could benefit from improved clarification surrounding the priorities for on-street Parking Account.	Appendix E
Coastal Towns - Reliable and Resilient Network	The policy could be expanded to include measures for improving accessibility and safety along walking and cycling routes.	Appendix E
Rural Somerset - A Great and Healthy Place	The policy could be expanded to include measures for improving accessibility and safety along walking and cycling routes.	Appendix E
Rural Somerset - Reliable and Resilient Network	The policy could be expanded to ensure that reduced maintenance demand does not restrict maintenance activities and ensures an up-to-date, efficient rural transport network.	Appendix E

11 NEXT STEPS

11.1.1. In accordance with the SEA Regulations, the SA Report must be made available at the same time as the draft plan or programme, as an integral part of the consultation process, and the relationship between the documents clearly indicated.

11.1.2. SC is seeking the views of statutory bodies, the public and other stakeholders on the results of the SA. Consultation at this stage continues to ensure that the SA provides a robust assessment of the LTP.

11.1.3. This SA Report will be issued to consultees for consultation alongside the draft LTP in Summer 2025.

11.1.4. An indicative timetable of the remaining stages of the SA and LTP have been included in **Table 11-1** below.

Table 11-1 – Indicative LTP and SA Timetable

SA/ LTP Stages	Timescales
SA Report and LTP Consultation	Summer 2025
SA Updates	Late Summer 2025
LTP4 Adoption	Winter 2025
SA Post Adoption Statement	Late Winter 2025

Appendix A

SEA ASSURANCE CHECKLIST

Choose an item.

Table A-1 sets out the quality assurance checklist, taken from the Office of the Deputy Prime Minster's Practical Guide to the Strategic Environmental Assessment Directive .

Table A-1 – SEA Assurance Checklist

Item	Where this has been addressed
Objectives and Context	
The plan's purpose and objectives are made clear.	Section 2.2 of the Environmental Report sets out the plan's vision and objectives.
Environmental issues and constraints, including international and environmental protection objectives, are considered in developing objectives and targets	Key sustainability issues have been identified through a review of relevant plans and programmes (see Appendix E and Appendix F). These have informed the development of the SEA Framework presented in Section 3.2.
SEA objectives, where used, are clearly set out and linked to indicators and targets where appropriate	Section 3 sets out in detail how the SEA framework has been devised.
Links with other related plans, programmes and policies are identified and explained.	A review of plans policies and programmes is set out in Appendix E and Appendix F.
Conflicts that exist between SEA objectives, between SEA and plan objectives and between SEA objectives and other plan objectives are identified and described.	Section 4 tests the compatibility of the SEA framework objectives against the LTP draft objectives.
Scoping	
Consultation Bodies are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report	The statutory consultees will be consulted on the Scoping Report during Summer 2025.

The assessment focuses on significant issues.	Section 3.2 summarises the key sustainability issues identified.
Technical, procedural and other difficulties encountered are discussed; assumptions and uncertainties are made explicit	Section 3.4 discusses the assumptions and limitations encountered.
Reasons are given for eliminating issues from further consideration.	No issues have been knowingly eliminated from the assessment at this stage.
Alternatives	
Alternatives include ‘do minimum’ and/or ‘business as usual’ scenarios wherever relevant.	Section 7.2 assesses the policy alternatives, which for this reflected three reasonable alternatives. Option 2D detailed a place-based approach to increasing investment in transport projects; option 3C focused on a rural/urban 'decide and provide' approach; and 3D focused on a place-based 'decide and provide' approach.
The environmental effects (both adverse and beneficial) of each alternative are identified and compared	Alternative measures and actions have both been assessed using the same criteria as the proposed policies and sites. A summary in Section 7.4 is provided that details their performance against the proposed measures and actions.
Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained	Where possible, this has been highlighted within the assessment and detailed in Section 7.2.
Reasons are given for selection or elimination of alternatives.	A summary in Section 2, Section 7.4 is provided that details their performance against the proposed allocations.
Baseline Information	

Relevant aspects of the current state of the environment and their likely evolution without the plan or programme are described.	Appendix C of this SEA Report presents the baseline analysis of the borough's social, economic and environmental characteristics including their likely evolution without the LTP.
Environmental characteristics of areas likely to be significantly affected are described, including areas wider than the physical boundary of the plan area where it is likely to be affected by the plan.	Section 3.3 sets out the criteria for assessing the spatial extent of effects. This has been further documented throughout the assessment in Appendix C.
Difficulties such as deficiencies in information or methods are explained.	Section 3.4 discusses the assumptions and limitations encountered.
Prediction and evaluation of likely significant environmental effects	
Effects identified include the types listed in the Directive (biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage and landscape), as relevant; other likely environmental effects are also covered, as appropriate	Sections 4 - 6 summarise the appraisal of the sustainability performance of the LTP. The Visions, Objectives, and Action Plan are appraised. Detailed appraisal matrices are also provided at Appendix E and Appendix F.
Both positive and negative effects are considered, and the duration of effects (short, medium or long-term) is addressed.	Positive and negative effects are considered within the appraisal matrices and within Sections 5 and 6. Potential effects are identified in the short, medium and long-term. The temporal scope for short-, medium- and long-term effects is defined in Section 3.3.
Likely secondary, cumulative and synergistic effects are identified where practicable.	The potential for cumulative and synergistic effects is considered in Section 8.
Inter-relationships between effects are considered where practicable.	Inter-relationships between effects are identified in the assessment commentary, where appropriate. These have

	also been assessed as part of the Intra-project cumulative effects.
The prediction and evaluation of effects makes use of relevant accepted standards, regulations, and thresholds	These have been detailed in Appendix E and Appendix F and identified where appropriate within the commentary for assessment.
Methods used to evaluate the effects are described.	These have been detailed in Section 3.3 and Appendix E and Appendix F.
Mitigation Measures	
Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan or programme are indicated.	These have been outlined in Section 9.
Issues to be taken into account in project consents are identified.	These have been outlined in Section 9.
The Environmental Report	
Is clear and concise in its layout and presentation	The SEA Report is clear and concise.
Uses simple, clear language and avoids or explains technical terms	Clear non-technical language has been used throughout.
Uses maps and other illustrations where appropriate.	Figure and tables have been used to present information where appropriate.
Explains the methodology used.	Methodology is set out in Section 3.
Explains who was consulted and what methods of consultation were used.	The statutory consultees will be consulted on the LTP and the Environmental Report in Summer 2025.

Identifies sources of information, including expert judgement and matters of opinion	Section 3 identify sources of information used to inform the assessment.
Contains a non-technical summary covering the overall approach to the SEA, the objectives of the plan, the main options considered, and any changes to the plan resulting from the SEA.	A non-technical summary has been included separately.
Consultation	
The SEA is consulted on as an integral part of the plan-making process	The statutory consultees will be consulted on the LTP and the Environmental Report in Summer 2025.
Consultation Bodies and the public likely to be affected by, or having an interest in, the plan or programme are consulted in ways and at times which give them an early and effective opportunity within appropriate time frames to express their opinions on the draft plan and Environmental Report.	This SEA Report will be consulted on alongside the draft LTP. This will give opportunities for statutory consultees, stakeholders and members of the public to comment on the findings of the SEA.
Decision-making and information on the decision	
The environmental report and the opinions of those consulted are taken into account in finalising and adopting the plan or programme	Responses received to this SEA Report will be taken into consideration in the final iteration of this report.
An explanation is given of how they have been taken into account.	This will be detailed in the post-adoption statement, which will be produced once the LTP has been adopted.
Reasons are given for choosing the plan or programme as adopted, in the light of other reasonable alternatives considered.	This will be detailed in the post-adoption statement, which will be produced once the LTP has been adopted.

Monitoring measures	
Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SEA.	Proposed monitoring measures are set out in Section 9.2. This details potential indicators and where possible are linked targets within the draft LTP.
Monitoring is used, where appropriate, during implementation of the plan or programme to make good deficiencies in baseline information in the SEA.	This will be detailed in the post-adoption statement, which will be produced once the LTP has been adopted.
Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects may include predictions which prove to be incorrect.)	Proposed monitoring measures are set out in Section 9.2. These are proposed for those residual significant effects – in this case these are just uncertain effects.
Proposals are made for action in response to significant adverse effects.	

Appendix B

SCOPING CONSULTATION COMMENTS

Table B-1 – Scoping Consultation Comments

ID	Date	Consultee	Comment	In reference to	Action required?	By Whom	Summary Action Taken/ Required
1	22nd March 2024	Environment Agency	Thank you for consulting the Environment Agency on the Sustainability Appraisal Scoping Report for the Somerset Local Transport Plan 4. We are in general agreement with the scope and objectives set out in the report.	General Comment	No	N/A	General comment - no action required
2	22nd March 2024	Environment Agency	The key issues the plan should consider are: - Flood Risk and Climate Change - Biodiversity and Blue/Green Infrastructure - Water Quality - Water Resources - Drainage	General Comment	No	N/A	General comment - no action required
3	22nd March 2024	Environment Agency	Flood Risk and Climate Change We are pleased to see flood risk, coastal erosion and the potential for this to increase with the effects of climate change have been included in the report, under both climate change and water environment sections. The plan should consider the current Strategic Flood Risk Assessments for the former district areas, as well as any emerging strategic assessments for the wider Somerset area as part of the evidence base. We agree with the proposed SA to reduce the risk of flooding overall and increase resilience with respect to flood risk. This should include avoiding areas of increased risk of flooding in the first instance, designing any new infrastructure to be resilient to the current and future impacts of climate change and coastal change and finally looking at ways existing transport infrastructure can be made more resilient for the future. The plan should aim to ensure that new and existing transport infrastructure and networks remain safe and operational with the current and anticipated flood risk, even beyond the plan period.	Baseline, key issues and opportunities and SA Framework	Yes	WSP	An additional measure to be added to the Issues and opportunities table that states ' The plan should aim to ensure that new and existing transport infrastructure and networks remain safe and operational with the current and anticipated flood risk, even beyond the plan period'.
4	22nd March 2024	Environment Agency	Biodiversity and Blue Green Infrastructure We agree with the SA objectives in relation to biodiversity and we are pleased to see reference to the objectives set out in the South West river basin district (RBD) river basin management plan. Emphasis should be placed increasing green/blue infrastructure and habitat connectivity. The plan should consider the emerging Somerset Local Nature Recovery Strategy and the objectives this may identify in relation to the transport plan. We are pleased to see the aim to provide natural buffers to watercourses to provide both flood risk and biodiversity benefits. We recommend that the plan considers avoiding new development across or next to watercourses in the first instance to keep these assets as natural as possible and provide space for natural processes to take place and habitats to adapt to the pressures of climate change. In addition, identified reasons for many waterbodies not achieving 'good' ecological status include land management and urban runoff. The natural buffers proposed, and incorporated natural flood management, could also provide waterbodies with additional protections from these impacts. We note the SA question included to provide at least 10% BNG. The plan should try to identify where greater gains could be delivered as part of areas or projects, to focus and maximise benefits with the available resources.	Baseline, key issues and opportunities and SA Framework	Yes	WSP	Somerset's Local Nature Recovery Strategy to be included within the future evolution of the baseline for Biodiversity and Natural Capital. An additional measure has been added to issues and opportunities to include opportunities to increase in blue and green infrastructure. An additional new issues and opportunities point has been included to consider avoiding new development across or next to watercourses in the first instance to keep these assets as natural as possible and provide space for natural processes to take place and habitats to adapt to the pressures of climate change An additional point has been included within issues and opportunities stating 'The plan should try to identify where greater gains could be delivered as part of areas or projects, to focus and maximise benefits with the available resources'.

5	22nd arch 2024	Environment Agency	Water Quality / Water Resources We agree with the objective to enhance water quality. As mentioned below an important part of this is improved sustainable drainage infrastructure. The plan may also want to consider the potential impacts to groundwater in further detail. Groundwater is mentioned as an environmental asset that requires protection, but there is no mention of groundwater as a crucial asset for a growing population. There are many Source Protection Zone designations within the plan area which represent high value groundwater assets used for human consumption. These areas should be protected from contamination, including the risk from serious pollution incidents, as part of the plan's objectives.	Baseline, key issues and opportunities and SA Framework	Yes	WSP	The inclusion of groundwater and its need to support population growth has been included within the future baseline. Source protection zones have been included within the baseline.
6	22nd March 2024	Environment Agency	Drainage The plan should consider how improved sustainable drainage for both new and existing infrastructure can contribute to reducing flood risk, provide benefits for biodiversity and improve water quality and water resources.	LTP	Yes	WSP	Check inclusion of drainage.
7	22nd March 2024	Historic England	Thank you for consulting Historic England on this Sustainability Appraisal Scoping Report. As the Government's adviser for the historic environment, we are keen to ensure that conservation and enhancement of the historic environment are taken into account in the preparation and assessment of the LTP4.	General Comment	No	N/A	General comment - no action required
8	22nd March 2024	Historic England	Further guidance can be found in Historic England Advice Note 8 Sustainability Appraisal and Strategic Environmental Assessment. Associated advice on sources of evidence for plan making can be found in Historic Environment Good Practice Advice in Planning: 1 The Historic Environment in Local Plans.	General Comment	No	N/A	Noted - no action required
9	22nd March 2024	Historic England	While we welcome the strand of the Vision titled 'Reducing the Environmental Impact', it is a major concern that neither this vision statement nor the five associated themes say anything about conserving and enhancing the built or historic environment, the character of Somerset's urban and rural areas, or landscapes and dramatic seascape. We request that the Council gives further consideration to the Vision and Themes to ensure that they reflect these important aspects of the environment and, in turn, promote the quality of life of its residents. Similarly, within the Creating Healthy Places strand of the Vision, we suggest that further consideration is given to the way in which well designed and sustainable transport contributes to health and wellbeing by providing access to the county's natural and historic environment, including public parks and visitor attractions.	Emerging Vision and Objectives - Table 2-1	tbc	SC	To be flagged with SC.
10	22nd March 2024	Historic England	Access to natural and historic places including public parks is also a contributor to health and wellbeing – see for example: https://historicengland.org.uk/images-books/publications/wellbeing-and-the-historic-environment/.	Policy Context - Table 4-1 Key Messages from Policy Review	Yes	WSP	An additional consideration has been included within table 4-1 to include improved access to the natural and historic environment.
11	22nd March 2024	Historic England	This section refers to 'natural landscapes' but could helpfully say more about townscapes / urban areas (including historic town centres) and designed landscapes (e.g. public parks). Much of the population lives in urban areas and their regeneration contributes to the economy and quality of life. See for example: https://historicengland.org.uk/research/heritage-counts/heritage-and-society/perception-historic-places/	Policy Context - Table 4-1 Key Messages from Policy Review	Yes	WSP	An additional point regarding conserving and enhancing townscapes, including historic town centres, has been added to Table 4-1.
12	22nd March 2024	Historic England	We suggest the third bullet point is adjusted as follows to confirm with policy 'Conserve and enhance the significance of nationally and locally designated cultural and historical assets as well as those which are undesignated, including any contribution made by their settings.'	Policy Context - Table 4-1 Key Messages from Policy Review	Yes	WSP	This bullet point within Table 4-1, under the Historic Environment has been amended to reflect this wording.
13	22nd March 2024	Historic England	In addition, we suggest that the considerations for LTP4 should include improving access to natural and historic places, including public parks, for their health and wellbeing benefits.	5.3 Human Health Table 5-2 Issues and	Yes	WSP	An additional consideration for the LTP has been included within Table 5-2, stated as follows: The LTP4 should improve access to the natural and historic environments,

				Opportunities for Human Health			including public parks, within Somerset. This will provide health and wellbeing benefits for the local population.
14	22nd March 2024	Historic England	Paragraph 5.4.7 highlights the importance of the visitor economy to Somerset and we are pleased to note that of the major tourist attractions highlighted, many are heritage based or have a strong cultural heritage association.	5.4 Economy and Employment Baseline	No	N/A	Noted - no action required
15	22nd March 2024	Historic England	Alongside this, we suggest that report highlights that the character and quality of places (including the city of Wells, Somerset's historic towns, villages and aspects of the countryside) can be an important part of the appeal of an area to residents, visitors and inward investors alike (see for example: https://historicengland.org.uk/research/heritage-counts/heritage-and-economy/place-development/). What is the condition of the built environment baseline in Somerset and how does this affect the economy?	5.4 Economy and Employment Baseline	Yes	WSP	WSP have considered this comment and will include the character and quality of Somerset's places within the main SEA report, and any assessment of the LTP4.
16	22nd March 2024	Historic England	There is great potential for the towns of Somerset to capitalise on their heritage as a driver of economic regeneration. Sustainable transport and well-designed streets play a part in this. We request that this is identified in the future baseline.	5.4 Economy and Employment - Future baseline	Yes	WSP	WSP have considered this comment and will consider the development of the LTP4 and it's impacts upon heritage growth within economic regeneration within the main SEA report, and any assessment of the LTP4.
17	22nd March 2024	Historic England	Similarly, we suggest that the issues and opportunities include sustainable and well-designed transport and streets that promote heritage-led regeneration, support the vitality and viability of town centres, and promote access to the historic environment and sustainable tourism.	Table 5-3 Issues and Opportunities for Economy and Employment	Yes	WSP	WSP have considered this comment and will consider the potential for transport to promote access to the historic environment and aid in regeneration within the main SEA report and assessment, with regards to the historic environment.
18	22nd March 2024	Historic England	The current and future baseline could helpfully say more about the current condition of towns in Somerset – please see our comments above on the relationship between place, transport/streets and regeneration. Initiatives such as the High Street Heritage Action Zone in Chard illustrate how street and public realm works can contribute to a wider package of heritage led regeneration.	5.7 Landscape and Townscape Baseline / future baseline			This may be worth including in the historic environment section.
19	22nd March 2024	Historic England	We are pleased to see that landscape and townscape character have been identified as important considerations in drawing up options.	Table 5-9 Issues and Opportunities for Landscape and Townscape	No	N/A	Noted - no action required
20	22nd March 2024	Historic England	We also note the references to improved access to the countryside, sustainable tourism, and better appreciation of heritage assets.	Table 5-9 Issues and Opportunities for Landscape and Townscape	No	N/A	Noted - no action required
21	22nd March 2024	Historic England	This section commences with quantitative information about designated heritage assets in Somerset. This helps to illustrate the magnitude of the resource. However, we think that more could be done to paint a qualitative picture of the unique historic environment of the district. For example, Somerset has some of the earliest evidence of human inhabitation in England within the caves of the Mendip Hills. The upland landscapes of the Mendips, Quantocks and Exmoor are in contrast to low lying areas including the Levels. Within these landscapes there are a variety of archaeological features including henges, cursus and barrows, along with remarkable ancient wooden trackways preserved in peat such as the Sweet Track. Following Roman occupation, towns (such as Glastonbury) grew around Minster churches. Nevertheless the county remains of predominantly rural character, interspersed with farmsteads, villages, the small city of Wells and historic market towns such as Taunton, Yeovil, Bridgewater and Frome. Industry has made a contribution, with canals, railways and factories a feature of the landscape. Coastal heritage and tourism also play their part.	5.8 Historic Environment Baseline	Yes	WSP	An additional paragraph has been included within the historic environment baseline that outlines the qualitative picture of the historic environment within Somerset.
23	22nd March 2024	Historic England	We welcome the reference to Heritage at Risk at paragraph 5.8.4 - Tonedale Mills could be highlighted as a particularly notable example within Somerset.	5.8 Historic Environment Baseline	No	N/A	WSP have considered this comment and have researched the status of Tonedale Mills. Given the nature of this scoping report, Tonedale Mills specifically has not been included within paragraph 5.8.4. However, it will be

							considered within the SEA report and assessment of interventions where applicable.
24	22nd March 2024	Historic England	We also welcome the reference to National Landscapes and archaeological sites at paragraph 5.8.5, although, as discussed above the latter are not restricted to National Landscapes.	5.8 Historic Environment Baseline	No	N/A	Noted - no action required
25	22nd March 2024	Historic England	As the Scoping report only provides a summary, it would be helpful to signpost that a range of information sources will need to be consulted in conducting the Integrated Assessment, including the National Heritage List, Somerset's Historic Environment Record, and the Somerset and Exmoor Historic Landscape Characterisation .	5.8 Historic Environment Baseline	Yes	WSP	To be included in Appendix A where necessary.
26	22nd March 2024	Historic England	The starting premise of this section seems to be that transport infrastructure is unlikely to ever have direct physical impacts on designated heritage assets. While we would certainly promote the idea that these impacts should be avoided, it is unfortunately not always the case. Unless sited and designed carefully, future transport projects present a risk to the historic environment, including heritage assets and their settings.	5.8 Historic Environment - Future Baseline	Yes	WSP	The wording within paragraph 5.8.8 has been reworded to clarify that direct effects are feasible. The sentence now reads 'However, whilst direct (physical) impacts on designated historical sites are strongly restricted, direct adverse effects on assets and adverse effects on the setting of designated heritage assets does still occur, for example relating to visual intrusion, or aspects such as traffic, lighting and noise.'
27	22nd March 2024	Historic England	There may also be direct physical or setting impacts on non-designated heritage assets, including archaeological sites that may be found in the course of designing or delivering a project. If these assets are nationally significant then in accordance with NPPF footnote 72 they should be considered subject to the policies for designated assets.	5.8 Historic Environment - Future Baseline	Yes	WSP	Reference to the NPPF is included within Appendix A of the Scoping Report. This includes reference to the significance of assets.
28	22nd March 2024	Historic England	Our guidance on Sustainability Appraisal and SEA suggests that the future baseline should describe the future likely condition of the historic environment in terms of its significance, sensitivity and capacity to accommodate change. We therefore think that paragraph 5.8.9 probably does not need to be included here.	Para 5.8.9	Yes	WSP	Paragraph 5.8.9 has been removed.
29	22nd March 2024	Historic England	The development described could result in direct physical impacts on heritage assets, their significance, and/or the contribution made by their settings.	Para 5.8.11	Yes	WSP	This additional sentence has been included within paragraph 5.8.11.
30	22nd March 2024	Historic England	The LTP4 should contain policies to ensure that heritage assets and their settings are conserved and enhanced through careful siting and design that responds and is sensitive to the context.	Para 5.8.12	Yes	WSP	This has been included within the considerations for the LTP4 in Table 5-10.
31	22nd March 2024	Historic England	We suggest that the following additional issues and opportunities are considered: - Transport infrastructure can impact on the character of historic landscapes, townscapes and seascapes - Appropriately designed transport infrastructure, streets and public realm can contribute to heritage-led regeneration, the vitality and viability of town centres, and sustainable heritage-based tourism. - While well designed transport infrastructure may ensure access and enjoyment to heritage assets, poorly designed schemes can result in severance. - Transport may have implications for assets on the Heritage at Risk register, either now or in the future.	5.8 Historic Environment - Issues and opportunities Table 5-10	Yes	WSP	These additional issues and opportunities have been included within Table 5-10.

32	22nd March 2024	Historic England	The first bullet point may require some limited redrafting as we are not sure what is meant by ‘through active modes and asset settings’. We suggest that the second bullet point (in particular the specific reference to ‘above ground heritage assets’) is removed and replaced with a broader reference to all heritage assets, e.g. - LTP4 should seek to ensure that transport schemes conserve and enhance the significance of heritage assets including any contribution made by their settings.	5.8 Historic Environment - Issues and opportunities Table 5-10			Within Table 5-10, the first bullet point has been amended to the following wording: There are opportunities for enhancing the setting of heritage assets through the development of schemes to reduce traffic noise through active travel modes. This will also enhance accessibility to heritage assets. The Second bullet point has been amended in line with the suggested comment and now reads: 'LTP4 should seek to ensure that transport schemes conserve and enhance the significance of heritage assets including any contribution made by their settings.'
33	22nd March 2024	Historic England	In addition: - Scheme design should consider and respond to the local context, including the character of historic landscapes/townscapes/seascapes, rural settlements and urban areas. - Careful consideration should be given to how schemes can contribute to heritage-led regeneration, particularly in Somerset’s towns and in relation to Heritage at Risk. - There may be opportunities to enhance the historic environment by removing insensitive past schemes and/or reducing severance.	5.8 Historic Environment - Issues and opportunities Table 5-10	Yes	WSP	These additional considerations have been added into Table 5-10.
34	22nd March 2024	Historic England	Human Health - Adjust the objective and include an appraisal question on whether people can access public parks and other natural and historic places that benefit their health and wellbeing.	Sustainability Framework	Yes	WSP	An additional supporting appraisal question has been included within Table 6-1, under Human Health.
35	22nd March 2024	Historic England	Economy and Employment Adjust the objective to better underpin the appraisal questions relating to regeneration and the tourism industry, e.g. SA3: To provide greater connectivity across Somerset and high quality streets and public spaces to support key sectors, attract inward investment and support economic success.	Sustainability Framework	Yes	WSP	Objective SA3 for Economy and Employment within Table 6-1 has been updated to reflect this wording.
36	22nd March 2024	Historic England	Landscape and Townscape Within the objective we suggest the following adjustment ‘To protect and enhance townscapes, landscapes and seascapes of natural, historic and/or visual importance..’	Sustainability Framework	Yes	WSP	The proposed objective for SA7 within Landscape and Townscape has been amended within Table 6-1 to include the natural environment. The historic environment element has been captured within the historic environment objective.
37	22nd March 2024	Historic England	Historic Environment In relation to the issues and opportunities, please see our previous comments. We believe that some of the matters we have raised can be dealt with through other objectives and indicators, as outlined above.	Sustainability Framework	Yes	WSP	The issues and opportunities within Table 6-1 have been updated to reflect the updates to issues and opportunities throughout.
38	22nd March 2024	Historic England	For the historic environment topic we suggest the following additional assessment question: - Secure appropriate public access and enjoyment to heritage assets? - Have implications for heritage assets on ‘at risk’ registers, or result in new assets becoming at risk?	Sustainability Framework	Yes	WSP	Additional appraisal questions have been included within the Historic Environment appraisal section of Table 6-1.
39	22nd March 2024	Historic England	Topic: Historic Environment - Within the National plans, policies and programmes we suggest that the NPPF is followed by National Planning Practice Guidance, which contains a specific section on the historic environment.	Appendix A: Review of Plans, Policies and Programmes	Yes	WSP	The National Planning Practice Guidance has been included within Appendix A.
40	22nd March 2024	Historic England	Topic: Historic Environment - Within the section on Regional/Local plans, policies and programmes, we suggest the addition of the following: - The Local Plans for the former local authorities that now constitute Somerset Council, which will contain policies for the historic environment and design. - Conservation Area Character Appraisals and Management Plans.	Appendix A: Review of Plans, Policies and Programmes	Yes	WSP	Additional plans have been included within the historic environment section of Appendix A.
41	22nd March 2024	Historic England	Topic: Historic Environment - We also suggest that consideration is given to any heritage, cultural, tourism and/or coastal strategies for areas within Somerset.	Appendix A: Review of Plans, Policies and Programmes	Yes	WSP	Additional strategies and plans relating to the historic environment have been included within Appendix A.

42	22nd March 2024	Historic England	Historic England recommends that the Council's conservation teams and archaeological advisors are involved throughout the preparation and assessment of this Local Transport Plan and Sustainability Appraisal. They are best placed to advise on: local historic environment issues and priorities, including access to data held in the Historic Environment Record; how the plan proposals can be tailored to minimise potential adverse impacts on the historic environment; the nature of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets.	General Comment	No	N/A	Noted - no action required
43	11th April 2024	Natural England	Thank you for consulting Natural England on this application. Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment Is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development. Please accept our apologies for the delay in responding, due to very high workloads. Natural England advise we have no further comments on this Somerset Local Transport Plan.	General Comment	No	N/A	Noted - no action required

Appendix C

BASELINE, REVIEW OF PLANS, POLICIES AND PROGRAMMES

Choose an item.

Appendix D

FIGURES

Choose an item.

Appendix E

VISION AND OBJECTIVE ASSESSMENT

Appendix F

ACTION PLAN ASSESSMENT

Address