



West Sussex County Council

Local Transport Plan

WSTP4 Sustainability Appraisal - Non-Technical
Summary



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Introduction

West Sussex County Council (WSCC) are currently updating their Local Transport Plan (LTP). The existing West Sussex Local Transport Plan covers the period of 2011-2026 while the new WSTP (WSTP4) will cover all transport policy and implementation of strategies and interventions within West Sussex between 2022 and 2036 (a 15-year period).

A Sustainability Appraisal (SA) has been prepared alongside WSTP4. SA is a systematic 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 adverse effects that the plan might otherwise have. The SA incorporates the regulatory requirements of the Environmental Assessment of Plans and Programmes Regulations 2004.

The SA represents the second stage of the Strategic Environmental Assessment (SEA) process, following a SA Scoping Report which determined the issues to be included in the SA.

SA Methodology

SA is an iterative process of gathering data and evidence, assessment of environmental effects, developing mitigation measures and making recommendations to refine plans or programmes in view of the predicted effects. The effects predicted at this stage remains at a strategic level; i.e. they are not site or scheme specific. The approach adopted involves the development of an assessment framework comprising a series of Sustainability objectives and assessment against these objectives. This framework is developed from an understanding of environmental problems and opportunities identified through a review of existing baseline information and a review of other plans, programmes and environmental protection objectives relevant to the plan area (West Sussex) and subject matter (transport).

The key stages of the SA process are as follows:

- Stage A: Setting the context and objectives, establishing the baseline and deciding on scope;
- Stage B: Developing and refining strategic alternatives and assessing their effects;
- Stage C: Preparing the SA;
- Stage D: Consultation on the draft WSTP4 and the draft SA; and
- Stage E: Monitoring the significant effects of implementing the revised WSTP4.

Sustainability Objectives

The Sustainability Objectives were identified and refined based on baseline information collated in the SA Scoping Report and consultee comments received on the SA Scoping Report. The objectives used in the SA are as follows:

1. **Natural Capital** - To maintain and enhance the provision of ecosystem services from the County's natural capital and contribute to biodiversity net gain;
2. **Resource Use** - To conserve natural resources, increase resource efficiency and reduce generation and disposal of waste;
3. **Soils and Agricultural Land** - To protect soils and minimise the loss of valuable agricultural and other land and improve efficiency of land use through the re-use of previously developed land and existing buildings;
4. **Biodiversity and Protected Sites** - To protect and enhance the County's biodiversity, fauna and flora, in particular, but not limited to, the following two areas; having regard to conserving (including enhancing and restoring) habitats (including designated priority habitats inventory) and species of principal importance, and avoiding actions which damage, or will be contrary to objectives to conserve and enhance the special features of sites of special scientific interest, or conservation objectives of international sites as defined in the Habitats Regulations;
5. **Green Infrastructure** - Enhance the connectivity between habitats through the creation of green corridors and preservation / enhancement of the Green Infrastructure Network;
6. **Air Quality** - To reduce traffic related air pollution in Air Quality Management Areas (AQMAs) and where possible enhance air quality elsewhere in West Sussex;
7. **Greenhouse Gas Emissions** - To reduce emissions of greenhouse gases and the reliance of the transport network on fossil fuels in line with the commitment to net zero carbon emissions by 2050, and the LTP carbon targets to be set in 2022;
8. **Climate Change Resilience** - Ensure that the local transport network builds resilience to climate change;

9. **Noise Pollution** - To reduce noise from transport related sources in particular in Noise Important Areas (NIAs) and protect tranquil areas;
10. **Landscape** - To protect and where possible, enhance the quality, character and diversity of the existing landscape, with particular care given to the South Downs National Park (SDNP) and designated Areas of Outstanding Natural Beauty (AONBs);
11. **Cultural Heritage** - To protect and enhance West Sussex's historic environment including heritage resources, historic buildings, historic landscapes and archaeological features;
12. **Water Quality** - To protect and where possible, enhance water quality of the County's rivers, groundwater and coast;
13. **Flood Risk** - To reduce vulnerability to flooding of transport infrastructure and ensure that the risk of surface water flooding is reduced by any implemented scheme or initiative;
14. **Connectivity and Demographic Change** - To sustain and develop the county's social and cultural infrastructure through increased connectivity of communities and to increase the capacity and efficiency of the transportation network to support demographic changes, including increasing travel by sustainable modes of transport;
15. **Health and Wellbeing** - To improve the mental and physical health and well-being of the population through access to transport, active travel (namely cycling and walking) and reductions in pollution; and
16. **Sustainable Economic Prosperity** - To sustain economic prosperity, enable well paid employment and competitiveness across West Sussex through provision of reliable and accessible transport networks.

Assessment Results

WSTP4 Strategy

The selected WSTP4 strategy for assessment was a modified version of the ‘Local Living’ Strategy. The Local Living Strategy consists of improving connectivity of communities through targeted highway improvements and extensive shared and active transport provision. The assessment concluded mostly positive or a combination of positive and negative effects in relation to the sustainability objectives. Overall the strategy would have positive effects in relation to pollution (air and noise), greenhouse gas emissions and biodiversity. The mixed positive and negative effects relate mostly to landscape, heritage, flood risk, connectivity and health and wellbeing.

WSTP4 Alternatives

At a strategic level, three options were considered during the development of WSTP4 (with a modified version of the ‘Local Living’ Strategy being selected). The ‘Connecting Economic Centres’ Strategy has broadly negative effects (including significant negative effects in relation to likely greenhouse gas emissions) in relation to sustainability objectives (with the exception on connectivity and economic prosperity) while the ‘Protecting People and Places’ has broadly similar effects to the ‘Local Living’ Strategy, with differences regarding economic prosperity and natural capital.

WSTP4 Objectives

The SA assesses the likely effects of the WSTP4 objectives on the Sustainability Objectives. The WSTP Objectives and assessment results are as follows:

- Prosperous West Sussex:
 - Objective 1: Support sustainable economic prosperity across the County by levelling-up underperforming areas and recovering from the COVID-19 pandemic:
 - It is assumed that in support of economic prosperity, some new infrastructure will be required on the transport network. It should be noted that the effects will depend on the economic development strategy and types of interventions pursued that are determined in separate plans (e.g. Local Plans). As a result, many of the effects of Objective 1 on the sustainability objectives are uncertain or have the potential for positive effects that will vary on a case by case basis with interventions.

- Objective 2: Support development and regeneration plans across the County by enabling local living and through strategic investments, particularly in sustainable modes of transport, at the right time and place to ensure the transport network is fit for the future:
 - As with the sustainable economic prosperity objective, the effects of the planned development objective will depend on the interventions pursued. As a result, many of the effects of Objective 2 on the sustainability objectives are uncertain or have the potential for positive effects that will vary on a case by case basis.
- Healthy West Sussex:
 - Objective 3: Accommodate the needs of an ageing population that is expected to grow most in existing settlements in the Gatwick Diamond and Coastal West Sussex areas:
 - The effects of the objective are dependent on the nature of physical interventions pursued. As a result, the effects of Objective 3 on many objectives, such as those associated with pollution and flood risk, have the potential for positive effects that will vary on a case by case basis with interventions.
 - Objective 4: Avoid where possible minimise air, noise and light pollution from use of the transport network to minimise impacts on public health and well-being:
 - Most of the effects on the sustainability objectives such as reducing air pollution and noise levels are positive, with some being negligible (such as effects on soil and land use).
 - Objective 5: Ensure the transport network allows residents and visitors to live healthy lifestyles with good access to green and blue spaces, particularly the West Sussex coast and the protected South Downs, High Weald and Chichester Harbour:
 - The enabling of healthy lifestyles objective is associated with the connectivity of residents with the Green Infrastructure network. This objective has the potential to result in a number of positive effects on the sustainability objectives.
 - Objective 6: Ensure rural communities can live locally by accessing local services or nearby towns:
 - The access to service objective could be achieved through a variety of forms of intervention. The resulting effects on the sustainability objectives will depend on the nature of the specific intervention.
- Protected West Sussex:
 - Objective 7: Enable the transport network to achieve net zero carbon by 2050:
 - The reduction of Green House Gas (GHG) emissions conforms with most sustainability objectives. The broad scope of this objective results in a negligible or positive effect on most sustainability objectives.
 - Objective 8: Avoid where possible and minimise the impacts of the transport network on natural resources and on the natural, built and historic environment:
 - The minimisation of impacts on protected areas conforms with most sustainability objectives which a focus on protected assets. The broad scope of this objective results in a negligible or positive effect on most sustainability objectives.
 - Objective 9: Improve the transport network whilst conserving and enhancing biodiversity:

- The protection and enhancement of the environment objective conforms with most sustainability objectives. This objective is to be achieved throughout any improvements and enhancements of the transport network. The broad scope of this objective results in a negligible or positive effect on most sustainability objectives.
- Objective 10: To monitor and adapt infrastructure to the effects of climate change:
 - The broad scope of this objective results in a negligible or positive effect on most sustainability objectives. Mitigation is recommended to improve the outcomes of this objective by specifying the need to mitigate and provide benefits towards flood risk and resilience of the transport network and West Sussex as a whole.
- Connected West Sussex:
 - Objective 11: Reduce the need to travel by car by enabling local living:
 - Reducing the need to travel by car is expected to have a broadly positive effect on sustainability objectives.
 - Objective 12: Improve the efficiency of the County Strategic Road Network, particularly east-west routes including A27, through targeted improvements to address congestion, pollution, rat-running and road safety issues on strategic or local routes:
 - Improving the Strategic Road Network would have broadly positive effects on the sustainability objectives due to the negative effects of congestion. There is the potential for negative effects on a case by case basis due to the requirement for physical interventions and will depend on the type of intervention pursued.
 - Objective 13: Minimise the impacts on the transport network of surface access to Gatwick Airport by passengers and employees and ensure transport network improvements take the needs of other users and communities that share these routes into account:
 - The effects are mostly localised to the Gatwick Airport area. The effects are mostly a combination of positive and negative effects on human receptors and neutral effects on biodiversity and landscape effects.
 - Objective 14: Ensure the rail network is an attractive option for travel between West Sussex towns and to surrounding cities by improving the speed and quality of West Coastway and Arun Valley Line services and capacity on the Brighton Main Line and integrating with other modes of transport:
 - For improving the rail network, many objectives will have a negligible effect, such as protection of biodiversity and natural capital, due to the lack of physical interventions that this objective will result in. Potential arising effects, such as increased train numbers, would need to be considered on a case by case basis.
 - Objective 15: Improve bus network efficiency and integration by reducing the effects of congestion into and within West Sussex towns, particularly where there are gaps in the rail network:
 - The improvement of the bus network efficiency has an overall positive to negligible effect on the sustainability objectives. Physical interventions would be limited to modifying existing infrastructure and lead to a reduction in car trips.
 - Objective 16: Ensure the bus network is customer focused and integrated with other modes of transport to provide an attractive option for journeys to nearby towns:

- Encouraging modal shift is not associated with any physical interventions and will result in a decrease in car journeys (a key challenge faced in West Sussex). As a result, the effect of this objective on the sustainability objectives is mostly positive.
- Objective 17: Extend and improve the network of active travel facilities so it is coherent and high quality enough to make active travel an attractive, safe option for short distance trips:
 - The improvement and extension of active travel facilities is associated positively with most of the sustainability objectives as it will encourage a change shift to active transport, increase connectivity and public health and help reduce negative impacts associated with motor transport.

WSTP4 Thematic Transport Strategies

The Thematic Transport Strategies (strategies associated with themes of the WSTP, such as active travel, and interventions in line with these themes) were separately assessed against the sustainability objectives. A summary of the findings of the assessment are as follows:

- Active Travel Strategy – Mostly positive effects on the sustainability objectives related to biodiversity resource use and various types of pollution. Significant positive effects are anticipated on the connectivity and wellbeing sustainability objectives. There are negligible effects in relation to the effects on climate change resilience and flood risk.
- Shared Transport Strategy – Mostly positive effects on resource use and various types of pollution. Positive and negative effects are anticipated on biodiversity due to the nature of likely interventions. There are negligible effects on climate change resilience and flood risk.
- Rail Strategy – Mostly positive effects in relation to biodiversity, resource use, various types of pollution, connectivity and economic prosperity. There are negligible effects on climate change resilience and flood risk.
- Access to Gatwick Airport Strategy – Due to the spatially limited nature of the thematic strategy many of the effects are negligible (due to the lack of interaction with certain receptors such as biodiversity assets) while there are a combination of positive and negative effects for sustainability objectives in relation to human receptors. There are negligible effects on heritage assets and positive effects in relation to economic prosperity.
- Road Network Strategy – This is the only thematic strategy with entirely negative (and some significant negative) effects on some sustainability objectives. These negative effects in particular relate to biodiversity, greenhouse gases, flood risk and landscape due to the provision of new highway schemes and highway improvements as part of the strategy. The positive effects for this strategy are limited to improving connectivity and economic prosperity. There are negligible effects on climate change resilience and water quality.

WSTP Area Transport Strategies

The Area Transport Strategies (spatial strategies based around the WSCC districts and interventions within these districts) were separately assessed against the Sustainability Objectives. A summary of the findings of the assessment are as follows. All Area Transport Strategies have uncertain effects in relation to climate change resilience, water quality and flood risk due to lack of information on interventions:

- Adur Area Transport Strategy – There is a negative effect on greenhouse gas emissions as a result of road based interventions. Other effects are a combination of positive, positive and negative and negligible due to multiple intervention types. Overall the strategy can be said to have mixed effects.
- Arun Area Transport Strategy – This area strategy has a number of likely negative effects on sustainability objectives. These negative effects in particular relate to biodiversity, greenhouse gases and landscape due to large scale highway schemes in the strategy. However, multiple positive effects on sustainability objectives will be seen as a result of the active and shared transport provision and the associated benefits on connectivity, resource use, air quality and noise pollution.
- Chichester Area Transport Strategy and Crawley Area Transport Strategy – Both these area transport strategies have a negative effect on greenhouse gas emissions as a result of road based interventions. Other effects are a combination of positive and negative effects in relation to biodiversity, land use and soils, air quality, noise pollution, landscape and heritage assets. There are positive effects associated with resource use, connectivity, health and wellbeing and economic prosperity.
- Horsham Area Transport Strategy – There is a negative effect on greenhouse gas emissions as a result of road based interventions. The other effects are a combination of positive, positive and negative and negligible effects due to multiple intervention types.
- Area Transport Strategy for Mid-Sussex – A combination of positive, positive and negative and negligible effects due to multiple intervention types.
- South Downs National Park Area Transport Strategy – Mostly positive effects on sustainability objectives due to the lack of road-based interventions. There are negligible effects in relation to soils and land use and cultural heritage assets due to a lack of interaction with these receptors.
- Worthing Area Transport Strategy - There is a negative effect on greenhouse gas emissions as a result of road based interventions. The other effects are a combination of positive, positive and negative and negligible effects due to multiple intervention types.

SA Conclusion and Recommendations

The key issues with the LTP relate to the large amount of road interventions that form the Road Network Strategy and some Area Transport Strategies. The nature of interventions throughout the LTP do not deliver the level of change in transport behaviour required to allow West Sussex to meet the target of net zero greenhouse gas emissions by 2050.

Mitigation measures have been recommended in relation to the sustainability objectives to ensure that these sustainability objectives are met, to reduce any anticipated negative impacts and to strengthen the environmental performance of the WSTP4 overall. These mitigation measures mostly relate to the strategic level as well as recommend the adaptation of other environmental assessments and processes during implementation of the Thematic and Area Transport Strategies and interventions. Multiple measures are recommended to mitigate and monitor biodiversity, green infrastructure and landscape effects. Additionally, clarity and development of commitments to BNG and climate change mitigation is recommended to be detailed in the LTP.

Monitoring measures have been recommended to allow for any remedial actions taken. The purpose of monitoring measures is to provide an important measure of the environmental outcomes of the final WSTP4 and be able to measure the performance of plan related interventions against any arising objectives and targets. Monitoring is also used to manage uncertainty, improve knowledge and enhance transparency and accountability.



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