Local Transport Plan 4 (2024-2039)













West Berkshire Council

West Berkshire Local Transport Plan 4 (2024-2039)

SA/SEA Environmental Report

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West Berkshire Council

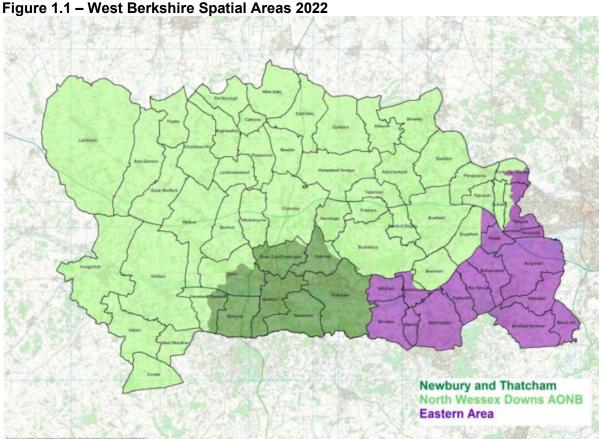
West Berkshire Local Transport Plan 4 (2024-2039) SA/SEA Environmental Report

1 Introduction

1.1 Overview

- 1.1.1 West Berkshire Council has prepared a draft Local Transport Plan (LTP4) Strategy Document to cover the period up to 2039. It is intended that the new LTP4 will be formally adopted by the Council in mid-2025 and replace the current LTP3, which was adopted in 2011.
- 1.1.2 This report constitutes the Strategic Environmental Assessment (SEA) and Sustainability Appraisal (SA) for the LTP4 Strategy document. The appraisal process has not been undertaken for the Action Plan as this has still to be finalised at the time of writing and it may be the case that appropriate assessments are undertaken on a scheme-by-scheme basis as these are developed.
- 1.1.3 The District of West Berkshire lies in the south of England, covering an area of 704km². The District has higher car ownership levels than the national average. The transport network includes the M4 and A34 Strategic highway corridors (which form an interchange at Chieveley), 117km of local authority managed A-roads and ten railway stations, which serve three railway lines.
- 1.1.4 The local road network in West Berkshire carries high volumes of traffic, particularly in the urban areas of Newbury and Thatcham, and in the urban areas in the east of the District adjoining the Reading Borough. Car travel remains the primary choice for many journeys made within West Berkshire.
- 1.1.5 There is a growing network of publicly available electric vehicle charging points within the district, which can be found at service stations on the Strategic road network, plus in the local areas with chargepoints located in public car parks and on-street parking bollards. Further provision of electric charging points will evolve in line with the Council's Environment Strategy.
- 1.1.6 The main railway line in West Berkshire is the Berks and Hants line, which provides connections east to Reading and London, and west to Taunton and the West of England. Pangbourne station provides local services to Oxford and Reading, with Mortimer station providing local services to Basingstoke and Reading. Rail patronage had been steadily increasing over the last decade and is now recovering from the slump in demand resulting from the COVID pandemic.
- 1.1.7 The main bus routes in the district primarily radiate from Newbury and central Reading. Away from these routes, the largely rural nature of West Berkshire, with dispersed smaller settlements has led to many communities having no or very limited and unreliable local bus services, especially so in the evenings and at weekends. This has resulted in lack of accessibility to other areas and main services and facilities (including employment, education and health care).

- 1.1.8 West Berkshire Council is responsible for around 1,190 kilometres (740 miles) of public footpaths, bridleways, restricted byways and byways. Most of these (61%) are public footpaths. Around 18% are bridleways and 21% are restricted byways and BOATs. These all create a network that is an important asset for the district and provides many public benefits. They enable people to access and enjoy the outstanding countryside and natural areas of the district, as well as being important to health, mental wellbeing, travel and the economy.
- 1.1.9 The Council wants Public Rights of Way (PROW) to be available for everyone, regardless of where they live. Issues with the PROW network includes less provision and disconnected routes in the Kennet Valley and eastern areas, lack of accessible routes for wheelchair and pushchair users, barriers created by major and busy local roads, conflict between users (e.g. motorised vehicles and walkers).
- The LTP4 will apply to transport systems, assets and resources within the West 1.1.10 Berkshire Council administrative boundary, shown in Figure 1.1 below. This shows the three place areas identified within the LTP4, which are consistent with the spatial areas identified in the emerging West Berkshire Local Plan Review.



1.2 **Local Transport Plans**

1.2.1 The Government's 1998 White Paper on transport, 'A New Deal for Transport: Better for Everyone', introduced the concept of Local Transport Plans (LTPs) to steer the development of national transport policies at the local level. The Transport Act 2000 (now amended by the Local Transport Act 2008) 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 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 refers 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.
- 1.2.4 The Department for Transport (DfT) has announced that local transport authorities should renew their Local Transport Plans and have been preparing updated LTP guidance, along with additional standalone quantifiable carbon reductions (QCR) guidance. When used as a part of the LTP development process, the QCR guidance will help local authorities make evidence-based decisions on the carbon impacts of their LTP at a strategic planning stage. At the time of writing, neither the LTP nor QCR guidance had been consulted upon, with no date scheduled for this to take place.

1.3 Purpose of the Report

- 1.3.1 West Berkshire Council has undertaken a Sustainability Appraisal (SA), which will ensure that sustainability aspects are incorporated into the LTP4. The SA combines the following assessment processes:
 - Strategic Environmental Assessment (SEA)
 - Equalities Impact Assessment (EqIA)
 - Habitats Regulations Assessment HRA
- 1.3.2 This approach enables synergies and cross-cutting impacts to be identified and avoids the need to undertake and report on separate assessments. It also reduces duplication of assessment work. A single process can improve efficiencies in the assessment itself, as many of the issues covered in the different forms of assessment overlap. This process also helps to simplify outcomes and recommendations for policymakers.
- 1.3.3 More detail on the SEA methodology can be found in Section 3.
- 1.3.4 This report sets out the second stage of the SEA/ local planning process, which is the assessment of the draft local plan and preparation of the Draft SA Report (SEA Stage B). The first stage of the SEA process (Stage A), Scoping, was completed in December 2022. This stage includes the following:
 - Outlining methodology for the SEA process
 - Outlining relevant plans, policies and programmes
 - Identifying Sustainability issues and problems
 - Outlining the Sustainability Appraisal Framework
 - Compatibility of SA Sustainability Objectives with draft LTP4 Objectives
 - Setting out the next stages

West Berkshire Local Transport Plan 4

2.1 Background

- 2.1.1 The current West Berkshire Local Transport Plan 3 and associated Environmental Report were approved by Full Council in 2011. The LTP3 covers the period 2011-2026, to mirror the period of the West Berkshire Local Plan Core Strategy. Although good progress has been made in delivering the current LTP, it now requires updating to reflect major changes that have impacted on transport. The new LTP4 will also align with the timescales of the Local Plan Review currently in progress and to reflect changes in national and local policies and scheme delivery priorities that have occurred since 2011.
- 2.1.2 The emerging LTP4 provides the key mechanism for how transport interventions will help West Berkshire Council to achieve its wider Strategy and Priorities. The LTP4 will provide a strategy for the development of Action 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.
- 2.1.3 The LTP4 will comprise two elements: the long-term 'Strategy' document and the 'Action Plan'. This appraisal relates to the second consultation draft LTP4 Strategy document, which will also include a draft Action Plan to help guide delivery of the LTP4 Strategy.

2.2 Elements of the Local Transport Plan 4

The Strategy

- 2.2.1 The revised draft LTP4 Strategy has been developed to consider national level policies and plans, regional strategies and guidance and numerous local strategies (such as Local Plans, the WBC Environment Strategy and WBC Rights of Way Improvement Plan). The revised draft LTP4 Strategy has also considered engagement with officers and elected members in West Berkshire Council and feedback from the first round of public consultation draft Strategy and SA Scoping Report.
- 2.2.2 The draft LTP4 will take a place-based approach to addressing local problems and opportunities. Three different functional areas have been proposed which align with the emerging Local Plan Review, along with a Strategic Connectivity place type (covering Strategic road and rail transport routes). The three place areas are as follows:
 - Newbury and Thatcham urban areas
 - Where 40% of the West Berkshire District population live
 - o Majority of trips made from Newbury or Thatcham
 - The highest levels of walking and cycling journeys and lowest car ownership levels in West Berkshire
 - Contains the most significant new development proposals
 - Rural areas (villages and town of Hungerford)
 - o Lies within North Wessex Downs National Landscape Area
 - o 74% of the district area and 36% of the population
 - Rail stations (Hungerford and Kintbury) in the south of the area and highest levels of people working from home
 - Sustainable transport options more limited in villages and rural areas

- Eastern area
 - o Makes up 20% of the District population
 - o Includes Theale and Calcot
 - Part of the area lies within the wider Reading Travel to Work area with 33% of trips made into Reading
 - Highest level of bus usage in West Berkshire
- 2.2.2 The LTP4 describes the issues regarding each of these of the identified place areas and outlines a bespoke strategy for each of these areas.
- 2.2.3 The LTP will be Vision led, with the strategy and interventions developed around delivering on the local priorities for West Berkshire. This draft vision sets out the identified local priorities that the LTP will support, which are:
 - Places for people
 - Sustainable access for all
 - Decarbonise transport
 - Support sustainable growth
- 2.2.4 Several objectives have been identified for each of the priorities, which are outlined in the Table 2.1 below:

Table 2.1 - Draft Vision and Objectives for West Berkshire LTP4 strategy		
Vision	Objectives	
Places for People	 'Vision Zero' target for road safety Safer residential, school and town centre streets Increased levels of physical activity 	
Sustainable Access for All	Easier journeysEveryone is digitally connectedA better maintained network	
Decarbonise transport	 Net zero emissions 50% active travel (Newbury and Thatcham) Access to Zero Emission charging &/or vehicles 	
Support sustainable growth	 Carbon neutral development Protect and enhance strategic connectivity More sustainable movement of freight 	

The Action Plan

2.2.5 A draft Action Plan has been developed, which will sit alongside the revised draft LTP4 Strategy. It will be based on feedback received from the first round of consultation and emerging priorities from the newly elected UK Government. The draft Action Plan has been prepared outlines a range of interventions, which will match the Council's ambitions described in the LTP4 Strategy. The draft Action Plan will be grouped according to the wider transport network and the three place-based areas, aggregated by the LTP4 objectives.

2.2.6 Since the draft Action Plan has yet to be fully developed and costed, along with little available information regarding the availability long-term funding, it has not been possible to accurately assess the draft Action Plan through this process. An assessment has been undertaken of the four place-based strategies, and it is expected that where individual measures and projects will be brought forward for delivery, that they will be subject to the assessment processes outlined in this document.

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 adverse effects that the plan might otherwise have.
- 3.1.2 The SA combines the following assessment processes:
 - Strategic Environmental Assessment (SEA)
 - Equalities Impact Assessment (EqIA)
 - Habitats Regulation Assessment (HRA)
- 3.1.3 The SEA/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.
- 3.1.4 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).
- 3.1.5 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.
- 3.1.6 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 the requirements of the SEA Regulations.
- 3.1.7 The approach adopted for the SA element of the LTP4 follows that set out in the Practical Guide to SEA and the Planning Practice Guidance to SEA. SAs, however, do need to meet all the requirements of the SEA Regulations, so a separate strategic environmental assessment should not be required.

3.2 SA/SEA Processes and Requirements

3.2.1 The integration of the SA with the LTP process is shown in Figure 3.1 below. This report covers the stages relating to the appraisal of the revised draft LTP4 Strategy document, produced following the initial public consultation undertaken in early 2023. The SA report covers the development of the LTP4 Strategy up to the second public consultation draft version. It is intended that this report will similarly be simultaneously subject to consultation with the second consultation draft LTP4 Strategy.

LTP SA Setting the SA context; establishing the baseline; SA STAGE A determining the scope of the SA and identifying Determining the scope of the LTP; clarifying goals; the LTP options. specifying the problems or challenges the authority wants to solve. 5 week statutory consultation Generating options for the plan to resolve these Developing, refining and appraising strategic challenges; appraising the options and predicting alternatives of the LTP. their effects. SA STAGE Assessing the effects of the LTP preferred options Selecting preferred options for the strategy and and policies, proposing mitigation, enhancement deciding priorities. measures and mitigation. Production of the draft LTP Production of the SA Report SA STAGE C & Consultation on the draft LTP Consultation of the SA Report (typically 12 weeks) Production of a revised SA Report if necessary Production of the final LTP Adoption of LTP SA Post Adoption Statement Monitoring the significant effects of the LTP STAGE Reviewing implementation of the LTP implementation.

Figure 3.1 – Relationship between SA and LTP4 stages

Stage A: Scoping

- 3.2.2 As part of SEA/SA Stage A, a Scoping Report was completed in December 2022, which provided baseline information, highlighted key issues and opportunities for the LTP and set out the SEA Framework. Consultation on the Scoping Report took place in January 2023, which allowed the statutory consultees to provide comments on the scope of the SA, baseline information, the proposed methodology and the SA framework.
- 3.2.3 Comments were received from Historic England on the SA Scoping Report and are outlined in Appendix A, which also provides our responses and actions taken considering these comments. No comments were received from the Environment Agency and Natural England.
- 3.2.4 The baseline information for the Scoping Report can be found in Appendix A.

Stage B: SA Assessment

3.2.5 Stage B comprises the assessment of the Draft LTP4 Strategy document against the SA Appraisal Framework objectives identified within the Scoping Report. This will aid the development of LTP4 and its policies.

- 3.2.6 The SEA Regulations also require consideration of reasonable alternatives. It is common practice for a SEA to consider what environmental effects would occur without the implementation of the plan (in this case the continuation of LTP3, and Action Plan Alternatives). This is done to allow the assessment of the likely effects that the implementation of the plan would have compared to any alternative plans (see Section 3.3).
- 3.2.7 The assessment of objectives, outcomes and alternatives has been presented in matrix format and accompanied by explanatory text for each policy and strategy overall. The assessment criteria used are detailed in Section 3.3.

Stage C and D: Reporting and Consultation

- 3.2.8 The results, recommendations, mitigation and monitoring measures have been summarised in the SA Report (this report, Stage C).
- 3.2.9 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 (Stage D).

Stage E: Monitoring

- 3.2.10 This report sets out recommendations for monitoring the social, environmental and economic effects of implementing the Draft LTP4 (Section 10).
- 3.2.11 The purpose of monitoring is to measure the environmental outcome of a plan and the performance of a plan against pre-defined environmental objectives, targets, or inputs. If monitoring is carried out effectively it will contribute to managing uncertainty; improving knowledge; enhancing transparency, accountability and managing environmental information.

3.3 Report Methodology

- 3.3.1 Stage B and Stage C (stages included within this report) comprise the assessment of the draft LTP4, against the SEA Appraisal Framework objectives identified within the Scoping Report. This will aid the development of the draft LTP4 and its objectives and outcomes and the draft Action Plan when it is produced.
- 3.3.2 This SA Draft Report will therefore show:
 - Assessment of the draft LTP4 vision themes, objectives and outcomes
 - Alternative policy scenarios and interventions.

Assessment of effects

- 3.3.3 The assessment of vision, objectives and outcomes has considered the following:
 - Overall effect significance (negative, positive, uncertain, potential for both negative and positive effect or negligible)
 - Nature of effect (direct or indirect)
 - Spatial impact (local, regional, national)
 - Reversibility of effect:
 - Reversible: the receptor can revert 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, Long term: 10+ (up to and beyond end of plan period)

3.3.4 Table 3.2 below sets out the key to assessment:

Table 3.2 – Key for SA process

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 or no effects	0
Magnitude (high, medium, low)	H/M/L
Nature of effect (direct or indirect)	D/I
Spatial extent (local / regional / national)	L/R/N
Reversibility of effect (reversible or irreversible)	R/I
Permanence (permanent or temporary)	P/T
Duration (short, medium or long term)	ST/ MT / LT

3.3.5 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 Alternatives

- 3.3.6 The SEA Regulations require that an assessment of reasonable alternatives is also undertaken.
- 3.3.7 For the LTP4, the alternative scenarios to be assessed will be a 'do nothing' strategy based on the continuation of the current LTP (LTP3) and a LTP4 Carbon Approach strategy option, which seeks a more enhanced focus and delivery on active travel and public transport improvements, along with some potential demand management measures. The assessment will not examine individual policies or projects that may arise from these but will look at the application of them against the SA objectives.
- 3.3.8 For the Action Plan, alternative interventions will be assessed. These will be developed and assessed on an individual basis as Action Plan schemes are progressed.
- 3.3.9 A high-level summary of effects of both alternative LTP strategies on each of the SEA objectives will be provided and each will be scored using the Key to Assessment set out in Table 3.2 above. See Section 8 for further details.

Cumulative Effects

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

- 3.3.11 In addition, the assessment has considered the cumulative effects of neighbouring transport developments, including those beyond the district boundary.
- 3.3.12 The assessment of cumulative effects has been undertaken in Section 9 of this report.

Mitigation, Enhancement and Monitoring Measures

- 3.3.13 The SEA Regulations require that mitigation measures are considered to prevent, reduce or offset any significant adverse effects on the environment resulting from implementing the plan.
- 3.3.14 Mitigation measures have been identified for the assessment of visions, objectives and outcomes. These include both proactive avoidance of adverse effects and actions taken after potential effects have been identified. These are set out in Section 10 of this report.
- 3.3.15 Section 10 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.
- 3.3.16 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.

3.4 Assumptions and Limitations

- 3.4.1 The following assumptions and limitations have been identified:
 - The preparation of the LTP4 alongside the SA has allowed for an iterative process of assessment and refinement in the narrative and policies within the Plan. Therefore, some of the recommendations set out in this report may already have been addressed in the LTP4 and the SA will be updated to reflect this.
 - The assessment of policies, and alternatives, has been undertaken as a deskbased exercise using the baseline information from the Scoping Report. No site visits have been undertaken specifically for the purposes of the SEA.
 - The LTP4 does not propose other specific development sites with defined boundaries above those mentioned. As such, the focus of the assessment for the SEA is of the strategic objectives (policy alternatives).
 - This SEA/SA has endeavoured to ensure 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.
 - In some instances, given reasonable assumptions, it is not possible to predict 'significant effects'. However, it is possible to comment on the potential positive and negative effects of the draft plan and its alternatives in more general terms, therefore informing any likely developments of the LTP4 strategy. This does

mean that, at implementation phase, significant effects may still occur depending on the nature and location context of specific interventions.

3.5 Relationship with other processes

Equalities Impact Assessment

- 3.5.1 The Equality Act 2010 includes a public-sector equality duty that requires public organisations and those delivering public functions to: show due regard to the need to eliminate unlawful discrimination, harassment and victimisation; advance equality of opportunity; and foster good relations between communities.
- 3.5.2 The EqIA process focuses on assessing and recording the likely equalities effects of a policy, project or plan. It seeks to ensure that the policy, project or plan does not discriminate or disadvantage people and enables consideration of how equality can be improved or promoted. The equality duty came into force in April 2011 and covers the following nine Personal Protected Characteristics:
 - Age
 - Disability
 - Gender
 - Gender reassignment
 - Marriage and civil partnership
 - Pregnancy and maternity
 - Race
 - Religion or belief
 - Sexual orientation

Habitats Regulations Assessment

3.5.3 Under Article 6(3) of the EU Habitats Directive as transposed into the UK law by the Habitats Regulations14, an assessment (referred to as an HRA) needs to be undertaken in respect of any plan or project which:

"Either alone or in combination with other plans or projects would be likely to have a significant effect on a site designated within the Natura 2000 network – these are Special Areas of Conservation (SACs), candidate SACs (cSACs), and Special Protection Areas (SPAs). In addition, Ramsar sites (wetlands of international importance), potential SPAs (pSPA) and in England possible SACs (pSACs), are considered in this process as a matter of law or UK Government policy. These sites are collectively termed 'European sites' in Habitats Regulations Assessment (HRA); and is not directly connected with, or necessary to, the management of the site".

- 3.5.4 Guidance on the Habitats Directive sets out four distinct stages for assessment under the Directive:
 - Stage 1: Screening: the process which initially identifies the likely impacts upon a Natura 2000 site of a plan or project, either alone or in combination with other plans or projects and considers whether these impacts are likely to be significant.
 - Stage 2: Appropriate Assessment: the detailed consideration of the impact on the integrity of the Natura 2000 sites of the plan or project, either alone or in combination with other plans or projects, with respect to the site's conservation objectives and its structure and function. This is to determine whether there will be adverse effects on the integrity of the site.

- Stage 3: Assessment of alternative solutions: the process which examines
 alternative ways of achieving the objectives of the plans or projects that avoid
 adverse impacts on the integrity of the Natura 2000 site; and
- Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain: an assessment of whether the development is necessary for imperative reasons of overriding public interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the Natura 2000 network.
- 3.5.5 The first stage of the Habitats Regulations Assessment (screening) will be undertaken alongside this Draft SA Report, to support the wider LTP4 and SA consultations.

4 Identifying Sustainability Issues

4.1 Sustainability Context

- 4.1.1 The SA Scoping Report was produced by West Berkshire Council in December 2022 in support of the LTP4 SA and subject to consultation in early 2023. The scoping report has since been updated to consider issues raised in the consultation. The SA Scoping Report presented the sustainability context of the West Berkshire District area. The report presented baseline information across 14 SA topics and identified key sustainability issues and opportunities, which helped to form the SEA Framework.
- 4.1.2 Table 4-1 below summarises the sustainability context of the West Berkshire District which was identified as part of the scoping process. The plans, policies and programmes identified in the Scoping Report, as well as the baseline can be found in Appendix A to the SA Report.

Table 4-1 – Sustainability Issues and Opportunities

SA topic	Summary of Sustainability issues and Opportunities
Climatic factors	 WBC has produced an Environment Strategy to guide the pathway to a Carbon Neutral District by 2030. Transport infrastructure is one of the largest contributors to greenhouse gas emissions and must be considered accordingly before progressing future schemes. Impacts of climate change may be felt on strategic and local transport networks (e.g. flooding damage to road and rail networks, extreme heat damage to road surfaces and rail lines). Therefore, greater resilience will be required to be built into transport networks. Mitigate the impacts of climate change through the development of green and blue infrastructure. There is a need to develop low carbon travel to choices to enable West Berkshire residents and businesses to make sustainable travel choices. There is a need to support the continued increase in infrastructure to support the demand in electric cars. Scope for redevelopment of existing assets rather than building new.
Biodiversity and Geodiversity	 There are several statutory local, national and international sites designated for nature conservation within West Berkshire which may be affected by development, including transport infrastructure. Designated habitats and protected species may be at risk by development and transport infrastructure. LTP4 presents opportunities to be strategic in the enhancement of biodiversity at the landscape scale across corridors. Existing Biodiversity Opportunity Areas can be combined with priorities for wider ecosystem service benefits to deliver landscape wide environment gain for biodiversity and people. There is a need to apply Biodiversity Net Gain in the delivery of infrastructure, including transport. There is a need for transport to play its part in protecting and enhancing biodiversity. This could include the 'soft estate' alongside existing corridors, such as introducing wildflower verges.
Landscape and townscape	 Nearly 75% of West Berkshire is designated as part of the North Wessex Downs National Landscape. West Berkshire manages around 740 miles of Public Rights of Way. There is potential for LTP4 to develop transport to improve access to the countryside. Transport infrastructure has the potential to erode and adversely affect local character and distinctiveness, such as surfacing, signing and lighting requirements. Green and Blue Infrastructure (GBI) describes the multifunctional network of green and blue spaces, landscapes, and natural elements within and between towns and villages. The LTP4 has a role to play in

	helping to develop GBI assets, especially green/blue corridors in relation to transport corridors, such as road verges, railway embankments, canal banks and towpaths. • There is a need to encourage providing good quality, accessible GBI within development and transport projects to improve health and wellbeing.
Soils	 It is important that any future development of the transport network in WBC does not have adverse impacts or lead to the degradation of Best and Most Versatile (BMV) (grades 1 to 3) agricultural land. The LTP can have a role to play in ensuring, where possible, that improvements are contained within land covered by existing transport networks to protect BMV land.
Cultural heritage	 There are over 2,000 listed heritage assets within West Berkshire. The historic environment is increasingly under threat from development pressures. New infrastructure can adversely affect the visual amenity and settings of designated Transport can adversely impact cultural heritage sites because of vehicle damage and emissions in urban areas and villages heritage assets. Ancillary features of transport, such as road signs and marking, as well as car parking, can impair the setting of historic environments.
Air	 As well as carbon emissions, road vehicles emit a wide range of pollutants, including nitrogen oxides (NOx) and particulate matters (PM). Nitrogen dioxide (NO₂) can attribute to the acidification of soils and can add excessive nutrients to water courses that may cause algal blooms. PM can arise from the burning of fuels and through degradation of vehicle tyres and braking systems. Emissions of dust can also generate concentrations of PM near quarries and construction sites. The two areas with previously recognised poor air quality in West Berkshire were both attributed to road transport emissions. The proximity to main Strategic Road Network corridors presents a challenge in managing vehicle flows on local networks, particularly in relation to heavy goods vehicles. Although changes in technology mean that vehicles are producing fewer emissions, the number of vehicles on roads is expected to increase. This has the potential to affect air quality and consequently, human health, natural capital, and ecological sites. The UK Government's plan to end the sale of all new conventional petrol and diesel cars and vans by 2035 and support for work and home-based electric charging facilities, will promote use of hybrid and electric vehicles, with positive effects for air quality.

	There is a need to promote sustainable and active travel opportunities for all to use, in preference to catering for unrestrained car use.
Water	Poor water quality is typically due to a combination of agricultural runoff, untreated drainage from built-up areas and roads, and discharge from wastewater treatment works.
	 Urban areas and the transport network are sources of environmental contaminants, which include hydrocarbons, metals, plastics, nutrients (such as phosphate), ammonia, pathogens, sediment and solid pollutants.
	 There is a need to avoid and reduce the impacts of surface water as well as river and groundwater flooding in parts of West Berkshire.
	There is a need to reduce the amount of major and significant pollution incidents which have affected the quality of West Berkshire's water resources, including from run-off from transport networks.
Noise and Light	 Noise pollution may impact the health and wellbeing of people who live near the Strategic Road Network (M4/A34) or key local routes (e.g. A4 & A339) due to current levels of traffic.
Pollution	• The natural environment, particularly tranquil areas, may experience an increase in transport-related noise pollution in proximity to transport corridors.
	 Light pollution can have harmful effects upon all areas, particularly in the more rural areas of West Berkshire, where artificial lighting has been limited. Too much light can impact the feeding and breeding cycles of birds, bats, insects and nocturnal animals
	 North Wessex Downs NLA seeks to reduce the threat of artificial light and to maintain the beauty of the dark sky areas.
Human health	There is a need to develop strategies to address where inequalities occur in access to healthcare, jobs and other services associated with transport provision.
	 There are negative perceptions about noise and air pollution and the potential health impacts associated with road vehicle traffic on congested routes.
	 Obesity is seen as an increasing issue by health professionals. There is a need to develop strategies that encourage active travel.
	 There is a need to develop networks that encourage greater use of walking and cycling, particularly in urban areas. Further opportunities exist to promote leisure active travel access to the network of quiet routes and footpaths in the rural areas.
	Human health and quality of life can also be improved by taking a natural capital approach.

General social considerations: Population, Education, Housing, Deprivation, Crime and Safety	 The West Berkshire population is expected to grow beyond 166,000 by 2036. The population of over 65s is forecast to grow by over 59% in the period 2016-2036 and the over 85s by 148% over the same period, for which transport requirements will need to be considered. Fear of crime, such as thefts of bicycles or travelling alone in later evenings, can influence people's choice of travel. There is a need to develop transport networks that are safe for all who wish to travel.
Transport	 West Berkshire experiences congestion on both Strategic and local road networks during peak times. This can result in capacity pinch-points and road safety issues which reduce its efficiency leading to congestion, pollution and rat running on less suitable routes.
	 There is a need to reduce reliance on the private car and to encourage greater use of sustainable and active travel choices, which would tackle the negative impacts of road, such as congestion, severance, road safety and increased costs of maintaining local transport assets. There is a need to look at the impact of freight and encourage more sustainable forms of distribution. There is a need to minimise the impact of road freight on local communities.
Renewable and low carbon energy	 The LTP4 has the potential to adopt approaches that encourage low-carbon technologies. WBC's Environment Strategy identifies transport as a key theme in helping to meet its 2030 net zero target. This is to be achieved by reducing reliance on private cars, increasing active travel, developing and maintaining resilient highway infrastructure and understanding the potential of ultra-low emission vehicles. There is a need for the new LTP4 to build on progress made in the current LTP in increasing travel choices.
Minerals	 There are several mineral sites, mainly located along the A4 corridor, plus the rail aggregate depot at Theale, which transfers to road deliveries in the wider area. The transport of minerals is expected to largely remain on the road network. Minerals will be used in transport improvements and maintenance, as well as new development sites. There is a need for increased use of recycled materials for transport infrastructure.
Waste	 Transport maintenance often requires the use of resources and generates waste. There is a need for efficient use of resources, including recycled and secondary aggregates in transport maintenance and construction of new infrastructure. New developments will create more waste, which will increase waste vehicle movements.
	West Berkshire is in one of the most prosperous economic sub-regions of Europe.

General economic considerations	 Employment space is dominated by industrial B2/B8 uses, which is clustered in Newbury, Thatcham and Theale and along the main transport corridors. Transport has a key role to play in ensuring the district maintains its economic competitiveness and in attracting new businesses and investment to the district. High levels of road traffic in urban centres or key inter urban routes can result in congestion, which can result in increases in journey times and unreliability. There is a need to ensure that that appropriate sustainable, reliable and accessible transport networks are in place to help sustain the economic vitality of the district and provide access for residents to employment.
Cross boundary issues	 There is considerable movement across boundaries, particularly to Reading Borough, where some transport measures associated with the Reading Transport Strategy may be delivered within the West Berkshire district. There is a need for good partnership working with neighbouring authorities and transport operators to deliver effective improvements that provide people with greater choice and opportunities for travel.

4.2 Future Evolution of the Baseline

- 4.2.1 The declining trend in the provision of many ecosystem services and biodiversity is expected to continue, with projected population growth and industrial development anticipated to place increasing pressure on sensitive wildlife sites within the West Berkshire, area as well contribute to the deterioration, loss and fragmentation of habitats.
- 4.2.2 The West Berkshire population is expected to grow beyond 166,000 by 2036. This sustained growth is likely to result in greater demands on resources, travel and local transport infrastructure. This may also result in associated increases in noise pollution, air pollution, and contamination of surface water run-off and could restrict the ability of existing roadside habitats (including trees) to reduce these impacts.
- 4.2.3 Significantly, the population of over 65s is forecast to grow by over 59% in the period 2016-2036 and the over 85s by 148% over the same period, both of which are well above the national average and increasing demand for healthcare and community facilities. In addition, the growing population is likely to place pressure on public transport methods such as rail and buses.
- 4.2.4 With a growing population and increased development the potential for generating waste is increasing. Additionally, economic growth and rising population within the District 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.
- 4.2.5 Further development and the provision and on-going maintenance of the local transport network will require increased use of minerals and generation of waste. There will be a need to increase the use of recycled materials and secondary aggregates in transport infrastructure projects and maintenance.
- 4.2.6 Another issue facing West Berkshire is climate change. The District has not been immune from the impacts of climate change, with incidences of flooding becoming more prevalent in recent years. Other key challenges include more extreme weather events, i.e. increases in hotter, drier summers, and increases in annual precipitation and extreme rainfall events in the District. Climate change also has the potential to further fragment and deteriorate ecosystems and biodiversity.
- 4.2.7 WBC declared a Climate Emergency in 2019 and in response, has developed an Environment Strategy to outline the steps that will be taken for the council to achieve net zero by 2030. However, population growth and forecasted development within the District is likely to result in an increase in carbon emissions.
- 4.2.8 The historic and cultural environment is increasingly under threat as result of 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.
- 4.2.9 Increasing population and development within the West Berkshire district 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 demand on drainage systems and the number and likelihood of properties being at risk of flooding.

4.3 Sustainability Appraisal Framework

4.3.1 A Sustainability Appraisal Framework has been produced to guide the assessment process of the LTP4. The framework (set out in Table 4-2 below) summarises the main sustainability issues in West Berkshire across each environmental topic, and the subsequent sustainability objectives and appraisal questions to be used to assess emerging LTP4 Strategy vision themes and objectives and will be used in the development of individual projects with Action Plans as these are developed.

Table 4-2 – Sustainability Appraisal Framework

SA Topic	SA Objective	SA Supporting appraisal questions
Biodiversity and Geodiversity	SA1 - To protect and enhance biodiversity and geological diversity throughout West Berkshire	Will the strategy or proposal: Protect the District's natural capital? Enhance or increase provision of ecosystem services from the District's natural capital?
Water quality	SA2 - To maintain and enhance water quality and resources	Will the strategy or proposal: • Support the protection and enhancement of water bodies? • Improve water quality?
Flood risk	SA3 - To minimise the risk and impact of flooding of transport infrastructure and ensure risk of surface water flooding is reduced	Will the strategy or proposal: Increase or decrease the risk of surface water flooding? Ensure that sustainable drainage systems are provided where required?
Soils	SA4 - To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Will the strategy or proposal: Reduce impacts from infrastructure development and maintenance on soil and mineral resources? Result in the loss of the Best or Most Versatile agricultural land?
Historic Environment	SA5 - To conserve and enhance the historic environment, including designated and non-designated heritage assets, cultural heritage assets and features of archaeological importance	Will the strategy or proposal: Conserve and or enhance heritage assets, their setting and the wider historic environment?

		 Contribute to the better management of heritage assets and tackle heritage at risk? Improve the quality and condition of the historic environment? Respect, maintain and strengthen local character and distinctiveness? Promote high quality design? Impact the historic environment through issues such as contamination, changes to the preservation conditions on a site etc? Impact the preservation of archaeological assets? Improve access and accessibility to heritage assets?
	- To minimise the impact on landscape townscape character	 Will the strategy or proposal: Be located within the North Wessex Downs Landscape Area? Improve the quality and condition of the landscape and townscape? Respect, maintain and strengthen local character and distinctiveness? Promote high quality design?
Air Quality when	- To reduce traffic related air pollution re air quality is a concern and where sible, enhance air quality elsewhere.	 Will the strategy or proposal: Support measures to improve air quality/pollution? Impact on the previously declared Air Quality Management Areas in West Berkshire? Support measures for reduction of congestion at key junctions. Support measures to reduce the impact on air quality arising from traffic generated by new developments.

Climate Change and Greenhouse gases	SA8 - To reduce carbon emissions and the reliance of the transport network on fossil fuels in line with net zero carbon commitments	 Will the strategy or proposal: Support the Council's own target for transition to net zero carbon emissions by 2030? Promote a reduction in private vehicle use? Support the transition to Zero Emission Vehicles? Increase the resilience of people, transport networks, infrastructure and natural environments to the impacts of climate change?
Minerals	SA9 - To promote the sustainable transport of minerals and waste within West Berkshire	 Will the strategy or proposal: Encourage the sustainable transport of minerals from locally won sites? Encourage the wider transfer of minerals from road to rail? Reduce impacts from infrastructure development and maintenance on mineral resources?
Waste	SA10 - To conserve natural resources and increase resource efficiency through use of recycled materials in construction and maintenance of local transport assets	 Will the strategy or proposal: Encourage the use of recycled and secondary aggregates in construction, maintenance and surfacing works? Result in substantial use of resource and generation of waste?
Noise and Light	SA11 - To reduce noise pollution in Noise Important Areas and protect tranquil and remote areas from the effects of noise and light pollution	 Will the strategy or proposal: Increase / decrease levels of noise? Impact the dark skies areas within the North Wessex Downs National Landscape Area?
Access to the Countryside	SA12 - To protect the physical and mental health and wellbeing of West Berkshire's residents through ensuring easy access to	Will the strategy or proposal:

	essential services and to the network of quiet routes and footpaths in the rural areas of the district	 Increase active travel journeys in, to and within the rural areas of the District? Increase the provision of active travel and PROWs in rural areas and connections between rural and urban areas?
Health and Wellbeing	SA13 - To create transport networks that are safe for all users, including improving personal safety and reducing crime	 Will the strategy or proposal: Improve road safety for all users? Reduce transport-related incidences of crime (such as thefts of bicycles)?
Active and Sustainable Travel	SA14 - To increase the capacity and efficiency of the transportation network to support demographic changes, including increasing travel by active and sustainable modes of transport	 Will the strategy or proposal: Increase walking and cycling? Increase public transport usage? Provide better connectivity (particularly in rural areas) to facilities and services? Help to reduce inequalities, particularly for those people and communities most vulnerable?
Economy and Employment	SA15 - To maintain economic vitality, enable well-paid employment and education across the district through provision of reliable transport networks, including with neighbouring areas	 Will the strategy or proposal: Improve access to employment centres? Improve access to education and training opportunities? Improve connectivity with neighbouring urban and economic areas? Support agile working patterns?

5 Assessment of LTP4 Vision Themes and Objectives

5.1 Introduction

- 5.1.1 This assessment of the Draft LTP4 Strategy Vision Themes and Objectives is summarised below and presented in full in Appendix C.
- 5.1.2 The four Vision Themes assessed are:
 - Support Sustainable Growth
 - Decarbonise Transport
 - Places for People
 - Sustainable Access for All
- 5.1.3 Within these Vision Themes, there are 12 supporting objectives, which are assessed as:
 - 'Vision Zero' target for road safety
 - Safer residential, school and town centre streets
 - Increased levels of physical activity
 - Easier journeys
 - Everyone is digitally connected
 - A better maintained network
 - Net Zero Emissions
 - 50% active travel journeys (Newbury and Thatcham)
 - Access to zero emission vehicles and/or charging
 - Carbon neutral development
 - Protect and enhance strategic connectivity
 - More sustainable movement of freight
- 5.1.4 A matrix approach has been used for the assessment which has used the significance criteria identified in Table 3.1. Table 5.1 below provides an overview on the performance of the LTP objectives against each SEA objective and Table 5.2 shows the summary of effects based on each SEA objective.

5.2 Summary of Vision and Objective Assessment Findings

Table 5.1 – Assessment of Vision Themes and Objectives

		SA1 - Biodiversity and Geodiversity	SA2 – Water Quality	SA3 – Flood risk	SA4 - Soils	SA5 – Historic Environment	SA6 - Landscape and Townscape	SA7 – Air Quality	SA8 – Climate Change & Greenhouse Gases	SA9 - Minerals	SA10 - Waste	SA11 - Noise and Light	SA12 – Access to the Countryside	SA13 – Health and Wellbeing	SA14 - Active and Sustainable Travel	SA15 – Economy and Employment
Places for People	'Vision Zero' target for Road Safety	+	0	+	?	+	++	+/-	+/-	?	?	+/-	+	++	+	+
Places for People	Safer residential, school and town centre streets	+	0	0	?	+	+	+/-	+/-	?	?	+/-	0	++	++	+
Places for People	Increased levels of Physical Activity	0	0	0	?	+/-	+	+	++	?	?	+/-	++	++	++	+
Sustainable Access for All	Easier Journeys	?	?	?	?	+/-	+/-	+	+/-	?	?	0	++	++	++	+
Sustainable Access for All	Everyone is digitally connected	0	0	0	0	0	+/-	+	+/-	0	0	0	+/-	+	+	+
Sustainable Access for All	A better maintained network	0	0	+	0	0	+	+	++	+	+	0	0	?	+	+

Decarbonise Transport	Net Zero emissions	+	+	0	+	+	+	++	++	0	0	++	+/-	+	0	+
Decarbonise Transport	50% Active Travel (Newbury & Thatcham)	+	0	0	0	+	+	++	+	0	0	+	+	++	++	+
Decarbonise Transport	Access to Zero Emission Charging &/or Vehicles	+	0	0	0	-	-	++	++	0	0	+/-	0	+	+	+
Support Sustainable Growth	Carbon Neutral development	?	0	0	0	+	++	?	+/-	+/-	0	0	0	+	+/-	0
Support Sustainable Growth	Protect and enhance strategic connectivity	-	0	?	?	0	0	+/-	+/-	?	?	-	0	+	+	+
Support Sustainable Growth	Improving freight	-	0	0	?	+/-	+/-	0	0	?	?	-	0	0	0	+

Table 5.2 – Summary of Significant Effects

SA Objective	Numbe Effects	r of Sigi	nificant	Summary of Significant Effects
	++		?	
SA1 – Biodiversity & Geodiversity	0	0	2	Two of the objectives have resulted in uncertain effects (Easier Journeys and Carbon Neutral development). This is generally where objectives may result in developments or enhancements which could give rise to a loss of natural capital, but the locations and overall design of proposals is not yet known. There may be opportunities to provide natural capital enhancements as part of design.
SA2 – Water Quality	0	0	1	One objective has resulted in uncertain effects (Easier Journeys). Potential improvements to these may affect run-off and on impact drainage systems in the local area, but the overall design of proposals is not yet known. Details of features such as water courses, culverts and drainage will be considered on a case-by-case basis.
SA3 – Flood Risk	0	0	2	Uncertain effects have been identified for two objectives (Easier Journeys and Protect and Enhance Strategic Connectivity). These objectives have the potential to result in improvements that may be located within flood zones and increase flood risk through increased hard standing. As the location of these improvements is currently not known, increases in flood risk cannot currently be determined. There is potential that developments and improvements located close to flood zones may include flood resilience measures, resulting in reduced flood risk.
SA4 – Soils	0	0	6	Uncertain effects have been identified for six objectives ('Vision Zero' target for Road Safety, Safer residential, school and town centre streets, Increased Levels of Physical Activity, Easier Journeys, Protect and Enhance Strategic Connectivity, and Improving freight). There is potential that development may result in land take surrounding existing highways and active travel routes. If brownfield land is utilised to develop existing routes, there is potential for positive effects. However, development locations are currently now known.
SA5 – Historic Environment	0	0	0	No significant or uncertain effects have been identified for Historic Environment. However, several minor positive and two minor negative effects have been identified. For details of these, see Appendix C .
SA6 – Landscape & Townscape	2	0	0	Both 'Vision Zero' target for Road Safety and Carbon Neutral Development have resulted in significant positive impacts. These objectives result in the improvement of the public realm and District's streetscapes, as well as improving the setting of the landscape and townscapes. Generally, this is through positive development, reducing vehicles, and through the development of attractive streets and active travel routes.
SA7 – Air Quality	3	0	1	Three objectives have resulted in significant positive effects on Air Quality (50% Active Travel in Newbury & Thatcham, Net Zero Emissions and Access to Electric Vehicles and/or Charging). Generally, these objectives encourage a modal shift away from private transport towards active

				travel options and a result in a reduction of private vehicles on West Berkshire's roads and encouraging the use of zero emission vehicles. This results in a reduction in vehicle related emissions, improving air quality. Uncertain effects have been identified for Carbon Neutral Development as it is unknown at this stage what development will take place and how many additional vehicle journeys may be generated as a result.
SA8 – Greenhouse Gases & Climate Change	4	0	0	Three objectives have been identified as having significant positive effects (Increased Levels of Physical Activity, Net Zero Emissions, and Access to Electric Vehicles and/or Charging). These objectives result in fewer traffic movements, and increased use of zero emission vehicles and zero emission buses. This contributes to decarbonising the transport network, reducing GHG emissions on the District's roads. A further objective (A Better Maintained Network) also resulted in significant positive effects. This includes climate resilience measures (such as heat, winter weather and rainfall measures) to protect the transport network against extreme effects of climate change.
SA9 – Minerals	0	0	6	Improvements associated with 'Vision Zero' for Road Safety, Safer residential, school and town centre streets, Increased levels of Physical Activity, Easier Journeys, Protect and enhance Strategic Connectivity and Improving Freight may have the potential to be material intensive. As the location and design of improvements is currently not yet known, uncertain effects have been identified.
SA10 – Waste	0	0	6	Improvements associated with 'Vision Zero' for Road Safety, Safer residential, school and town centre streets, Increased levels of Physical Activity, Easier Journeys, Protect and enhance Strategic Connectivity and Improving Freight may have the potential to generate significant amounts of construction waste. As the location and design of improvements is currently not yet known, uncertain effects have been identified.
SA11 – Noise & Light	1	0	0	One objective significant positive effect has been identified (Zero Emission Vehicles). This is because electric vehicles are much quieter than the ICE equivalents and an increase in EV's should help to reduce transport noise.
SA12 – Access to the Countryside	2	0	0	Two objectives have resulted in significant positive effects (Increased Levels of Physical Activity and Easier Journeys). These will encourage greater levels of active travel, which along with improvements to the PROW and rural transport networks will help improve access to the countryside.
SA13 – Health & Wellbeing	5	0	1	Five objectives have resulted in significant positive effects ('Vision Zero' for Road Safety, Safer residential, school and town centre streets, Increased Physical Activity, Easier Journeys and 50% Active Travel in Newbury & Thatcham). These objectives will result in improved safety on transport routes in the District, reducing the number of KSI on the District's roads. Additionally,

				these objectives improve physical activity amongst the population and provide improved access to community facilities. A Better Maintained Network has resulted in uncertain effects as this may include measures to help improve safety.
SA14 – Active & Sustainable Travel	4	0	0	Four objectives have resulted in significant positive effects (Safer residential, school and town centre streets, Increased Physical Activity, Easier Journeys and 50% Active Travel in Newbury & Thatcham). It is likely that improvements associated with these objectives will increase levels in the use of active and sustainable travel modes.
SA15 – Economy & Employment	0	0	0	No significant or uncertain effects have been identified for economy and employment because of LTP4 objectives. However, several minor positive effects and a few negative effects have been identified. These have been explored in Appendix C.

6 Findings from other Assessments

6.1 Equalities Impact Assessment Summary

- 6.1.1 Overall, the LTP4 vision and supporting objectives are likely to result in positive impact on protected characteristic groups in the District. The objectives aim to address a wide range of issues, identified by the key themes in the EqIA.
- 6.1.2 The main protected characteristic groups that will particularly benefit include:

Age – All age groups are likely to experience benefits because of the LTP4 objectives. Older people who may be inhibited from accessing online services, including public transport timetables and ticket purchasing will benefit from the LTP4 supporting improved digital connectivity. Younger people who may find the cost of private vehicle ownership too high will benefit from improvements to key public transport corridors to access employment opportunities or benefit from expansion of the West Berkshire Car Club. The development of safe and attractive pedestrian and cycle routes and residential streets are likely to benefit all age groups by encouraging the uptake of active travel and the subsequent benefits in terms of increased physical activity and improvements in local air quality.

Disability – People with a disability who may find the lack of suitable infrastructure a barrier to movement will benefit from LTP4 objectives to improve local transport infrastructure that contain measures to be built into street improvements. Inhibited access to public transport can also increase reliance on private vehicles. The LTP4 will seek to work with transport operators to improve access for transport users with a disability by providing much more accessible buses, trains and stations.

Rural communities – The LTP4 recognises the rural nature of West Berkshire and the transport issues that people living in rural communities may experience. Reduced or limited public transport provision and lack of safe active travel connections to urban areas can result in social exclusion in terms of accessing services and facilities. The LTP4, through the BSIP, will seek to improve public transport connections from rural areas and to improving active travel links, such as the Eling Way and the Kennet & Avon canal towpath, to urban areas. Where there is a reliance on private car use, LTP4 objectives will seek to expand publicly available EV charging networks. Rural communities with poor internet connection will benefit from the LTP4's support for improving digital connectivity, which will allow access to online services.

- 6.1.3 There is potential for low negative impacts on:
 - Gender reassignment
 - Sexual orientation
- 6.1.4 Further details of the Equalities Impact Assessment can be found in Appendix D.

6.2 Habitats Regulations Assessment (HRA) Summary

- 6.2.1 The HRA provides guidance on the likely data sources, information requirements and the process of HRA Screening, recommending further stages of assessment (Appropriate Assessment) if necessary. It also provides an indication of where the ecological implications of the LTP4 will lie, and which Habitats sites are vulnerable to known pressures, threats and existing air quality impacts.
- There are three Special Areas of Conservation (SAC) within West Berkshire, plus a further two SACs within 5km of the district boundary. Whilst there are no Special Protected Areas (SPAs) within West Berkshire, the southeast corner of the district lies within the 5km and 7km boundaries of the Thames Basin Heaths SPA. In addition, there are two Nutrient Neutrality Zones, with one covering the River Lambourn catchment area and the other covering a small area of the Solent NNZ in the southwest corner of the district.
- 6.2.3 The majority of objectives have been screened out due to their neutral or beneficial effects. However, some remain where they require development of additional infrastructure, may result in a redistribution of traffic on the local road network leading to changes to traffic flow, speed or composition on roads which fall within 200m of the identified SACs and/or increase public access to habitat sites, such as improving rural active travel access between urban areas and the countryside. Due to the high-level nature of the LTP4 objectives, some are screened in for further assessment at individual project stage following the precautionary principle embedded within the HRA process as the location, scale and extent of effects is currently unknown.
- 6.2.4 These individual measures, therefore, have potential for Likely Significant Effects (LSE) on nearby Habitats sites relating to increased traffic and further, detailed assessment is considered necessary to satisfy the requirements of the Habitats Regulations.
- 6.2.5 There is the potential for additional effects, or severity of effects, arising 'incombination' where the Habitats sites lie within neighbouring authority areas and are crossed by strategic highway routes. This is informed by the precautionary approach and high-level assessment of effects from the LTP4.

7 Assessment of Place-Based Strategies

7.1 Introduction

- 7.1.1 The LTP4 contains four placed based strategies, comprising strategic transport networks and the three place areas identified in the emerging Local Plan review. The strategies consider the transport issues for each area, providing a bespoke evidence-based outline and a strategy for how the LTP4 objectives are to be delivered. This section focuses on these four place-based strategies, which form the basis of the measures that will be contained within the draft Action Plan for delivery.
- 7.1.2 Tables 7.1 7.4 below provide an assessment for each of the four place-based strategies according to the individual measures that have been identified for the LTP4 objectives. The assessments consider the indicative Action Plan schemes, measures and initiatives contained with the LTP4.

Table 7.1 - Strategic Connections Strategy

Objective		SA1 - Biodiversity and Geodiversity	SA2 – Water Quality	SA3 – Flood risk	SA4 - Soils	SA5 – Historic Environment	SA6 – Landscape and Townscape	SA7 – Air Quality	SA8 – Climate Change & Greenhouse Gases	SA9 - Minerals	SA10 - Waste	SA11 - Noise and Light	SA12 – Access to the Countryside	SA13 – Health and Wellbeing	SA14 - Active and Sustainable Travel	SA15 – Economy and Employment
Sustainable transport for all	Service improvements at stations on Great Western Mainline	0	0	0	0	+/-	0	?	?	0	0	?	+	?	++	+
	Enhance bus frequency to every 15 minutes between Newbury – Thatcham - Reading	0	0	0	0	?	?	+/-	+/-	0	0	?	+	?	++	+
	Delivery of new and existing regional cycleways, including Eling Way	+/-	?	?	?	0	+/-	?	+/-	0	0	0	++	+	++	+/-
	Support development of Mobility as a Service (MaaS) applications	0	0	0	0	0	?	?	?	0	0	+/-	?	+	+	+
Decarbonising transport	Work with partners to reduce noise and environmental impacts of M4 & A34	+	+/-	+/-	?	?	+/-	?	?	+/-	0	+	?	0	0	+
Support sustainable growth	Theale Strategic Rail Terminal	-	+/-	+/-	-	?	-	+/-	+/-	+/-	+/-	?	0	0	0	+

A339 Newbury to Basingstoke and Junction and Safety improvements	-	?	?	?	0	+/-	+/-	0	?	0	0	?	?	?	+

Table 7.2 - Strategy for Newbury and Thatcham

Objective		SA1 – Biodiversity and Geodiversity	SA2 – Water Quality	SA3 – Flood risk	SA4 - Soils	SA5 – Historic Environment	SA6 – Landscape and Townscape	SA7 – Air Quality	SA8 – Climate Change & Greenhouse Gases	SA9 - Minerals	SA10 - Waste	SA11 – Noise and Light	SA12 - Access to the Countryside	SA13 – Health and Wellbeing	SA14 - Active and Sustainable Travel	SA15 – Economy and Employment
Places for People 50% of trips	Zero pedestrian and cyclists killed or seriously injured in Newbury and Thatcham	0	0	?	0	0	0	+/-	?	0	0	0	?	++	+	?
within Newbury and Thatcham to be made by	Improve access to cycling, including greater access to storage facilities	0	0	0	0	0	+/-	+	+	0	0	?	?	+	++	+
walking and cycling	Deliver a core strategic cycle network in and between Newbury and Thatcham	?	?	?	0	0	-	+	+	?	0	0	?	+	++	+
	Trial extensions to Newbury Town Centre pedestrianisation	0	0	0	0	0	+	+	+	0	0	0	0	+	+	+
	Create quieter and safer urban streets for residents, pedestrians and cyclists	+/-	?	?	0	0	+	++	+	0	0	+	?	++	++	+
	20 mph speed limits and quieter residential areas where residents want it	+/-	0	0	0	0	+	+	+	0	0	+	?	++	++	?

	Improve attractiveness and safety of walking and cycling routes to schools	0	0	?	0	0	0	+	+	0	0	?	+/-	+	++	?
	Test and trial access changes prioritising pedestrian and cycle movements, thus reducing the dominance of car traffic in urban centres	0	0	0	0	0	+/-	+	+	0	0	?	?	+	+	+/-
	Improve walking and cycling links to Greenham Common and to the Eling Way	+/-	?	?	+/-	0	+/-	+	+	?	?	?	+	++	++	+
	Support a trial for an on-street E-scooter hire scheme	0	0	0	0	?	-	+	+	0	0	0	0	+/-	+	+
	Employer, school and residential travel planning programmes	0	0	0	0	0	0	+	+	0	0	0	?	+	+	+
Sustainable access for all	Zero emission public or shared transport within 400m of every house in Newbury	0	0	0	0	0	?	?	+	0	0	0	0	?	+	0
	Expand car club network into Thatcham	0	0	0	0	0	0	+/-	+/-	0	0	0	0	0	+	+
	15-minute bus frequency between Newbury and Thatcham	0	0	0	0	0	0	+/-	+/-	0	0	0	0	0	+	+
	Improvements to bus services and journey times in Newbury	0	0	0	0	0	?	+/-	+/-	0	0	+/-	?	+	+	+
	Upgrade of interchange and facilities at Thatcham and Newbury Racecourse stations	?	0	0	0	0	0	+/-	+/-	?	?	0	0	0	+	+
	Trial of gritting active travel routes in Winter	-	-	0	0	0	?	0	0	?	0	0	0	+	+	0

Decarbonise transport	Zero emission buses in Newbury and Thatcham and along the A4 to	0	0	0	0	0	0	++	++	0	0	+/-	2	0	+/-	?
transport	Reading	ŭ	Ŭ	J	Ŭ	J	J)	J	.,	•	ŭ	- 7	•
	EV infrastructure aligned with expansion of shared mobility network and in areas with limited off-street parking	0	0	0	0	?	?	+	+	0	0	+/-	0	0	+/-	?
	Reduction of traffic movements in Newbury and Thatcham	+/-	0	?	0	0	+	++	++	0	0	+	0	?	+	?
	Reduce through movements, particularly HGV movements on A339	?	0	0	0	?	+	+	+/-	0	0	+	0	+	+	+/-
Support sustainable growth	Provide zero and low carbon travel options within new strategic developments in Newbury and Thatcham, including contributions towards enhancing bus services	+/-	0	0	0	0	?	++	++	?	?	?	?	?	+	?
	Create a high-quality active travel link between Sandleford Park, Newbury Town Centre, Thatcham Town Centre, north-east Thatcham and railway stations	+/-	?	?	?	0	+/-	+	+	?	?	?	+/-	+	+	?
	Trial of minibus service from north- east Thatcham to the railway station	0	0	0	0	0	?	+/-	+/-	0	0	?	?	+	+	+
	Improve operation of and reduce impact of freight in town centres	0	0	0	0	?	?	+/-	+/-	?	?	+/-	0	+/-	+/-	+
	Promote the use of E-cargo bikes	0	0	0	0	0	?	+	+	0	0	?	0	0	+	+

Table 7.3 - Strategy for the Eastern Area

Objective		SA1 - Biodiversity and Geodiversity	SA2 – Water Quality	SA3 – Flood risk	SA4 - Soils	SA5 – Historic Environment	SA6 - Landscape and Townscape	SA7 – Air Quality	SA8 – Climate Change & Greenhouse Gases	SA9 - Minerals	SA10 - Waste	SA11 - Noise and Light	SA12 - Access to the Countryside	SA13 – Health and Wellbeing	SA14 - Active and Sustainable Travel	SA15 – Economy and Employment
Places for people	Reduce the dominance of vehicles and support improved public realm and place making improvements in local centres	0	0	0	0	0	+	+	+	0	0	+	0	+	+	+
	Improve attractiveness and safety of walking and cycling routes to schools	0	0	0	0	0	+/-	+	+	0	0	?	0	+	++	0
	Secured cycle parking, adapted cycle parking and motorcycle parking at local destinations	0	0	0	0	0	0	?	+	0	0	0	0	0	+	0
	Support the extension of the Reading local cycle network, including the A329 sustainable travel corridor, and local connections into existing and planned strategic cycle routes	0	0	0	?	0	+/-	+	+	0	0	0	0	0	++	?
	Support and collaborate with Reading Borough Council on proposals that could introduce	0	0	0	0	0	-	?	+	0	0	?	0	?	+	?

	micro-mobility hire schemes into parts of the Eastern area															
Sustainable access for all	Completion of improvements to Theale station	0	?	?	0	0	+	?	?	0	0	?	0	?	+	+
	Improve pedestrian and cycle links to and interchanges at railway stations, including shared vehicles, EV charging and cycle parking	0	0	0	0	?	+/-	+/-	+	0	0	?	?	0	+	+
	M4 / A4 interchange hub offering transfer onto sustainable travel choices (to Reading)	?	?	0	?	0	?	+	+/-	?	?	0	0	0	+	+
	Improvements to active travel and bus journey times on A4 across/in the vicinity of M4 J12	0	0	0	0	0	?	+/-	+/-	0	0	0	0	+	++	+
	New Demand Responsive Transport services to serve villages in the east of the district	0	0	0	0	0	?	+/-	+	0	0	0	+	?	+	?
	Work with partners to use the service Demand Responsive Transport applications to deliver efficient bus services	0	0	0	0	0	?	0	0	0	0	0	?	?	+	?
	Collaborate in supporting partners and innovators in developing new solutions for decarbonising transport, including with existing and emerging proposals for Reading	0	0	?	?	?	?	+	+	?	0	?	?	?	+	?
Decarbonising transport	Support provision of EV infrastructure in areas with limited off-street parking, particularly around Theale, Mortimer and Burghfield Common	0	0	0	0	?	?	+	+	0	0	0	0	0	?	0
	Promotion of peer-to-peer electric charging networks	0	0	0	0	0	0	+	+	0	0	0	0	0	?	0

	Support operators and adjacent authorities with the transition to Zero emission buses	0	0	0	0	0	0	++	+	0	0	0	0	0	+	0
	Collaborate in supporting partners and innovators in developing solutions for decarbonising transport, including with existing and emerging proposals for Reading	?	?	?	?	0	+/-	+	+	?	?	+/-	?	?	++	+
Sustainable growth	Theale strategic rail Freight Interchange	-	?	?	-	0	?	+/-	+/-	+/-	+/-	?	0	0	0	++
	Attractive and direct walking and cycling links, access to public and / or shared transport and EV chargers to support carbon neutral developments	?	0	0	0	0	0	+	+	+/-	0	0	+/-	+	++	+
	Trials of new measures and / or network changes to accelerate the process for expanding the active travel network and decarbonising the transport network	?	0	0	0	0	0	+	+	?	0	0	?	+	+	+

Table 7.4 - Strategy for the Villages and Rural Areas Strategy

Objective		SA1 - Biodiversity and Geodiversity	SA2 – Water Quality	SA3 – Flood risk	SA4 - Soils	SA5 – Historic Environment	SA6 - Landscape and Townscape	SA7 – Air Quality	SA8 – Climate Change & Greenhouse Gases	SA9 - Minerals	SA10 - Waste	SA11 - Noise and Light	SA12 – Access to the Countryside	SA13 – Health and Wellbeing	SA14 - Active and Sustainable Travel	SA15 – Economy and Employment
Places for people	Promote town and village centres, including trial of events/ temporary highway changes to support the vitality of rural villages and local centres and car parking incentives	?	?	0	0	?	?	?	?	0	0	?	?	+/-	+	+
	Upgrade of footways connecting attractions and main local centres	?	?	0	0	?	?	0	0	0	0	?	+	+	+	?
	Delivery of new and improving existing regional cycleways, including extension of Eling Way from Hermitage towards Newbury and from Hampstead Norreys to Compton	?	?	?	?	0	+/-	0	0	?	0	?	+	+	+	0
	Develop walking, cycling and equestrian routes around settlements ("community circuits")	?	0	0	0	?	?	0	0	0	0	0	+	+	+	0
	Trial of 'green lanes' including locally led proposals for safer walking and cycling access to	0	0	0	0	0	+/-	0	0	0	0	?	+	+	+	0

<u></u>	T															
	public transport, schools and															
	expanding the network for walking,															
	cycling and horse riding															
	Secured cycle parking, adapted															
	cycle parking and motorcycle	0	0	0	0	?	?	0	0	0	0	?	+	+	+	?
	parking at local destinations															
Sustainable	Seek enhanced rail service															
access for all	frequency to at least 30-min															
access for all	frequency to Pangbourne, Goring	0	0	0	0	0	0	?	+/-	0	0	0	+	0	+	+
	and Streatley, Hungerford and	Ŭ		Ŭ		Ŭ	Ŭ	·	- 7	Ŭ		Ŭ				
	Kintbury stations															
	Improve facilities and/or															
	interchange at Hungerford Station	0	0	0	0	0	+	0	0	?	0	0	0	0	+	+
	and Pangbourne Station	U	U	U	U	U		0	0	f	U	U	U	U		
	Implementation of Demand															
	Responsive Transport services	0	0	0	0	0	?	?	+/-	0	0	?	+	+	+	+
	connecting local centres to the															
	wider public transport network															
Decarbonising	EV charging and shared mobility at															
transport	rural hubs, starting with Lambourn															
	and Hungerford, and explore	0	0	0	0	0	?	+	+	0	0	+/-	0	0	+	0
	expanding into other areas such as															
	Chieveley and Streatley															
	Provision of charging points and															
	promotion of peer-to-peer charging	0	0	0	0	0	0	+	+	0	0	0	0	0	+	0
	networks															
	Continue improving rural															
	broadband and digital connectivity	0	0	0	0	0	0	0	+/-	0	0	0	0	0	?	++
	,															
	Upgrade of public transport fleet to															
	reduce emissions and provide	0	0	0	0	0	0	+	+	0	0	?	?	?	+	+
	mobile office capability															
	Work with National Highways to															
	explore measures to reduce noise															
	pollution and carbon emissions	+	0	0	0	0	+	?	+	?	0	+	0	0	0	0
	associated with the M4 and A34															
	associated with the M4 and A34															

Sustainable growth	Improve active and shared travel and zero emission vehicle facilities supporting appropriate and sustainable new developments	?	+/-	0	0	0	0	+	+	0	0	0	+	+	+	?
	Retain access to and enhance the safety of A34 and M4 junctions	0	?	0	0	0	?	?	0	?	0	?	0	0	0	+

8 Assessment of Alternatives

8.1 Introduction

- 8.1.1 The SEA Regulations require an assessment of the plan and its "reasonable alternatives", in addition to those proposed within the draft plan. Without this, there cannot be a proper environmental evaluation of the preferred plan.
- 8.1.2 The assessment of reasonable alternatives does not need include all possible alternatives, but only those that are realistic. The assessment of alternatives has looked at both alternative strategy scenarios as well as alternative Action Plan interventions.

8.2 Assessment of Alternative LTP4 Objectives

- 8.2.1 The development of the LTP4 Strategy has considered several options. These have included the following alternative approaches.
 - Continuation of existing LTP3: This option would be considered as a 'do nothing' option where there would simply see a roll forward of the existing LTP3 and its associated objectives and policies beyond the current end of plan date of 2026. It is considered highly inappropriate to adopt this approach as the LTP3 is now considered to be out of date, particularly in terms of considering new technological approaches and the need to introduce measures to help reduce carbon emissions from local transport. The age of the LTP3 also means that there is no recognition of more recent policy areas, such as the Council's declared Climate Emergency in 2019 and production of its Environment Strategy. In addition, the Local Transport Act 2000 requires the local transport authority to keep the plan under review and must replace the plan no later than five years after the date on which it was made. Therefore, given the reasons outlined, this strategy was not selected.
 - LTP4 Carbon Approach: This strategy option would seek to develop and introduce measures that provide a greater degree of carbon reduction than what would be proposed through the preferred LTP4 Strategy. These would be enhanced focus on the development of alternative Action Plan interventions with the aim to deliver more widespread active travel measures and greater development of public transport infrastructure and services. These measures would also be supported by demand management measures to help curb vehicular usage, such as a road user charging scheme. The development and implementation of these measures would require significantly higher levels of capital and revenue funding than what is proposed through the preferred LTP4 Strategy to deliver within the plan period. It is highly likely this level of interventions would not be feasible considering current constraints on public sector funding. In addition, the development of some measures, particularly relating to demand management, may have little local support. Therefore, given these reasons, this strategy approach was not selected.
- 8.2.2 Although not selected, both alternative scenarios have been assessed against the SA objectives, so that they can be compared to the assessment for the preferred LTP4 strategy. Tables 8.1 and 8.2 below provides a summary of the application of the alternative scenarios outlined above. Both tables use the same key to effects outline in Table 3.1.

Table 8.1 – Assessment of Alternative Maintaining Current LTP3 Policy Scenario

SA Objective	Summary of Maintaining Current LTP3 Scenario Effects	Significance
SA1 – Biodiversity & Geodiversity	Any new developments that may come forward have the potential to negatively impact habitats, species and biodiversity. This could be through land take and both construction disturbance, particularly through noise and air quality changes. Potential development may occur in areas of high ecological value, where current levels of noise pollution are low, and air quality is good. Whilst the LTP3 acknowledges the need to protect biodiversity, the only policy where this is included is regarding highway asset management. There is no mention of the need to protect biodiversity, and it predates the Government's Environment Plan (2018) and the need to consider biodiversity net gain. The	-
	LTP3 can therefore be considered out of date in relation to biodiversity issues.	
SA2 – Water Quality	The LTP3 was assessed as not forecasted to have a significant impact on water as a resource, with no major transport schemes planned which may impact on groundwater regimes. The exclusion of water quality considerations within the LTP3 therefore has the potential to reduce water quality within West Berkshire area if not considered within development of transport schemes.	-
SA3 – Flood Risk	There have been numerous incidences of flooding that have impacted transport networks and residents in West Berkshire in recent years. Whilst LTP3 does recognise that impact and disruption that flooding from extreme rainfall events can have on the transport network, there is no specific driver to increase resilience on the local highway network to tackle such events. As Climate Change is forecast to increase the frequency of more extreme weather events that have the potential to impact transport systems, including flooding, the LTP3 does not recognise the need to develop resilient plans to manage local highway and transport networks.	-
SA4 – Soils	The LTP3 considered that as no new road building projects were being proposed that there would not be a significant impact on soils. However, there remains a possibility that transport improvements associated with new developments may take place in future years, which may involve the land-take of agricultural land and/or associated contamination. There is no protection in the LTP3 that would ensure that the agriculturally important soil assets are not at risk of degradation because of scheme development.	-
SA5 – Historic Environment	West Berkshire contains a wide range of archaeological and historic sites, including several features which are of national importance. The LTP3 was considered that it may not have a direct impact on historic and heritage assets, particularly a declared Air Quality Management Areas were not in the vicinity of these assets.	+/-

	The LTP3 does recognise that a transfer of journeys to active and public transport modes could reduce local traffic volumes and reduce congestion and improve local air quality. As air pollution is a key factor in the degradation of surfaces of historic buildings and monuments, action to improve air quality has the potential to indirectly benefit the historic environment	
SA6 – Landscape and Townscape	Although mainly rural in character, West Berkshire's townscape includes historic market towns; areas of more recent urban or suburban development (particularly in Newbury, Thatcham and on the fringes of Reading); freestanding industrial areas and many rural villages, several of which are designated as Conservation Areas because of their architectural or historic interest. In terms of landscape, 74% of West Berkshire lies within the boundaries of the North Wessex Downs National Landscape Area (formerly Area of Outstanding Natural Beauty at the time LTP3 was produced).	+/-
	LTP3 recognises that the presence of traffic and on-going growth in traffic levels can contribute to perceived or actual reduction in townscape and the reduction in tranquillity and setting in rural areas, and that the LTP should try to limit the impact of transport on the landscape character of West Berkshire.	
	New development also may have the potential to impact the landscape of the District. Policy LTP K13 (New Development) outlines how the Council will manage the transport and travel aspects of development in a way that supports the delivery of the Local Development Framework Core Strategy and the local transport goals. This included ensuring the transport impacts of development do not adversely affect the environment especially the character of rural roads, rural communities and the AONB.	
SA7 – Air Quality	LTP3 recognised that poor air quality around some congested junctions in the urban areas has become an important issue, and that the Council will need to develop effective and workable solutions to improve air quality where this is a problem. Policy LTP K6 (Air Quality) indicates that the Council will fulfil its responsibilities for Local Air Quality Management, with a focus on establishing a framework for air quality improvements and highlighting ways in which air quality can be protected through the development management process.	+
	Additionally, several other LTP3 policies contribute to improve travel choices and improving active and public transport (LTP K1 (+ AT1, AT2), K2, K5, K9 (+PT1, PT2, PT3), K10, K12 & K14). Improving travel choices through improved public and active travel will help to reduce the number of vehicles on the road, particularly the number of private cars, resulting in a reduction in emissions and therefore, an improvement on the air quality.	
SA8 – Greenhouse Gases & Climate Change	LTP3 recognises that transport is the single largest source of carbon emissions in West Berkshire. Policy LTP K5 (Climate Change) highlights how the Council will develop measures to reduce road transport energy consumption and carbon emissions in West Berkshire and to plan for the impacts of climate	-

	change on transport. Additionally, policies relating to active and public transport, and asset management seek to reduce road traffic levels and improved highway management and maintenance. Since the development of LTP3, Climate Change issues have gained greater global importance, with the UK Government having national target for reducing carbon emissions, including managing the transition of the UK vehicle fleet to zero emission vehicles. Locally, the climate change issue has been recognised by the Council's own declaration of a Climate Emergency in 2019, resulting in the publication of the Council's Environment Strategy in 2020, which outlines how the Council will seek to become net zero by 2030. Therefore, the LTP3 Climate Change policy is considered out of date as it does not consider the need for transition to net zero or the development of the infrastructure needed to support the take-up of zero emission vehicles across the district.	
.SA9 – Minerals	The LTP3 only recognises the presence of mineral sites and rail aggregate facilities in West Berkshire. The delivery of new transport schemes and new developments and their associated infrastructure have the potential to be minerals intensive. Since the publication of LTP3, there is a greater need to re-use existing aggregate material in highway maintenance schemes and to seek opportunities for more sustainable forms of minerals transportation. The LTP3 is therefore out of date in that it does not seek the sustainable use or transportation of minerals.	+/-
SA10 – Waste	The LTP3 only recognises the presence of waste sites in West Berkshire. However, highway maintenance practices and the delivery of new transport infrastructure and development sites are all likely to generate volumes of waste material. Policy LTP K7 (Highway Maintenance) does not specifically consider seeking the use of more recycled materials in highway maintenance programmes. Since the LTP3 was published, there has been increased focus towards the efficient use of resources, including the reuse and recycling of materials where appropriate. Therefore, the LTP3 is likely to be no longer up to date in terms of ensuring the sustainable use and recycling of highway materials.	+/-
SA11 – Noise & Light	The LTP3 recognises the negative impact on communities arising from noise generated by road and transport networks. This includes Policy K12 (Freight), which considers issues arising from the impact of road freight traffic passing close to residential buildings and using unsuitable routes in rural areas. The LTP3 does not address the issue of light pollution. This is an important issue for rural areas in the North Wessex Downs NLA covered by the dark skies' areas, which may require a need to consider the design of or minimising the need for streetlighting in dark sky areas wherever possible,	+/-

SA12 – Access to the Countryside	Although there is no specific policy relating to Access to the Countryside, LTP3 does recognise its role in delivering Policy LTP K14 (Health & Leisure) where there is a focus towards maintenance, promotion and improvement of the rights of way network and other routes for walking, cycling and horse riding. In addition, active travel policies AT1 & AT2, both acknowledge the need to the need to develop schemes listed in the Rights of Way Improvement Plan, with accessibility policies (LTP K3 & K4) seeking to enable equal access to the PROW network. Since the LTP3 was published, there has been a greater emphasis on encouraging access to the countryside for both leisure activities and in encouraging healthier lifestyles. In addition, the Council has recently updated its Rights of Way Improvement Plan. Therefore, the LTP3 policies may not be sufficiently robust to guide the development of transport schemes that facilitate access to the countryside.	-
SA13 – Health & Wellbeing	Safe and Healthy travel is recognised as a key issue in LTP3, particularly concerning how increased active travel can improve people's quality of life and contribute towards wider priorities for healthier lifestyles for residents. There are several connections between transport and health throughout the document, recognising the need to work across sectors to enable transport to contribute to the health of West Berkshire residents Encouraging more people to walk and cycle can allow people to become more active by incorporating physical activity into their everyday lives. This can help address some of the current health issues facing the UK, such as tackling obesity and heart disease. This is supported by the key LTP3 Policy LTP K14 (Health and Leisure), which points towards the Council will work towards the promotion of transport as a means of improving health and access to leisure for all and would include promoting the health benefits of active travel modes and making links with local health care providers.	+/-
	The links between health and active travel are further recognised in active travel policies AT1 (walking) and AT2 (cycling), LTP K4 (Accessibility – equality, diversity and inclusion), LTP K10 (School Travel). These policies seek to deliver both healthy and safe forms of active travel. LTP3 also identified Air Quality as a key issue, including the negative impact that this can have on people's health, particularly those suffering from asthma and other respiratory conditions. LTP3 Policy LTP K6 (Air Quality) emphasises the need for the Council to fulfil its air quality monitoring obligations, directing preventative and improvement approaches for dealing with local air quality management issues. Health and wellbeing is a key focus for the Council's wider corporate Vision 2036 and Healthy Communities is a key theme in the Council's Environment Strategy. The LTP3 was produced prior to the development of these documents and is therefore somewhat out of date with the Council's priorities.	

SA14 – Active & Sustainable Travel	As mentioned in other sections, there are supporting policies for LTP Policy K1 (Travel Choice) which seek to encourage Active Travel (AT1 – walking, AT2 – cycling). This would be further supported by LTP	+/-						
oustainable Havei	supporting documents, such as the strategies for Active Travel, Smarter Choices and Sustainable Modes of Travel for Schools. These recognise the benefits of promoting active travel in relation to tackling key issues, such as congestion, air quality, healthy lifestyles and improving choices.							
	Since the publication of LTP3, there has been an increased emphasis both local and national governments in developing and encouraging greater levels of active travel, particularly in relation to the need to tackling the global climate change emergency. This has seen the production of several national strategies (such as the National Cycling and Walking Investment Strategy, Gearchange and the establishment of Active Travel England) and locally through the development of the Council's Environment Strategy and Local Cycling and Walking Infrastructure Plans.							
	Whilst the LTP3 does contain a focus and policies that look to encourage active travel, it does not consider the current situation and policy background that provide greater emphasis and priority in relation to Active Travel.							
SA15 – Economy & Employment	The LTP3 remains relevant in considering the role of transport in supporting the district's economy and supporting the access of residents to employment opportunities. Economy is listed as a key issue, recognising the need to maintain the economic vitality of the district and the role that transport must play in facilitating access to town centres, businesses, and to local education and training opportunities.	+						
	The plan recognises the benefit of improving public transport and active travel connectivity to key employment areas, both within the district and in neighbouring areas, particularly Reading Borough. These issues relate to both urban and rural areas of the district, with the recognition that there are different issues facing different areas.							
	The LTP3 does include some consideration regarding broadband provision and how the application of new technologies will have an important role in reducing congestion, both for improving traffic management and in providing people with greater lifestyle choices. Furthermore, there have been major changes to how many people live and work following the Covid-19 pandemic, which has seen greater numbers of people working from home and an expansion of home shopping/deliveries and the provision of online services, such as healthcare.							

Table 8.2 – Assessment of Alternative LTP4 Carbon Approach Policy Scenario

SA Objective	Summary of Alternative LTP4 Carbon approach									
SA1 – Biodiversity & Geodiversity	Any new developments that may come forward have the potential to negatively impact habitats, species and biodiversity. This could be through land take and both construction disturbance, particularly through noise and air quality changes. Potential development may occur in areas of high ecological value, where current levels of noise pollution are low, and air quality is good.	-								
	There would be a need to consider biodiversity and the requirement for biodiversity net gain (BNG) in that major transport proposals requiring a planning application would need to deliver BNG under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). However, there is potential for significant negative effects to occur during construction periods and in some instances, operationally thereafter. Despite this, and taking a precautionary approach, a minor negative score has been awarded.									
SA2 – Water Quality	The LTP4 Carbon Approach would result in the development of a greater number of active travel and public transport schemes compared to the preferred LTP4 Strategy. Depending on the location of such improvements, there is the potential for impacts on water bodies or drainage run-off that would need to be taken into consideration at the scheme design process.	-								
SA3 – Flood Risk	There have been numerous incidences of flooding that have impacted transport networks and residents in West Berkshire in recent years. Whilst the LTP4 and LTP4 Carbon Approach would both recognise that impact and disruption that flooding from extreme rainfall events can have on the transport network, there is no specific driver to increase resilience on the local highway network to tackle such events. As Climate Change is forecast to increase the frequency of weather events that have the potential to impact transport systems, including flooding, the LTP4 Carbon Approach may not be able to develop resilient plans to manage local highway and transport networks.	-								
SA4 – Soils	The LTP4 Carbon approach scenario is highly unlikely to result in the development of major new road schemes. However, there remains a possibility that transport improvements associated with new developments may take place in future years, which may involve the land-take of agricultural land and/or associated contamination. This would be considered as part of the development management process.	-								
SA5 – Historic Environment	West Berkshire contains a wide range of archaeological and historic sites, including several features which are of national importance. Air pollution is a key factor in the degradation of surfaces of historic buildings and monuments, action to improve air quality has the potential to indirectly benefit the historic environment.	+								

	A key component of the LTP4 Carbon approach would be to increase the number of public transport journeys and active travel. This would allow for the transfer of journeys to these modes from car-based travel, which in turn could reduce local traffic volumes and reduce congestion and improve local air quality. A minor positive score has been awarded as an element of car journeys would remain on the network due to wider rurality of the West Berkshire district.	
SA6 - Landscape and	Although mainly rural in character, West Berkshire's townscape includes historic market towns; areas of	+
Townscape	more recent urban or suburban development (particularly in Newbury, Thatcham and on the fringes of Reading); freestanding industrial areas and many rural villages, several of which are designated as Conservation Areas because of their architectural or historic interest. In terms of landscape, 74% of West Berkshire lies within the boundaries of the North Wessex Downs National Landscape Area. The LTP4 Carbon Approach would place a focus on achieving modal shift through the development of public transport and active travel networks. This could have a positive impact in terms of reducing traffic volumes in urban centres, which could help improve townscape settings. However, there is also the need	
	for realisation that rural communities are likely to have some reliance on private car journeys due to poor public transport and active travel connections. There may be reductions in traffic volumes in rural areas, but this would be far less than what would be anticipated in urban areas.	
	New development also may have the potential to impact the landscape of the District. The LTP4 Carbon Approach would need to be developed to help maximise sustainable travel opportunities to/from and within new development in a way that would support the Transport Policies in the new emerging West Berkshire Local Plan. This would need to include ensuring the transport impacts of development do not adversely affect the environment especially the character of rural roads, rural communities and the NWD NLA.	
SA7 – Air Quality	The LTP4 Carbon Approach would take a progressive stance in improving local air quality through an emphasis on providing active travel routes and major public transport schemes. This would also include a focus on providing charging facilities for electric vehicles and other forms of encouraging electric vehicles, particularly for rural communities who are likely to have a higher degree of dependency on private (car) transport. The overall approach should help to reduce the number of vehicles and increase the proportion of zero emission vehicles using the network, resulting in a reduction in tailpipe emissions and contribute to improved local air quality.	+
	An increase in public transport options may increase the number of public service vehicles using the local network. To make the highest gains in improved air quality, the public transport improvements should be undertaken in line with a programme of introducing low or zero emission buses.	

It is likely that major upgrades to the local bus network would require significant local authority investment in infrastructure and potential subsidies. If this option is pursued, it is likely that delivery of such schemes would be in the longer-term due to availability of funding and preparation of business cases. This will mean that improvements of air quality because of the measures will not occur until towards the end of the plan period.	
The Council's Environment Strategy has been published to address the Climate Emergency in July 2019. Its main aim is to deliver a carbon neutral West Berkshire by 2030. The Environment Strategy recognises that transport is the single largest source of carbon emissions in West Berkshire, which has been reflected in the drafting of the new LTP4.	+
The LTP4 Carbon option would aim to further the development of major public transport infrastructure and service improvements to provide a real alternative to private car travel. Coupled with enhanced active travel improvements and infrastructure to support and encourage the transition to zero emission vehicles, this could help to deliver reductions in car usage and long-term improvements in greenhouse gas emissions.	
However, such major improvements would be at significant cost and take a long time to deliver. There would also be an environmental impact in delivering large scale infrastructure projects. These factors would suggest that these would be unable to be delivered to help meet the Council's 2030 net zero target or within the 2031 timeframe proposed for the LTP4, which is the reason for only achieving a slight positive score.	
The draft LTP4 recognises the presence of mineral sites and rail aggregate facilities in West Berkshire. The delivery of new transport schemes and new developments and their associated infrastructure have the potential to be minerals intensive. These would major public transport infrastructure projects that could be developed as part of the LTP4 Carbon approach. The LTP4 Carbon approach would also need to consider the need for greater resuse of existing aggregate.	+/-
material in highway maintenance schemes and to seek opportunities for more sustainable forms of minerals transportation.	
The LTP4 Carbon Approach would likely take a similar approach to Waste as has been considered as part of the preferred LTP4 Strategy. There will be an increased need for greater re-use of existing materials in highway maintenance schemes. In addition, there may be an increased focus to introduce more lower or zero emission waste vehicles.	+/-
	in infrastructure and potential subsidies. If this option is pursued, it is likely that delivery of such schemes would be in the longer-term due to availability of funding and preparation of business cases. This will mean that improvements of air quality because of the measures will not occur until towards the end of the plan period. The Council's Environment Strategy has been published to address the Climate Emergency in July 2019. Its main aim is to deliver a carbon neutral West Berkshire by 2030. The Environment Strategy recognises that transport is the single largest source of carbon emissions in West Berkshire, which has been reflected in the drafting of the new LTP4. The LTP4 Carbon option would aim to further the development of major public transport infrastructure and service improvements to provide a real alternative to private car travel. Coupled with enhanced active travel improvements and infrastructure to support and encourage the transition to zero emission vehicles, this could help to deliver reductions in car usage and long-term improvements in greenhouse gas emissions. However, such major improvements would be at significant cost and take a long time to deliver. There would also be an environmental impact in delivering large scale infrastructure projects. These factors would suggest that these would be unable to be delivered to help meet the Council's 2030 net zero target or within the 2031 timeframe proposed for the LTP4, which is the reason for only achieving a slight positive score. The draft LTP4 recognises the presence of mineral sites and rail aggregate facilities in West Berkshire. The delivery of new transport schemes and new developments and their associated infrastructure have the potential to be minerals intensive. These would major public transport infrastructure projects that could be developed as part of the LTP4 Carbon approach would also need to consider the need for greater re-use of existing aggregate material in highway maintenance schemes and to seek opportunities for m

SA11 – Noise & Light	The LTP4 Carbon Approach would seek to reduce the number of vehicle movements, which may have a beneficial impact in reducing the impact on road noise at a local level. However, the proposals in the LTP4 Carbon Approach are unlikely to have much of an impact on the volumes of traffic using the Strategic M4 & A34 corridors through the District. The LTP4 Carbon Approach is unlikely to have much impact in terms of reducing light pollution. There would be a need to ensure that the provision of public charging points in remote communities in the NWD NLA do not harm the designated "dark sky" areas.	+/-
SA12 – Access to the Countryside	The LTP4 Carbon Approach would endeavour promote sustainable access to the countryside through the development of active travel routes (including linkages to urban areas) and encouraging access by public transport. Improvements would also seek linkages with the Council's Rights of Way Improvement Plan. The current focus for the development of active travel journeys outlined in the LCWIPs is towards improving linkages and routes within the main urban areas as this is where there is a focus of active travel journeys and a greater potential for modal shift. While some improvements may be sought, it may well be the case that improved active travel connections in rural areas would achieve a lower priority. The LTP4 Carbon Approach would seek to improve public transport options throughout the District. This may include extra services that may require an increase in subsidies. There is no extra money for this currently and is likely to be a long-term aspiration.	-
SA13 – Health & Wellbeing	Health and wellbeing is a key focus for the Council's wider corporate Vision 2036 and Healthy Communities is a key theme in the Council's Environment Strategy. Safe and Healthy travel would complement these and be a key component of the LTP4 Carbon Approach. This would help to deliver active travel networks that would improve people's quality of life and provide healthier lifestyles. Improvements would also prioritise active and public transport over car use, leading to improved road safety. The LTP4 Carbon Approach would also result in improvements in local air quality, which would benefit residents. However, the provision of active and public transport schemes sought through the LTP4 Carbon Approach may not be achievable without considerable resources. Such funding may not be forthcoming and there is a likelihood that this would not be much more than sought in the preferred LTP4 approach.	+
SA14 – Active & Sustainable Travel	The LTP4 Carbon Approach would seek to develop and deliver enhanced levels of active and public transport infrastructure measures compared to the preferred LTP4 Strategy. This would help achieve modal shift towards sustainable travel choices.	+

	However, the development of such measures would require significant levels of capital funding to deliver infrastructure and revenue funding to help deliver enhanced levels of bus services and travel planning. Given the expected on-going constraints on funding for local transport, it is unlikely that these measures could be successfully delivered.							
SA15 – Economy & Employment	The LTP4 Carbon Approach would consider the need for access to employment, training and town centres. This would be achieved through the provision of enhanced active travel routes and public transport infrastructure and services. The introduction of these measures may also be undertaken in line with demand management measures aimed at restricting motorised transport from urban measures. Such measures could be unpopular with some residents and businesses and may be difficult to implement.	+/-						

8.3 Assessment of Alternative Action Plan Interventions

- 8.3.1 There is a requirement in the SA regulations to undertake an assessment of the Action Plan. At this stage, the assessment solely relates to the LTP4 Strategy document.
- 8.3.2 An Action Plan is currently being developed alongside the LTP4 Strategy document. The Action Plan is set to include interventions, which are grouped under the four vision themes and associated objectives proposed within the LTP4 Strategy document. These in turn are aggregated into the four place-based areas. The development of the various individual measures contained within the Action Plan will be subject to the SA criteria laid down in this document.

9 Cumulative Effects

9.1 Introduction

- 9.1.1 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.
- 9.1.2 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.
- 9.1.3 This section therefore presents the findings of the following:

 - How the proposed vision themes and objectives within LTP4 could cause cumulative effects with other plans, policies and projects in the surrounding area (i.e. Inter-project effects).

9.2 Intra Project Effects

- 9.2.1 The SEA of vision themes and objectives has drawn out potential intra-project cumulative effects, which are identified in Table 9.2.
- 9.2.2 Table 9.1 below outlines the key to effects for intra-project cumulative effects.

Table 9.1 – Key to Cumulative effects

Effect	Key
Positive cumulative effect	+
Negative cumulative effect	-
Mixed cumulative effects	+/-
No overall cumulative effect	0

Table 9.2 – Intra-Project Cumulative Effects Summary

Table 9.2 – Intra-Projec	ct Gui	iiuiati	ve Elli	ecis 3	ullilli	ai y							
SA Objective	Vision Zero target for road safety	Safer residential, school and town centre streets	Increased levels of physical activity	Easier journeys	Everyone is digitally connected	A better maintained network	Net zero emissions	50% active travel in Newbury & Thatcham	Access to zero emission charging &/or vehicles	Carbon neutral development	Protect and enhance strategic connectivity	More sustainable movements of freight	Summary
SA1 Biodiversity & Geodiversity	+	0	+/-	+/-	0	0	+/-	+	+	+	+/-		There is the potential for negative cumulative effects on biodiversity where large scale developments and associated infrastructure, such as Local Plan Strategic Housing allocated sites, may 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 should look to provide BNG enhancements through reductions in habitat disturbance, as well as preserving habitats and species through improved air quality.
SA2 Water Quality	0	0	0	0	0	+	0	0	0	0	+/-	0	There is potential for negative cumulative effects if several strategic developments with associated infrastructure 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 because of new developments as well as the development of sustainable transport schemes. Water quality measures are likely to be specific to each development or scheme, but there may be cumulative benefits because of traffic reductions, reducing pollution load in runoff, or the inclusion of SuDS, if successful implementation occurs. In addition, better maintenance practices may improve highway drainage, resulting in less runoff.
SA3 Flood Risk	+/-	+/-	0	0	0	+	0	0	0	0	+/-	+/-	There are potential negative cumulative effects on flooding if where multiple developments and/or schemes were to arise within flood zone areas. These could lead to an increase in impermeable surfaces, increasing flood risk. Flood risk measures are likely to be development specific or considered at the scheme design stage, but there may be cumulative benefits if implemented across multiple developments.

SA Objective	Vision Zero target for road safety	Safer residential, school and town centre streets	Increased levels of physical activity	Easier journeys	Everyone is digitally connected	A better maintained network	Net zero emissions	50% active travel in Newbury & Thatcham	Access to zero emission charging &/or vehicles	Carbon neutral development	Protect and enhance strategic connectivity	More sustainable movements of freight	Summary
SA4 Soils	Vision safety	Saf tow	O Inc.	O	O Eve	O A b	O	, 50%	O Acces	Car	O con	Moi + of f	Potential negative cumulative effects have been identified for soils due to the potential for multiple developments and associated infrastructure that may come forward, requiring additional land take outside of the existing highway boundary. This land take may result in loss of BMV or agricultural land, depending on the location of development/schemes, particularly if these are located outside of urban areas.
SA5 Historic Environment	+/-	+/-	+/-	0	0	+	+	+	+/-	+	0	+/-	There is the potential for negative cumulative effects on the historic environment if multiple developments and/or schemes were to come forward near heritage assets. During construction of these, 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 and schemes to fit in with the setting of any surrounding designated and undesignated heritage assets. The LTP4 may also result in a cumulative increase in protection and preservation of heritage assets through improved air quality. This could result in better understanding and appreciation of the historic environment.
SA6 Townscape and Landscape	+	+	+	0	0	+	+	0	+/-	+	0	+/-	There is the potential for negative cumulative effects on townscapes and landscapes if multiple developments and/or schemes were to come forward near the North Wessex Downs National Landscape Area, parks and open spaces and areas with high townscape values. During construction of these, there is the potential for disturbance to the setting and tranquillity of these areas. However, positive cumulative effects may arise due to good design of the proposed developments and improvements to the public realm, parks and open spaces and the natural environment.

SA Objective	Vision Zero target for road safety	Safer residential, school and town centre streets	Increased levels of physical activity	Easier journeys	Everyone is digitally connected	A better maintained network	Net zero emissions	50% active travel in Newbury & Thatcham	Access to zero emission charging &/or vehicles	Carbon neutral development	Protect and enhance strategic connectivity	More sustainable movements of freight	Summary
SA7 Air Quality	+	+	+	+	+	+	+	+	+	+	0	+/-	Temporary negative cumulative effects have the potential to result during the construction phase, if multiple developments and/or schemes, 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 encourage more people to use sustainable 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.
SA8 Greenhouse Gases and Climate Change	0	+/-	+	+/-	0	0	+	+	+	+	+/-	+/-	If multiple developments and/or schemes 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 and/or 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 West Berkshire's roads.
SA9 Minerals	0	0	0	0	0	+/-	0	1	0	+/-	0	+/-	If multiple developments and/or transport schemes come forward, coupled with maintenance regimes, this could lead to an accelerated demand from mineral resources. Maintenance programmes may look to utilise increased use of recycled aggregates, which would help reduce demand from new mineral sources.

SA Objective	Vision Zero target for road safety	Safer residential, school and town centre streets	Increased levels of physical activity	Easier journeys	Everyone is digitally connected	A better maintained network	Net zero emissions	50% active travel in Newbury & Thatcham	Access to zero emission charging &/or vehicles	Carbon neutral development	Protect and enhance strategic connectivity	More sustainable movements of freight	Summary
SA10 Waste SA11 Noise & Light	0	+/-	+	0	0	+/-	0	+/-	+/-	+/-	0	0	The simultaneous delivery of new developments and/or infrastructure, along with maintenance projects, may result in a cumulative increase in waste generated, especially during construction phases. This can be mitigated by new developments and schemes and maintenance projects looking to recyclable materials wherever possible, particularly if they are from the same site. 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 on the district's roads, reducing noise. In addition, the provision of new infrastructure in NLA Dark Sky areas may have a cumulative impact in terms of light pollution. However, there is potential for negative cumulative effects on noise if multiple developments and/or schemes and maintenance projects were to arise at the same time as during construction there are likely to be
SA12 Access to the Countryside	0	0		+/-	0	-	0	0	0	0	0	0	cumulative increases in noise. Additionally, there is potential for cumulative increases in traffic noise during construction because of delays and increased congestion. The development of transport interventions that promote access to the countryside may have a cumulative negative impact through issues such as land degradation, environmental pollution, biodiversity loss and increases in waste/litter. In addition, if insufficient active travel and public transport is available to countryside locations, there may be undesirable increases in private vehicle traffic, resulting in increases of air and water pollution and damage to rural roads and verges. There are opportunities to mitigate the impact of additional journeys to access the countryside through management of the Rights of Way network. Looking after the Network is identified as key theme in the Council's ROWIP.

SA Objective	Vision Zero target for road safety	Safer residential, school and town centre streets	Increased levels of physical activity	Easier journeys	Everyone is digitally connected	A better maintained network	Net zero emissions	50% active travel in Newbury & Thatcham	Access to zero emission charging &/or vehicles	Carbon neutral development	Protect and enhance strategic connectivity	More sustainable movements of freight	Summary
SA13 Health and Wellbeing	+	+	+	+	+	+	+	+	+	+	+	+	There are potential positive cumulative effects on health because of all LTP4 vision themes and objectives. The strategy and projects that will be developed through the Action Plan will 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.
SA14 Active and Sustainable Travel	+	+	+	+	+	+/-	+	+	+	+	+	0	The majority of LTP4 vision themes and objectives will have positive cumulative effects on improving active and sustainable travel. The strategy and associated Action Plan projects will encourage greater active travel use and improvements to access to local bus and rail services and digital technologies will look to encourage greater use of sustainable public transport options. Improved maintenance of transport networks may result in delays and inconvenience during works, but the result would result in higher quality networks for active travel and public transport journeys
SA15 Economy and Employment	+	+	+	+	+	+/-	+	+	+	+	+	+	Positive cumulative effects are anticipated for economy and employment. The LTP4 improves transport and active travel connectivity across the district, improving access to employment locations and town centres. The vision themes and objectives, which will be developed through the Action Plan also improve connectivity to the wider region, including Reading, Basingstoke and London, improving access to employment. There are also positive cumulative effects anticipated because of improvements to journey time reliabilities, although there could be delays during periods when maintenance works are taking place. The development of improved transport links is also likely to improve town centre economies and improve access from rural areas.

9.3 Inter Project Effects

9.3.1 Table 9.3 below outlines the sources of potential inter-cumulative effects, whilst Table 9.4 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 9.1 above.

Table 9.3 - Sources of Inter-Cumulative Effects

Policy or Plan	Plan Details
Transport for the South East (TfSE) Regional Transport Strategy, 2020	West Berkshire Council is in the South East Region. The Transport Strategy sets out how the TfSE aims to achieve its vision across the region. This includes ensuring the delivery of a high quality, sustainable and integrated transport system that supports increased productivity to grow the South East and UK economy and compete in the global marketplace.
	It aims to facilitate the development of a high quality, sustainable and integrated transport system that works to improve safety, quality of life and access to opportunities for all.
	The Strategy acknowledges the key relationship London has with the South East and how it is reliant upon strong transport links with towns, cities and international gateways outside of London, which is reflected strongly in commuting patterns between both regions.
	The Strategy also acknowledges linkages between the neighbouring sub-national transport bodies (SNTB) bordering West Berkshire. The England's Economic Heartlands SNTB has important linkages with the A34 corridor, and the Western Gateway SNTB has strategic road (M4) and rail corridors linking to Bristol, South Wales and the West of England.
Neighbouring Local Transport Plans	Local transport plans and strategies in neighbouring Berkshire unitaries (Reading Borough and Wokingham Borough), counties (Oxfordshire, Hampshire and Wiltshire) and local district authorities (Vale of White Horse, South Oxfordshire, Basingstoke & Deane and Test Valley) enable local authorities to plan for transport in their areas. They can identify both strategic policy and implementation plans for delivering this policy. Therefore, they identify policy options for implementing transport improvements, including different modes of transport. They also prioritise several areas and schemes for development over the plan period.
	 The plans include: Reading Transport Strategy 2040. Wokingham Borough Council Local Transport Plan 4. Oxfordshire County Council Local Transport and Connectivity Plan, 2022-2050. Hampshire County Council Local Transport Plan 4. Wiltshire Council Local Transport Plan 3 (new LTP 4 currently being drafted). Basingstoke Transport Strategy

Neighbouring Local Plans and Strategies

Local plans in neighbouring Berkshire unitaries (Reading Borough and Wokingham Borough), counties (Oxfordshire, Hampshire and Wiltshire) and district authorities (Vale of White Horse, South Oxfordshire, Basingstoke & Deane and Test Valley) may influence cross-boundary movements.

These plans include:

- · Reading Borough Local Plan.
- Wokingham Local Plan (emerging plan to 2040).
- Vale of White Horse Local Plan 2031 (emerging joint local plan with South Oxfordshire 2041).
- South Oxfordshire Local Plan 2035 (emerging joint local plan with Vale of White Horse 2041).
- Basingstoke & Deane Local Plan 2029 (emerging update local plan 2040).
- Test Valley Local Plan (draft plan 2040).
- Wiltshire Local Plan (emerging Local Plan review 2038).
- Oxfordshire Active Travel Strategy

Nationally Significant Infrastructure Projects (NSIPs)

There are 23 NSIPs located within the South East Region, including decided and pre-application developments. These include

- East/West Rail
- AQUIND Interconnector
- · Lower Thames Crossing
- M3 Junction 9 improvement
- M25 J10/A3 Wisley Interchange Improvement
- Southampton to London Pipeline Project
- Oxfordshire Strategic Rail Freight Interchange
- Western Rail Link to Heathrow (WRAtH)
- Slough Multifuel Extension Project
- Hampshire Water Transfer and Waste Water Project
- Botley West Solar Farm

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Table 9.4 – Intra-Projects Cumulative Effects Summary

SA Objective	Transport for the South East	Neighbouring Local Transport Plans	Neighbouring Local Plans and Strategies	Nationally Significant Infrastructure Projects	Summary
SA1 – Biodiversity & Geodiversity	+/-	+/-	+/-	+/-	There is potential for cumulative loss, damage or fragmentation of statutory and non-statutory sites and habitats if multiple developments, across similar timeframes were to come forward. Although it is assumed that protected species would be mitigated at a project level, there are wider impacts on biodiversity. There is potential positive effects through the incorporation of biodiversity net gain (TfSE, East West Rail) and green infrastructure (TfSE, Local Transport Plans, Local Plans).
SA2 – Water Quality	+/-	+/-	+/-	+/-	There is potential for cumulative impacts on surface water and groundwater quality, particularly from physical alteration because of development. Water quality measures are likely to be specific to each development, but there may be cumulative benefits if implemented District-wide.
SA3 – Flood Risk	+/-	+/-	+/-	+/-	There is potential for cumulative increase in surface water runoff and flood risk, particularly From physical alteration because of development and increases in impermeable surfaces. Drainage measures are likely to be specific to each development, but there may be cumulative benefits if implemented District-wide
SA4 – Soils	0	+/-	+/-	+/-	Potential negative cumulative effects on soils may arise because of several largescale projects, such as NSIPs, coupled with other development in the District and surrounding area. This could lead to a cumulative loss of land, some of which may be BMV land and not brownfield land. However, positive cumulative effects could arise if the majority of the of proposed developments are situated on brownfield sites.
SA5 – Historic Environment	+/-	+/-	+/-		There is potential for both positive and negative, direct and indirect cumulative effects on nationally and locally designated heritage assets, and their unique settings. This is in addition to cumulative effects on undesignated and unknown assets, which are also important. However, well-designed developments and infrastructure could present opportunities to enhance the quality of visual amenity of heritage assets by managing public access to or from the historic features. This could have additional cumulative benefits for identity, health and wellbeing and placemaking.

SA Objective	Transport for the South East	Neighbouring Local Transport Plans	Neighbouring Local Plans and Strategies	Nationally Significant Infrastructure Projects	Summary
SA6 – Townscape & Landscape	+/-	+/-	+/-	-	The provision of public realm improvements through neighbouring local plans and strategies, neighbouring transport plans, and TfSE could help to increase and improve the open space offering as well as the setting of the district's townscape and landscape. This will result in positive cumulative effects. However, multiple developments close to the district boundary (particularly if they are built to a higher density) could result in a cumulative loss of open spaces.
SA7 – Air Quality	+	+/-	+/-	+/-	Temporary negative cumulative effects have the potential to result during the construction phase, if multiple developments were to come forward. Construction of these developments may reduce the air quality through an increase in particulate matter and dust. Positive cumulative effects will result through the development of sustainable transport schemes. In combination with the Local Transport Plan's vision themes and objectives, this will increase access to public transport modes, reducing the use of a private car, and therefore improving air quality. Further positive cumulative effects will result from the reduction in journey times and congestion on the highway network.
SA8 – Greenhouse Gases& Climate Change	+/-	+/-	+/-	+/-	There is potential for increased development to increase transport related greenhouse gas emissions, particularly where this leads to increases in vehicular traffic as well as embodied carbon due to development. However, there may be cumulative benefits from transport initiatives (including East West Rail, WRAtH, TfSE and neighbouring local transport plans and strategies) and low carbon developments (as set out in neighbouring local plans) in reducing greenhouse gases. Climate change adaptation measures are likely to be specific to each development, but there may be cumulative benefits if implemented across multiple plans (as set out in neighbouring Local Plans).

SA Objective	Transport for the South East	Neighbouring Local Transport Plans	Neighbouring Local Plans and Strategies	Nationally Significant Infrastructure Projects	Summary
SA9 - Minerals	+/-	+/-	+/-	1	There is potential for negative cumulative effects upon minerals because of large-scale projects (NSIPs). Additionally, if developments and other projects across similar timeframes were to come forward, this has potential to negatively affect minerals. However, strategies and plans (TfSE, Local Transport Plans, Local Plans) include circular economy principles that may contribute to limiting demand for new minerals-based materials.
SA10 – Waste	+/-	+/-	+/-	-	There is potential for negative cumulative effects in terms of waste because of large-scale projects (NSIPs). Additionally, if developments and other projects across similar timeframes were to come forward, this has the potential to negatively impact waste through larger generated volumes. However, strategies and plans (e.g. TfSE, Local Transport Plans and maintenance plans, Local Plans and strategies) may include circular economy principles that may include on—site recycling and re-use of waste materials in construction and maintenance projects.
SA11 - Noise & Light	+/-	+/-	-	-	There may be cumulative reductions in noise from transport initiatives (TfSE, neighbouring local transport plans) encouraging a move towards sustainable transport modes, reducing road traffic noise. However, temporary negative cumulative effects have the potential to result during the construction phase, if multiple developments were to come forward during the same timeframe. There may also be cumulative negative impacts arising from light pollution affecting the dark sky areas of the NLA should major developments take place close to the district boundary.
SA12 – Access to the Countryside	+/-	+/-	+/-	0	There is potential for cumulative positive effects arising from transport initiatives (TfSE, neighbouring local transport plans and strategies) that seek to encourage increased use of acti travel and public transport to access rural areas. However, there is the potential for negative cumulative impacts because of vehicle journeys from neighbouring urban areas to access the countryside in terms of increased carbon emissions, damage to rural transport networks and verges and sensitive biodiversity areas.

SA Objective	Transport for the South East	Neighbouring Local Transport Plans	Neighbouring Local Plans and Strategies	Nationally Significant Infrastructure Projects	Summary
SA13 – Health & Wellbeing	0	+	+/-	+/-	There is a potential for negative cumulative effects to result if multiple housing developments as part of neighbouring local plans were to come forward, due to the increased strain on existing community health facilities resulting from the increased demand from new populations. The provision and improvements to the active travel, public realm and open spaces, as part of developments arising from neighbouring local transport plans and neighbouring plans, will result in positive effects on the health and wellbeing of the population in the region. This is because access to greenspace (including access to the countryside) can provide better mental health and wellbeing outcomes including reduced levels of depression, anxiety and enhanced quality of life, as well as helping to- bind communities together, reduce loneliness, and mitigate the negative effects of air pollution and excessive noise.
SA14 – Active and Sustainable Travel	+	+	+	+/-	There is a potential for positive cumulative effects if developments and associated infrastructure as part of neighbouring local plans and local transport plans were to come forward, as many of these seek to encourage both active and sustainable travel. These improvements will allow more opportunities for new or existing journeys to be made by sustainable means. In addition, wider transport policies and proposals developed by TfSE and relevant NSIPs (e.g. WRAtH) will seek to improve wider public transport connections, thus providing more opportunities for sustainable travel choices.
SA15 – Economy and Employment	+	+	+	+	There are likely to be positive cumulative economic benefits across the district following the development and delivery of projects associated with neighbouring Local Plans and local transport plans and strategies, neighbouring local transport plans, TfSE and NSIPs. These developments and associated schemes are likely to result in increased connectivity across the wider southeast region and to neighbouring areas, such as London and the Science Vale area England's Economic Heartland. This will yield an increase in employment opportunities, and improved access to employment.

10 Mitigation, Enhancement and Monitoring

10.1 Mitigation and Enhancement Measures

- 10.1.1 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.
- 10.1.2 The mitigation measures proposed in Table 10.1 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, which aim to optimise positive impacts and enhance sustainability.
- 10.1.3 As this is the SA draft reporting stage, these measures are subject to change as the preferred policies and sites are refined and updated. Vision and Objective specific mitigation measures have been included within Appendix D, with Action Plan specific mitigation included within Appendix A.
- 10.1.4 The SA Assessment has identified recommendations identified throughout the assessment of the LTP4 draft Strategy. These have been taken from the SA Report, EqIA and HRA. It should be noted that these are different from the mitigation measures, as they focus on potential changes to the LTP, rather than measures identified in response significant effects. These recommendations will be considered by WBC during preparation of the final version of the LTP4 Strategy document and preparation of the Action Plan.

Table 10.1 – Proposed Mitigation and Enhancement Measures

SA Objective	Mitigation / Enhancement	Mechanism
SA1 – Biodiversity & Geodiversity	Consideration needs to be given to the potential effects of construction and operation of developments (noise, vibration and air pollution) on international, national and locally designated sites of importance for biodiversity. Sites should be surveyed prior to development to establish all habitats and species in the area.	
	To maximise sustainability benefits and compliance with national biodiversity policy, transport interventions must commit to at least 10% biodiversity net gain (where this scheme is above the de minimis threshold).	Project level design and assessment (including noise assessments/ surveys)
	Infrastructure schemes should incorporate design measures that lessen the impact on biodiversity and include enhancements through the application of the Mitigation Hierarchy.	Adherence to emerging West Berkshire Local Plan Review Policy SP11 (Biodiversity & Geodiversity)
	Where a transport project is likely to have a significant effect on the natural environment the avoidance-mitigation-compensation hierarchy applies, for example, less damaging alternatives should be sought with regards impacts to high value ecological and landscape receptors.	
SA2 – Water Quality	The incorporation of Sustainable Drainage Systems (SuDS) into all interventions where practicable.	Project level design and assessment
	Avoidance of alteration and crossing of watercourses should be a consideration of any physical intervention. If avoidance is not possible a system to identify vulnerable watercourses with the potential to be affected by multiple interventions should be developed and included in the implementation of the LTP4.	All new transport schemes close to rivers and culverts should take advantage of the opportunity presented to improve and enhance the river environment, water quality, in line with Local Plan Review Policy SP6 (Flood Risk)
	Enhancement and restoration potential should be considered for interventions near watercourses. Interventions such as sustainable transport corridors have the opportunity to integrate improvements to watercourses and associated habitats within their design.	
SA3 – Flood Risk	Where new transport schemes or developments are located within flood zones or flood risk areas, SuDS should be included with scheme design.	Project level design and assessment.
	If located within a flood zone, the Environment Agency would need to permit any work to ensure there is no increase in flood risk, considering climate uplifts.	Adherence to emerging Local Plan Review Policy SP6 (Flood Risk)
SA4 – Soils	Where new transport schemes are developed outside of the highway boundary and require land-take involving agricultural lane, an assessment should be made in terms of soil quality.	Project level design and assessment. Whether any required land-take would include soils designated as Best and Most Versatile (BMV) (grades 1 to 3) agricultural land.
SA5 – Historic Environment	Sensitive design should be considered within the action plans to ensure positive effects on local historic assets. Historic Landscape Characteris Project level design and assess	

	Measures to discourage individual car trips over other alternative transport modes (active, shared and public transport) should be implemented, to reduce the air quality related damage to historic assets.	Inclusion within preferred emerging Local Plan Review policies, especially SP9 (Historic Environment)
	Development should consider impacts on designated areas including the Conservation Areas and the North Wessex Downs National Landscape Area within West Berkshire.	
	Where development is located within designated areas, a process of trial trenching should be undertaken to record and register what buried archaeological assets.	
	Where action plan interventions are located within, or 500m outside of a designated historic asset, visual effects assessment should be undertaken to determine magnitude of impact and possible mitigation.	
SA6 – Townscape & Landscape	Sensitive design should be considered within the LTP4 Action Plan(s) plans to ensure	Project level design and assessment
	positive effects on local townscapes and landscapes. Measures to discourage individual car trips over other alternative transport modes (active, shared and public transport) should be implemented, to improve the landscape	Project level landscape and visual impacts assessments
	and townscape setting.	Inclusion within relevant emerging Local Plan Review policies relating to conservation and historic environment.
SA7 – Air Quality	Consideration needs to be given to the potential effects of construction and operation of the interventions on air quality receptors including schools and residential buildings.	Project level design and air quality assessments where necessary to consider the requirements contained emerging West Berkshire Local Plan Review Policy
	Measures to discourage individual car trips over other alternative transport modes (active, shared and public transport) should be implemented.	DM8 (Air Quality)
SA8 - Greenhouse	Any form of construction and operation should be undertaken as sustainably as possible,	Project level design stage to undertake a carbon
Gases& Climate Change	making use of tools and processes, such as circular economy, waste hierarchy and should consider BREEAM and BREEAM Infrastructure.	assessment in line with West Berkshire Council's carbon assessment tool.
	Measures to discourage individual car trips over other alternative transport modes (active, shared and public transport) should be implemented.	Development of projects should consider emerging West Berkshire Local Plan Review Policy SP5 (Responding to Climate Change) and West Berkshire Environment Strategy 2020-2030.
SA11 – Noise & Light	Consideration needs to be given to the potential effects of construction and operation of interventions on noise receptors.	Project level design to consider requirements of emerging West Berkshire Local Plan Review Policy DM5 (Environmental Nuisance and Pollution Control) in
	Consideration should also be given to the impact of proposals on the North Wessex Downs NLA in respect of protecting quality of established dark sky areas.	respect relating to noise issues and assessment.
	Reasonable steps should be taken to avoid obtrusive light, sky glow, glare and light spillage.	Project level design to consider requirements of emerging West Berkshire Local Plan Review Policy SP2 (North Wessex Downs NLA) in respect of dark sky areas.
SA13 – Health &	Active travel provision should be accessible for all, including those using hand cycles.	Project level design and assessment
Wellbeing	Consideration needs to be given to those who may not have the same understanding of or access to technology (for example the elderly, those with learning difficulties or in low-income groups).	Inclusion within relevant policies in emerging Local Plan Review.

SA14 – Active and Sustainable	Development of measures to promote active travel and sustainable transport options.	Project level design and assessment
Travel	Active travel provision should be accessible for all, including those using hand cycles.	Adherence to relevant emerging Local Plan Review policies, especially Policy SP23 (Transport)
	Where public transport developments are proposed, consideration should be given to the accessibility of vulnerable groups, to ensure they are able to access public transport and services are inclusive.	
SA15 – Economy and Employment	Action plan interventions should remain accessible for all to ensure connectivity with employment opportunities.	Project level design and assessment.
	Where possible, developments should work with local businesses and employers to source materials and workforces.	

10.2 Monitoring Measures

- 10.2.1 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.
- 10.2.2 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.
- 10.2.3 Table 10.2 below sets out some of those monitoring measures which would be suitable in monitoring those uncertain residual effects outlined above.

Table 10.2 – Potential Monitoring Measures

Potential Effects	Key Performance Indicators	Targets
SA1: Potential negative effects on Biodiversity	Biodiversity Net Gain (BNG) through interventions	Relevant developments / projects to deliver a minimum 10% BNG
-	Distance of project to the nearest sensitive receptors	Condition of nearest sensitive receptors
SA2: Potential impact on water quality of the District's water courses and groundwater	Coordinate with EA monitoring of water quality and review annual results.	No deterioration of water quality in the District
SA3: Potential increase in flood risk because of scheme delivery	Monitoring around flood risk reduction and prevention targets as developed in SFRA / SUDS proposals as part of the scheme development process.	For all relevant LTP4 interventions to incorporate suitable flood resilience and mitigation measures.
SA4: Potential impact on soils	Review areas of brownfield land to determine if they are being utilised in support of the LTP4.	No Best and Most Versatile (BMV) (grades 1 to 3) agricultural land is affected by implementation of LTP4 proposals.
	Review areas of valuable agricultural land change over time to ensure that transport infrastructure and related developments are not responsible for reductions in area	
SA5: Potential impact on local heritage assets	The number of designated historic assets potentially at risk from the development of LTP4 related projects.	No designated historic assets negatively affected by the interventions.
	The number of designated historic assets benefiting from conservation and enhancement measure because of LTP4 related projects.	
SA6: Potential negative impacts on townscape and landscape	Landscapes benefiting from conservation and enhancement measure because of the LTP4 action plan interventions.	No greenfield land lost because of the LTP4 interventions.

SA7: Potential	To continue monitor air quality at	To continue improvement in air
negative impacts on	revoked AQMAs and other	quality in revoked AQMAs and not
air quality	sensitive locations.	to exceed prescribed levels at other
. ,		locations.
	Assessment of impact on air	
	quality arising from traffic	New development sites do not
	generated from strategic	result in air quality exceedances.
	development sites.	
SA8: Potential	Local Carbon monitoring as part	To ensure West Berkshire becomes
negative impacts from	of WBC's Environment Strategy	carbon neutral by 2030.
greenhouse gases	monitoring, including number of	
	ZEVs registered and number of	
	publicly available charging points	
CAO: Detential impact	in West Berkshire.	
SA9: Potential impact on mineral assets	Protection of safeguarded	
on mineral assets	minerals areas.	
	Use of recycled and secondary	Tbc following review of Highways
	materials in transport projects and	Asset Management Plan (HAMP).
	maintenance and surfacing works.	Asset Management Flan (Flam).
SA10: Potential	Proportion of recyclable and	Tbc following review of Highways
negative impacts	secondary materials used in	Asset Management Plan (HAMP).
relating to waste	highway construction,	, reset management i ian (i ii iiii).
generated by	maintenance and surfacing works.	
management of local	ŭ	
transport network.	Maintain records of maintenance	
	checks of associated WBC	
	interventions to establish an	
	improvement in the life of	
	materials.	
SA11: Potential	Monitor the number of noise	No increase in the number of
negative impact on	important areas. Develop Noise	noise important areas.
noise and light	Action Plans to tackle specific	
	arising issues if required.	
	Monitor impact on NWD NLA	No degradation on dark sky areas
	Dark Sky areas where relevant.	because of LTP4 projects.
SA12: Potential	Increased usage of countryside	Increase levels of walking and
impacts arising from	routes and PROWs.	cycling on active travel routes
increased access to		linking urban and rural areas.
the countryside	Inclusion of BNG in development	Ŭ
	of new projects that improve	
	access to the countryside.	
SA13: Potential	Uptake of new active travel routes	To increase levels of walking and
impacts on health and	should be monitored through	cycling.
wellbeing from delivery	public surveys or users counts.	
of LTP4 projects		
SA14: Potential	Monitor number of active travel	To increase modal share of active
negative impacts arising from	journeys made, particularly in Newbury & Thatcham and	travel and public transport journeys.
unrestrained private	Eastern Area of the district.	
car use		
33.7 433	Number of bus journeys made in	
	West Berkshire.	
	ORR station usage data for West	
	Berkshire rail stations.	

	Road collision casualty data and trends	LPT4 Vision Zero target for road safety
	Increase in kms of cycle routes and PROWs	Increases in line with LCWIPs and ROWIP.
SA15: To sustain the economic prosperity of West Berkshire	Not applicable	None required

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 West Berkshire Council is seeking the views of statutory consultees (Environment Agency, Historic England, and Natural England) on the results of the SEA.

 Consultation of this SA Report will occur simultaneously with the consultation of the revised draft LTP4.
- 11.1.3 The public will also be encouraged to comment on the SA report and guided by the following questions:
 - To what extent do you agree with the assessment outcomes of the Integrated Sustainability Appraisal report?
 - Do you think the proposed measures are sufficient to address the outcomes in the Integrated Sustainability Appraisal?
- 11.1.4 Following consultation on this report, any necessary amendments will be made in responses to consultation comments and a finalised version of the report will be issued, alongside a post-adoption statement. The post-adoption statement will document how environmental, health, and socio-economic considerations, the views of consultees, and the outcomes of the SA have been considered in the adopted LTP4.
- 11.1.5 It should be noted that the HRA undertaken for the LTP4, will be consulted on separately with just Natural England.
- 11.1.6 An indicative timetable for the remaining stages of the development of the SA and LTP4 is highlighted in Table 11.1 below:

Table 11.1 – Proposed Local Transport Plan 4 and SA timetable

LTP4 / SA Stages	Timescales
LTP4 revised draft Strategy and SA report consultation	February / March 2025
Post consultation LTP4 and SA updates	April / May 2025
Full Council adoption of LTP4	July 2025
Publication of final LTP4 and SA	July 2025

West Berkshire Council

West Berkshire Local Transport Plan 4 (2023-2039) SA/SEA Environmental Report

APPENDIX A

Scoping Report Statutory Consultee Comments

Appendix A – Consultation received for West Berkshire LTP4 SA Scoping Report

Consultee	Comment	WBC Response	Where addressed?
Historic England	In terms of the historic environment, whilst we endorse some aspects of the Scoping Report and consider that it has established a broadly appropriate Baseline against which to assess the Plan's proposals, there are areas where we consider that further thought is required.	Noted.	N/A
	We suggest adding the most relevant planning guidance documents on the historic environment for inclusion in Table 3 under Strategies, Action Plans and Guidance.	Noted. The Scoping report has been updated accordingly.	Table 3 of the Scoping report has been updated.
	Focusing on Table 6 and local policies, plans and programmes, we suggest also reference to (list of)		Table 6 of the Scoping report has been updated.
	We welcome the SA Objective on the historic environment, though we suggest minor wording changes, in particular: a) to refer to the historic environment, rather than the historical environment. b) to align with national planning policy by referring to designated and non-designated heritage assets (the NPPF does not define cultural heritage assets, meaning that the proposed objective risks being unclear); and c) while we agree that heritage makes a very important contribution to character, character as a quality is insufficiently broad to cover all aspects of the historic environment. Possible revised wording for consideration: 5) To conserve and enhance the character of the historical environment, including designated and non-designated heritage assets, cultural heritage	Comments are noted. Wording of the SA Objective to be amended to reflect the suggestions made by Historic England.	Changes made to SA report and Scoping report where required. Wording has been changed to take this into account Title for SA Objective 5 has been amended to reflect the
	assets, and features of archaeological importance Focusing on the proposed indicators in Table 8, monitoring the number of	Comment noted. Wording in	suggested wording in both the SA and Scoping reports. Scoping report, Table 8,
	designated heritage assets will only be of limited help and does not relate to the proposed Transport Plan. A more helpful starting point would be the "location of designated and non-designated heritage assets".	Table 8 of the Scoping report has been amended	Objective 5 Potential indicator has been changed.
	We welcome the proposal to monitor the number of designated heritage assets at risk from proposals; however, its current wording could imply that the assets are at risk also from archaeological advisors or statutory	Comment has been noted and wording changed.	Scoping report, Table 8, Objective 5 Potential indicator has been reworded.

Lauranika ad Thia was	de to be accounted and actions as a destablished	Defenses has been abouted	
	ds to be reworded, and reference made to Historic	Reference has been changed	
England rather than		to Historic England.	Coordinate and Table 0
please ensure it is cle locally, or only those refer to Registered P	storic Parks or Gardens" and "Historic Battlefields" ear if this covers both those designated nationally and designated nationally. If the latter, it would be better to arks and Gardens and Registered Battlefields. We is also taking account of the second battle of Newbury egistered Battlefield.	Clarification has been provided to indicate that these should be designated nationally and locally.	Scoping report, Table 8, Objective 5 Potential indicator has been reworded.
of assets beneath the (potential) impact on amending the point ". The crucial point is to consideration in plan professionals.	referring to non-designated heritage assets in the list e text: "New transport infrastructure proximity to, and the significance of any:" In practice, this may result in Sites identified in the Historic Environment Record". o focus on assets with a degree of significance meriting ning decisions, informed by liaison with heritage	The potential indicator has been amended to reflect the need to include both designated and nondesignated assets.	Scoping report, Table 8, Objective 5 Potential indicator has been reworded.
be made to Historic I Register is updated a recent data from 202	rs to the Heritage at Risk Register. Reference should England rather than English Heritage. Also, the annually, so it would be appropriate to cite the most 22: which identify five four listed buildings, five four nts and four three historic parks and gardens at risk in	Wording has been changed to cite the most recent data from 2022.	Paragraph 7.25 updated
The baseline's section on West Berkshire's	on on cultural heritage should also refer to the assets Local List:	Reference has been made to WBC's Local List of Heritage Assets	Paragraph 7.24 updated.
2015, English Heritag retaining the name E Collection. Historic E advice to owners, loc	s to English Heritage. Please note at the start of April ge separated into two different bodies. A new charity nglish Heritage looks after the National Heritage ngland continues the statutory role of giving expert cal authorities and the public. Therefore, in this ence to English Heritage should be changed to Historic	Changes to English Heritage have been noted. All references have been changed to Historic England.	All references have been updated.
Paragraph 6.3: we su	uggest referring also to non-designated heritage assets bes when describing the historic environment.	Paragraph 6.3 has been amended to reflect this comment.	Paragraph 6.3 amended.
to harm to non-desig	I to the second sentence in paragraph 7.26: "In addition nated heritage assets, the creation of new ide for a growing population adversely affects visual	Paragraph 7.26 has been amended to reflect the comment and now includes	Project 7.26 amended.

	1	T
amenity and the settings of designated heritage assets". This seems to imply that harm to non-designated heritage assets is inevitable, excludes the possibility of harm to their setting, and appears to place the consideration of non-designated heritage assets before designated heritage assets, which is not ideal. As stated in the NPPF, heritage assets are an irreplaceable resource and should be conserved in a manner appropriate to their significance. While we welcome the point being made in paragraph 7.26, it needs to be rewritten.	reference to non-designated assets.	
We suggest paragraph 7.27 would be improved by amending its first reference to the historic environment to historic buildings and places i.e. "Transport can adversely impact cultural heritage sites because of vehicle damage and emissions in urban areas and villages. Ancillary features of transport, such as road signs and marking, as well as car parking, can impair the setting of historic <u>buildings and places environments</u> . This indicates a need to conserve and enhance West Berkshire's rich historic environment and diverse historic landscape character."	Wording to paragraph 7.27 has been changed as per suggestion.	Paragraph 7.27 amended.
Paragraph 9.1: reference to English Heritage should be changed to Historic England	Reference has been changed.	Paragraph 9.1 amended.
As a final comment, we strongly advise that the conservation team of your authority and your archaeological advisors are closely involved throughout the preparation of the SEA/SA of this Plan. They are best placed to advise on: local historic environment issues and priorities, including access to data held in the HER; how the policy or proposal can be tailored to minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets. As stated in section 1 of this letter, Historic England has produced guidance for all involved in undertaking SEA/SA exercises which gives advice on issues relating to the historic environment. This can be found here.	The significance of heritage assets has been considered during the development of the LTP4 Strategy document. Further considerations will be given on a scheme-by-scheme basis during development of projects to be included within the LTP4 Action Plan(s).	N/A.

West Berkshire Council

West Berkshire Local Transport Plan 4 (2023-2039) SA/SEA Environmental Report

APPENDIX B

Sustainability Appraisal Scoping Report and Baseline Information (Post Consultation Version)

West Berkshire Local Transport Plan 4 Sustainability Appraisal Scoping Report Post consultation version (2023)

Introduction

This Scoping Report (SR) forms the first part of the Sustainability Appraisal (SA), incorporating the requirements of the Strategic Environmental Assessment (SEA), for the West Berkshire Local Transport Plan 4 (LTP4), due to cover the period 2022 to 2039. The requirements for both the SA and SEA can be carried out in one appraisal process. To avoid any confusion, for the purposes of this report the terms SA and SEA are interchangeable.

SEA is used to describe the application of environmental assessment to plans and programmes in accordance with European Council Directive 2001/42/EC1 1 EC (2001) Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the Environment. The SEA Directive is enacted in England through the "Environmental Assessment of Plans and Programmes Regulations" (SI 2004/1633, known as the SEA Regulations) UK Government (2004) SI 2004 No. 1633, The Environmental Assessment of Plans and Programmes Regulations 2004. These regulations will be adhered to until they are superseded by new legislation emerging from the United Kingdom's departure from the EU.

The purpose of the SA is to promote sustainable development through better integration of sustainability considerations in the preparation and adoption of plans. It is an iterative process that identifies and reports on the likely significant effects of each document and the extent to which implementation of the policies it contains will achieve agreed social, environmental, economic and resource management objectives.

In the context of West Berkshire, the SA will focus on the significant sustainability issues that are likely to result from the LTP4 and consider alternatives that consider the social, environmental and economic objectives, and the geographical scope of the document. Future trends in terms of the state of the environment in the absence of the LTP4 also be outlined.

This SR sets out the background information and proposed strategic objectives that will be used to appraise the LTP4 in the context of the SA. In doing so, the document complies with the requirements for the content of a Scoping Report as set out in the Environmental Assessment of Plans and Programmes Regulations 2004 (as amended) (the SEA regulations). It builds upon work already undertaken by West Berkshire Council (WBC) for the SA relating to the West Berkshire Local Transport Plan 3, which was formally adopted in 2011.

This SR provides an opportunity for Statutory Consultees to express their views upon the scope of the SA/SEA process that will inform and underpin the development of LTP4.

Background of transport policy in West Berkshire

Local Transport Plans (LTPs) form a statutory requirement under the Transport Act 2000 and amended by the Transport Act 2008. The duty to prepare a LTP is the responsibility of the local transport authority, in this instance West Berkshire Council as the unitary authority. The West Berkshire LTP sets out policies covering all forms of transport and sets the framework for the delivery of all aspects of traffic and travel in the district. It also supports several of West Berkshire's strategies and plans, including the West Berkshire Local Plan and Environment Strategy.

The current West Berkshire LTP3 was formally adopted by Full Council in 2011 and covers the period 2011-2026. This timeframe was chosen to be consistent with that of the West Berkshire Local Plan Core Strategy, which was formally adopted in 2012.

A new Local Transport Plan (LTP4) for West Berkshire is currently being developed in line with the Council's Local Plan Review process, also currently in progress. It is anticipated that the new LTP4 will be formally adopted by the Council in 2025.

West Berkshire is also part of the Transport for the South East (TfSE), a sub-national transport body established to speak with one voice regarding strategic transport issues in the South East region.

The SEA Process

The SEA Directive was adopted in June 2001 with a view to increase the level of protection for the environment, integrate environmental considerations into the preparation and adoption of plans and programmes, and to promote sustainable development. Annex F of this SR sets out the relevant requirements of the SEA Directive Annex 1 (Information referred to in SEA Directive Article 5(1)), indicating which parts of the SR meet these requirements.

Article 2a of the SEA Directive requires a Strategic Environmental Assessment to be carried out for all plans and programmes which are:

'subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government,'

and

'required by legislative, regulatory or administrative provisions'.

Pursuant to the requirements of the Planning and Compulsory Purchase Act 2004 (as amended) the production of the LTP is a statutory requirement for local transport authorities under the Transport Act 2000.

The SEA should be carried out for plans and programmes which are likely to have significant environmental effects as set out in Article 3(2a) and Annex II. It is stated that:

'An environmental assessment shall be carried out for all plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning and which set the framework for future development consent of projects listed in Annexes I and II, or

which in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC.'

The few exceptions are detailed in Article 3 (8, 9) of the SEA Directive. The aim of the SEA is to identify potentially significant environmental effects created because of the implementation of the plan or programme on issues such as

'biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors'

as specified in Annex 1(f) of the Directive. The Directive was transposed into English legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations'), which came into force on 21 July 2004. Sustainability Appraisals are mandatory for all DPDs in accordance with the Planning and Compulsory Purchase Act 2004 as amended.

Methodology

This Scoping Report incorporates the requirements of the Strategic Environmental Assessment into the Sustainability Appraisal process and has been developed in accordance with the following guidance:

- The European Directive 2001/42/EC, (EC, 2001)
- A Practical Guide to the Strategic Environmental Assessment Directive, (ODPM, 2005)

The proposed plan has been screened against the Directive, and it has been determined that an SEA is required. The appraisal of the LTP is an integral part of the plan preparation and has five sequential stages. These main stages and the tasks for each stage are listed in Table 1 below. This report is the main SA/SEA scoping report document and appended to this report is a SA/SEA Baseline appendix and the SA/SEA Assessment of plans and policies appendix.

Table 1 – Relationship between Plan making process and SA/SEA stages.

Local Transport Plan Stage	SA/SEA Stage	
Pre-production	Α	Setting the context and objectives, establishing the
(in progress)		baseline and deciding on the scope
	A1	Identify other relevant policies, plans and
		programmes, and sustainability objectives
	A2	Collect baseline information
	A3	Identify sustainability issues and problems
	A4	Develop the SA framework
	A5	Consult on the scope of the SA
Production	В	Developing and refining options and assessing
		effects
	B1	Test the LTP objectives against the SA framework
	B2	Develop the LTP options
	B3	Predict the effects of the LTP
	B4	Evaluate the effects of the LTP
	B5	Consider mitigation measures and ways to
		maximise beneficial effects
	B6	Propose measures to monitor the significant
		effects of implementing the LTP
	С	Preparing the SA report
	C1	Prepare the SA report
	D	Consulting on the preferred options of the LTP
	D4	and SA report
	D1	Public participation on the preferred options of the
	DO(i)	LTP and the SA Report
A -l 4:	D2(i)	Appraise significant changes
Adoption and	D2(ii)	Appraise significant changes resulting from
Monitoring	Do	representations
	D3	Make decisions and provide information
	E	Monitoring the significant effects of implementing the LTP
	E1	Finalise aims and methods for monitoring
	E2	Respond to adverse effects

Methodology for Stage A1 - Identify other relevant policies, plans and programmes, and sustainability objectives.

The SEA Directive requires the provision of:

"an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;" (Annex 1(a))

The Council must therefore take account of relationships between the LTP and other relevant policies, plans, programmes and sustainability objectives and consider environmental protection objectives established at international, European Community and national levels. All of these may influence the options to be considered in the preparation of the LTP. By reviewing these relationships, inconsistencies and constraints can be addressed and potential synergies can be exploited.

The SA process requires these relationships to be reviewed on an ongoing basis as the LTP is prepared, and whilst future supporting strategies are prepared.

This SR assumes that higher and lower-level plans are in conformity with each other and therefore only the most appropriate level plan need be referred to. International level plans will have been reviewed and considered to produce National level plans, for example.

There are common themes covered by more than one National policy document. Therefore, the SA process does not seek to mention every case where an issue is raised, rather to highlight the major issues of relevance for the LTP and where these will not be dealt with by other plans, programmes or strategies.

The list in the tables in section 5 below includes relevant national planning guidance, and Local Transport Plan documents of neighbouring Local Planning Authorities. It is assumed that lower-level plans will be in conformity with national level plans and programmes and therefore the objectives of these are not assessed. The findings of the relevant international, national and local policy guidance, plans and strategies highlight several objectives and targets of relevance to this SA's objectives.

Methodology for Stage A2 – Baseline Information

The SEA Directive requires the provision of information on:

"relevant aspects of the current state of the environment and the likely evolution therefore without implementation of the plan or programme"

and

"the environmental characteristics of areas likely to be significantly affected;"

(Annex 1(b) and (c) respectively)

The Collation of existing environmental and sustainability information (baseline data) has helped to identify the sustainability issues that are facing West Berkshire and has set the context for appraising the LTP.

The baseline data for the SA/SEA includes existing environmental and sustainability information from a range of sources which is both quantitative and qualitative. The information provides the basis for assessing the potential impact of the plan's policies, objectives and options (including site options) and will aid development of appropriate mitigation measures, together with future monitoring data. The baseline information profile will include baseline data pertaining to the following:

- the latest available data for the plan area for each topic.
- comparators: national, regional and county level data (where relevant).
- likely future trends in respect of the topic area.
- data limitation where relevant; and
- considering the likely future trends, the existing challenges for the LTP

This SR is based on information that was available at the time of publication and is presented as a consultation draft. Additional information that comes to light during the consultation procedure will, where relevant, be incorporated into the assessment

process. In drawing together this SR it is important to highlight the limitations and difficulties that have been found, particularly regarding the minerals and waste baseline data.

Methodology for Stage A3 - Identifying Sustainability Issues and Problems

The SEA Directive requires the provision of information on:

"any existing problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance such as areas designated pursuant to Directives 79/409/EEC* and 92/43/ECC." (Annex 1(d))

*New Birds Directive 2009/147/EC has replaced 79/409/EEC

Key sustainability issues (section 5 below) have been identified through the assessment of the baseline information and review of the relevant plans and programmes. This identification process has provided the opportunity to define the key issues for the LTP and to improve the objectives and the options for the plan.

Methodology for Stage A4 – Developing the SA Framework

Developing the SA framework provides a way in which sustainability effects can be described, analysed and compared, and forms a central part of the SA process. The SA Framework is made up of a set of sustainability objectives and their indicators (see Table 8 below). The indicators are a method of measuring the extent to which the objectives are achieved. These objectives and indicators can also then be used to monitor the implementation of the LTP.

Methodology for Stage A5 – Consultation

The SEA Directive (Article 5.4) requires views to be sought from the three statutory environmental consultation bodies designated in the SA Regulations (Environment Agency, Natural England, and English Heritage) on the scope and level of detail of the environmental information in the SA. This consultation stage will help to ensure that the SA will be comprehensive and robust in its support of the LTP.

Methodology for the next stages of the SA

When Stage A5, consultation on the SR, has been completed the development of the SA will move on to Stage B, developing and refining options and assessing effects, with Stages C, D and E to follow (for more information on this please see Table 1). The SR is the first stage of the SA Process. An 'Interim Environmental Report' will be produced in conjunction with the 'LTP Issues and Options' The full SA/SEA Environmental Report will then be produced and made available prior to the production of the Final Version for adoption. The SA Process is an iterative process that will be undertaken alongside the production of the LTP in an informative capacity.

Stage A1: Other relevant policies, plans and programmes

As detailed above in table 1 the first stage of the SA/SEA scoping process involves the identification of other relevant policies, plans and programmes, and sustainability objectives to enable the consideration of the relationships between the LTP and other relevant policies, plans, programmes and sustainability objectives and consider environmental protection objectives established at international, European Community and national levels.

The following tables (tables 2-7) detail those other policies plans and programmes that have been identified as being relevant to the development of the LTP along with clarifying the relevance to the LTP.

Table 2 below highlights International level policies, plans and programmes. It is assumed that these plans and programmes have already been 'scoped' during the production of the more recent UK National Plans.

Table 2 – International Level Policies, Plans and Programmes

Title	Author	Date	Relevance
Declarations/Strategies			
Sustainable Development Goals 2030	United	2015	Context
Agenda (New York)	Nations		
Paris Agreement and UN Convention	United	2015	Context
on Climate Change	Nations		
The Johannesburg Declaration of	United	2002	Context
Sustainability Development European	Nations		
Community			
EU Biodiversity Strategy to 2020	European	2011	Context
	Community		
Bern Convention on the Conservation of	European	1979	Context
European Wildlife and Natural Habitats	Community		
Ramsar Convention on Wetlands of	Ramsar	1971	Context
International importance, especially	Convention		
waterfowl habitats			
Bonn Convention on the Conservation	United	1979	Context
of Migratory Species of Wild Animals	Nations		
The European Convention on the	European	1992	Context
Protection of Archaeological Heritage	Community		
(Valetta Convention)	_	1005	
The Convention for the Protection of the	European	1985	Context
Architectural Heritage of Europe	Community		
(Granada Convention)			
EU/EC Directives	T =	14004	
EC Hazardous Waste Directive	European	1991	Context
(Directive 91/689/EEC) (as amended)	Commission	0000	
EC Waste Electrical and Electronic	European	2002	Context
Equipment (WEEE) Directive (Directive	Commission		
2002/96/EC) (as amended)	_	0000	
EC End of Life Vehicles Directive	European	2000	Context
(Directive 2000/53/EC) (as amended)	Commission	0000	0 1 1
EC Restriction of Hazardous	European	2002	Context
Substances (ROHS) Directive (Directive	Commission		
2002/95/EC) (as amended)			

EC Packaging and Packaging Waste	European	1994	Context
Directive (Directive 94/62 EC) (as	Commission		
amended)	_	2000	
EC Directive on Incineration of Waste	European	2000	Context
(Directive 2000/76/EC) (as amended)	Commission	0000	
EC Integrated Pollution and Prevention	European	2008	Context
and Control (IPCC) Directive	Commission		
(2008/1/EC) (as amended)			
EC Directive on Waste to Landfill	European	1999	Context
(Directive 99/31/EC) (as amended)	Commission	4070	
EC Directive on Conservation of Wild	European	1979	Context
Birds (Directive 79/409/EEC) (as	Commission		
amended)	_	0000	0 1 1
EC Animal By-Products Regulations	European	2002	Context
(EC 1774/2002) (as amended)	Commission	1004	
Conservation of Natural Habitats and	European	1994	Context
Wild Fauna and Flora (Directive	Commission		
92/43/EC) (The Habitats Directive) (as			
amended)		2000	Cambaud
EC Water Framework Directive	European	2000	Context
(Directive 2000/60/EC) (as amended)	Commission	4004	Combact
Urban Waste Water Treatment Directive	European	1991	Context
(as amended)	Commission	4000	
Air Quality Framework Directive	European	1996	Context
(Directive 96/62/EC) (as amended)	Commission	4000/4007	0 1 1
Kyoto Protocol and the UN Framework	United	1999/1997	Context
Convention on Climate Change	Nations	0004	0 1 1
Directive to promote Electricity from	European	2001	Context
Renewable Energy (Directive	Commission		
2001/77/EC)	Furancan	1001	Contovt
Directive concerning the protection of	European	1991	Context
waters against pollution caused by	Commission		
nitrates from agricultural sources			
(Nitrates Directive) (as amended) The Convention on Biological Diversity,	United	1992	Context
Rio de Janeiro	Nations	1992	Context
Directive on Ambient Air Quality and		1966	Context
Management	European Commission	1900	COLLEX
European Spatial Development	European	1999	Context
Perspective, Towards Balanced and	Commission	1999	COLLEX
Spatial Development of the Territory of	COMMISSION		
the European Union			
Waste Framework Directive (Directive	European	2008	Context
2008/98/EC) (as amended)	Commission	2000	Joniost
Environment 2010: Our Future, Our	European	2001	Context
Choice, EU Sixth Environment Action	Commission	2001	Context
Programme, 2001-2010	Johnnission		
Groundwater Directive (80/68/EEC) (as	European	1991	Context
amended)	Commission	1001	Jonitoat
Mining Waste Directive (2006/21/EC)	European	2006	Context
(as amended)	Commission	2000	Contoxt
Directive 2001/42/EC on the	European	2001	Context
assessment of the effects of certain	Commission	2001	Joniost
plans and programmes on the	Johnnission		
environment			
CHAILOHHICH		<u> </u>	

Table 3 – National level policies plans and programmes(It is assumed that these plans and programmes have already been 'scoped' during the production of the more recent National, Regional and Local Planning Guidance).

Title	Author	Date	Relevance
Legislation	LUZ	1000	Contout
Town and Country Planning Act (as	UK	1990	Context
amended)	Government		
Environment Act (as amended)	UK	1995	Context
,	Government		
Wildlife and Countryside Act (as	UK	1981	Context
amended)	Government		
Countryside and Rights of Way Act	UK	2000	Context
2000 (CRoW) (as amended)	Government		
The Water Act (as amended) HMSO	UK	2005	Context
2003 Context Hazardous Waste	Government		
Regulations (England and Wales) (as amended)			
The Environmental Protection (Duty of	UK	1991	Context
Care) Regulations (as amended)	Government	1001	Comon
Air Quality Standards Regulations (as	UK	2010	Context
amended)	Government		
The Habitats Regulations (as amended)	UK	1994	Context
- ,	Government		
Transport Act	UK	2000	Context
	Government		
The Climate Change Act	UK	2008	Context
	Government		
The Environmental Assessment of	UK	2004	Context
Plans and Programmes Regulations	Government		
2004 (Statutory Instrument 2004			
No.1633) (as amended) The Town and Country Planning (Local	UK	2012	Context
Planning) (England) Regulations 2012	Government	2012	Context
(as amended)	Government		
Ancient Monuments and Archaeological	UK	1979	Context
Areas Act 1979 (as amended)	Government		
Planning (Listed Buildings and	UK	1990	Context
Conservation Areas) Act 1990 (as	Government		
amended)			
Publications			
EN-1: Overarching National Policy	DECC	July 2011	Strategic
Statement for			
Energy	DECO	1.1.0044	0, ,
EN-2 - National Policy Statement for	DECC	July 2011	Strategic
Fossil Fuel Electricity Generating			
Infrastructure EN-3: National Policy Statement for	DECC	July 2011	Stratogic
Renewable Energy Infrastructure	DECC	July 2011	Strategic
Trenewable Ellergy Illinastructure		1	

	DECO	11.0044	101 1
EN-4: National Policy Statement for	DECC	July 2011	Strategic
Gas Supply Infrastructure and Gas and			
Oil Pipelines			
EN-5: National Policy Statement for	DECC	July 2011	Strategic
Electricity Networks Infrastructure			
EN-6: National Policy Statement for	DECC	July 2011	Strategic
Nuclear Power Generation – Annexes			
National Policy Statement for Waste	Defra	March 2012	Strategic
Water June			
National Policy Statement for	Defra	2013	Strategic
Hazardous Waste			
Planning Policy	l.	<u> </u>	l
National Planning Policy Framework	HCLG	2021	Strategic
Planning Practice Guidance – Transport	DCLG	March 2015	Strategic
evidence bases in plan making and	DOLO	March 2013	Strategic
decision making			
	DCLG	March 2014	Ctratagia
Planning Practice Guidance – Travel	DCLG	March 2014	Strategic
plans, transport assessments and			
statements			
Strategies, Action Plans and Guidance		T = = . =	1
Agenda 2030 - the UK Government's	HM	2017	Context
approach to delivering the Global Goals	Government		
for Sustainable Development - at home			
and around the world			
The Road to Zero (Next steps towards	HM	2018	Context
cleaner road transport and delivering	Government		
our Industrial Strategy)			
Clean Air Zone Framework (principles	Defra	2017	Context
for local authorities)			
Bus Back Better: national bus strategy	DfT	2021	Context
for England			
The Second Cycling and Walking	DfT	2022	Context
Investment Strategy		2022	Contoxt
Gear Change: A bold vision for walking	DfT	2022	Context
and cycling		2022	Context
Towards a One Nation Economy: A 10-	Defra	2018	Context
	Della	2010	Context
point plan for improving rural			
productivity	DOLO	0005	0, ,
A Green Future: Our 25-year plan to	DCLG	2005	Strategic
improve the environment			
Securing the Future – Delivering UK	HM	2005	Context
Sustainable Development Strategy	Government		
Implementing the Sustainable	HM	2021	Context
Development Goals	Government		
Climate Change: The UK Programme	Defra	2006	Context
Air Quality Strategy: Working Together	DETR	2000	Context
for Clean Air		(updated	
		2007)	
Strategic Environmental assessment	CCC, EN, EA	2004	Context
and Biodiversity: Guidance for	and RSPB		
Practitioners			
UK Biodiversity Action Plan	UK	1994	Context
On Disarvorsity / totion i lan	Biodiversity	1007	JontoAt
	Partnership		

		1	
	and UK		
	Government		
The 'UK Post-2010 Biodiversity	JNCC and	2012	Context
Framework' (July 2012)	Defra		
Government forestry policy statement	Defra	2013	Context
The Carbon Plan: Delivering our low	HM	2011	Context
carbon future	Government		
Safe Guarding our soils: A strategy for	Defra	2011	Context
England 2030			
The Natural Choice: Securing the Value	Defra	2011	Context
of Nature			
Biodiversity 2020 – A Strategy for	Defra	2011	Context
England's Wildlife and Ecosystem			
Services			
GPA2 – Managing Significance in	Historic	2015	Context
Decision – Taking in the Historic	England		
Environment			
GPA3 – The Setting of Heritage Assets	Historic	2017	Context
(2 nd Edition)	England		
HE Advice Note 8: Sustainability	Historic	2016	Context
Appraisal and Strategic Environmental	England		
Assessment			
HE Advice Note 12: Statements of	Historic	2019	Context
Heritage Significance	England		
HE advice Note 17: Planning and	Historic	2022	Context
Archaeology	England		

Table 4 – Regional Level Policies, Plans and Guidance

Title	Author	Date	Relevance
A Strategic Investment Plan for the South	TfSE	June 2022	Context
East			
Transport Strategy for the South East	TfSE	June 2020	Context

Table 5 – County level policies, plans and programmes

Title	Author	Date	Relevance
Wilder – More Nature Everywhere (Five Year	BBOWT	2021	Context
Strategic Plan, 2021-2026)			
North Wessex Downs Area of Outstanding	NWD AONB	2019	Context
Natural Beauty Management Plan (2019-	Council of		
2024)	Partners		
Thames Valley Berkshire: Delivering national	TVB Local	2015	Context
growth, locally – Strategic Economic Plan	Enterprise		
2015/16-2020/21	Partnership		

Table 6 – West Berkshire / Unitary level policies, plans and programmes

lable 6 – West Berkshire / Unitary level policies, plans and programmes				
Title	Author	Date	Relevance	
Council Strategy 2019-2023 (refresh 2021)	West Berks	2021	Direct	
The Adopted West Berkshire Core Strategy	West Berks	2012	Direct	
Development Plan Document 2012-2026				
West Berkshire District Local Plan 1991-	West Berks	2007	Direct	
2006 (Saved Policies 2007)				
Housing Sites Allocations Development Plan	West Berks	2017	Direct	
Document				
Revised Statement of Community	West Berks	January	Direct	
Involvement		2020		
West Berkshire Local Transport Plan 2011-	West Berks	2011	Direct	
2026				
West Berkshire Local Transport Plan 2011-	West Berks	2011	Direct	
2026 – Active Travel Strategy				
West Berkshire Local Transport Plan 2011-	West Berks	2011	Direct	
2026 – Smarter Choices Strategy				
West Berkshire Local Transport Plan 2011-	West Berks	November	Direct	
2026 – Passenger Transport Strategy		2014		
West Berkshire Local Transport Plan 2011-	West Berks	2013	Direct	
2026 – Road Safety Strategy				
West Berkshire Local Transport Plan 2011-	West Berks	November	Direct	
2026 – Freight Strategy		2014		
West Berkshire Local Transport Plan 2011-	West Berks	April 2011	Direct	
2026 – Network Management Plan				
West Berkshire Local Transport Plan 2011-	West Berks	August 2016	Direct	
2026 – Highway Asset Management Plan				
2011/12-2020/21 (Fourth edition)				
West Berkshire Local Cycling & Walking	West Berks	2011	Direct	
Infrastructure Plan				
National Bus Strategy – 2022 Bus Service	West Berks	October	Direct	
Improvement Plan – West Berkshire		2022		
Environment Strategy 2020 – 2030	West Berks	2020	Direct	
Ultra Low Emission Vehicle Strategy	West Berks	2020	Direct	
Newbury Vision 2026	West Berks	2014	Direct	
Housing Matters: West Berkshire's Housing	West Berks	2020	Direct	
Strategy 2020-2036				
West Berkshire Historic Environment	West Berks	2008	Direct	
Character Zoning				
West Berkshire Historic Record	West Berks	online	Direct	
The Newbury Historic Character Study	West Berks	2006	Context	
Archaeological Potential Modelling in the	West Berks	2020	Context	
Kennet Valley				
Economic Development Strategy	West Berks	2021	Context	

Table 7 Neighbouring Authorities policies and plans

Title	Author	Date	Relevance
Draft Reading Transport Strategy 2036	Reading BC	2020	Strategic
Local Transport Plan 4 Vision	Wokingham BC	2020	Strategic
Draft Local Transport Plan 4	Hampshire CC	April 2022	Strategic
Basingstoke Transport Strategy	Basingstoke & Deane DC	April 2019	Strategic
Wiltshire Local Transport Plan 2011-2026	Wiltshire Council	2011	Strategic
Swindon Local Transport Plan 3 2011-2026 (Main Strategy)	Swindon BC	2011	Strategic
Connecting Oxfordshire: Local Transport Plan 2015-2031 – Area Strategies	Oxfordshire CC	2015	Strategic
Western Gateway Strategic Transport Plan 2020-2025	Western Gateway SNTB	2020	Strategic
EEH Transport Strategy: Connecting People, Transforming Journeys	England's Economic Heartland SNTB	February 2021	Strategic

Stage A2: Baseline Information

West Berkshire is in the south east of England, within the county of Berkshire. It is a Unitary Authority and covers an area of 704 square kilometres, extending from Hungerford in the west to Calcot in the east. The area is predominately rural in character, with approximately 74% of the land area making up part of the North Wessex Downs Area of Outstanding Natural Beauty. Newbury, Thatcham, Hungerford, Theale, Purley on Thames, Tilehurst, Calcot and Burghfield Common are the largest settlements in the district area.

The mid-2016 population estimates produced by the Office for National Statistics estimates the West Berkshire population to be 157,000. Approximately 73% of the population is concentrated in the Kennet Valley at strategic points along the A4 and on the western side of Reading. West Berkshire has by far the most dispersed population of the six unitary authorities in Berkshire.

Aside from the nationally important landscape of the North Wessex Downs AONB, the authority area has numerous designated statutory and non-statutory areas which aim to protect and enhance sites of international, national, regional and local nature conservation importance. The historic environment is also of great value to West Berkshire, consisting of both designated and non-designated assets. These cover listed buildings, conservation areas, Scheduled Monuments, Registered Parks and Gardens and a Registered Battlefield.

The rural nature of the West Berkshire district is associated with high car use, dependency and ownership. The main transport connections are east-west towards Reading and London on the M4/Great Western Mainline corridor and north-south A34 South Coast to the Midlands corridor (see Map 1 below). The district's transport network includes around 42 miles of motorways and Trunk Roads, approximately 1280km of local highway network and 10 railway stations. The road network experiences capacity, accessibility and connectivity at key points on the network, particularly in the urban areas. The A4 runs through the district, connecting Hungerford, Newbury, Thatcham, Theale and Calcot into central Reading, also serving as a diversionary route in the event of closures on the M4. The A339 provides a connection from the M4/A34 junction at Chieveley to Newbury and south into Hampshire, to Basingstoke.

Map 1 – West Berkshire Main Transport Networks



West Berkshire, like other areas of the UK, is seeing an increase in the number of Ultra Low Emission Vehicles (ULEVs). In 2019, for the UK as a whole, ULEVs represented 0.68% of vehicles registered, with 0.84% registered in West Berkshire, suggesting the district has a slightly above average ULEV uptake. Industry experts forecast that by 2030, 25% of residents will have moved to ULEVs. This represents a need to ensure that there is an adequate home and publicly available charging network. A particular challenge will be to provide charging options for the 31% of homes in the district that have no off-street parking.

The district rail network is focussed on east/west connections to Reading and London Paddington. Communities with rail stations, or well-connected to them, enjoy good connectivity to everyday services and facilities in larger centres.

Outside of the main urban areas of Newbury & Thatcham and the urban area on the western edge of the wider urban Reading urban area, the district's population is predominantly rural. As a result, the public transport network, away from the rail network, is dispersed, disconnected and unreliable, which limits accessibility to rural communities and services. Away from the main commercially operated inter-urban bus routes, most local bus services are not commercially viable and only operate due to financial support from the council.

West Berkshire has an extensive Public Rights of Way network, which includes footpaths, bridleways, restricted byways and Byways Open to All Traffic (BOATs). The network provides sustainable options for travelling to school, to work and to local services. It also contributes to people being able to lead a healthy lifestyle via the provision of areas suitable for Non-Motorised Users (NMUs) to undertake activities such as walking, cycling and horse riding. Whilst the NMU network is extensive, there are very few routes dedicated to cycleways (although the council is actively seeking to build more routes, such as the Eling Way foot/cycle path between Hermitage and Hampstead Norreys).

Stage A3 – Identify Sustainability Issues and Problems

The SEA Directive requires the production of the following information:

"any existing problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance such as areas designated pursuant to Directives 79/409/EEC and 92/43/ECC", and

"the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors". (Annex 1(d) and (f) respectively)

Sustainability issues have been identified through the review of relevant plans and programmes and from the baseline information. Identifying the sustainability issues and problems during the Scoping Stage ensures that they are addressed in the sustainability objectives, indicators and targets which make up the SA framework. The key issues and existing problems relating to the LTP4 that have been identified are as follows.

Environmental

Climatic Factors

The UK is likely to see more extreme weather events, including hotter and drier summers, flooding and rising sea-levels. One of the main challenges for West Berkshire is to mitigate for the impacts of climate change for example through flood water storage or the provision of green infrastructure and blue infrastructure.

Transport produced 27% of the UK's total emissions in 2019. Of this, the majority (91%) came from road traffic. The biggest contributors to this were cars and taxis, which made up to 61% of emissions from road transport, followed by heavy goods vehicles (18%) and vans (17%). Bearing this in mind, the LTP has a major role to play in helping to develop attractive low carbon transport options to encourage West Berkshire residents and businesses to make sustainable travel choices.

The impacts of climate change may also be felt on local transport networks. Increased incidences of flooding may cause damage to roads and rail networks. Increasing temperatures of summer heatwaves may cause damage to surface of local roads (as they are typically built to a lesser standard than more strategic routes) and buckling of railway lines, resulting in the disruption to services.

As transport corridors are typically linear, ensuring the connectivity of ecosystems is both an issue and an opportunity for the LTP4. There is scope to focus on redevelopment of existing assets rather than build new, to focus development away from areas of high biodiversity and ecosystem service provision, and to enhance the quality of the transport 'soft estate' alongside existing and new transport corridors to improve habitat connectivity.

Carbon emissions from road transport are likely to be significantly impacted by the adoption of the net zero target by 2050. As the UK looks to move towards this, the government's Road to Zero transport strategy (HM Government, July 2018) includes

the ambition that by 2050 almost every car and van will be zero emission. The Committee on Climate Change (CCC)'s Net Zero Technical Report (May 2019) notes that, to achieve the net zero target, sales of non-zero emission cars, vans and motorcycles are likely to need to end by 2035. The government's Clean Air Strategy (2019) further examines how air pollution by pollutants other than greenhouse gases, such as nitrogen oxides and particulate matter, can be reduced.

The LTP4 will support the Council's Environment Strategy and Ultra Low Emission Vehicle Strategy in achieving a net zero district by 2030. The LTP4 will include policies and strategies to promote the use of zero emission vehicles, including developing appropriate charging infrastructure. These will complement other policies and objectives to encourage and increase sustainable and active travel.

Biodiversity and Geodiversity

Of the 51 SSSIs in West Berkshire 21 of them were in 'favourable' condition, 12 were 'unfavourable recovering', 1 was 'unfavourable declining', while the remaining sites were a combination of these conditions (i.e. partially 'favourable' and partially 'unfavourable').

There are several statutory local, national and international sites designated for nature conservation within West Berkshire which may be affected by development, including transport infrastructure.

Habitats, particularly those designated as HPI and Ancient Woodland are at risk of being lost, damaged or fragmented by development, including transport infrastructure.

Species, including Species of Principal Importance and protected species, may also be affected by construction and operation of new infrastructure, both directly and indirectly.

The LTP4 presents opportunities to be strategic in the enhancement of biodiversity at the landscape scale across the corridors (and, once the interventions are defined, also in relation to any necessary offsets beyond the boundary of specific developments). Existing Biodiversity Opportunity Areas (Natural England) can be combined with priorities for wider ecosystem service benefits to deliver landscape wide environment gain for biodiversity and people.

Biodiversity Net Gain (BNG) is the result of a process applied to development so that overall, there is a positive outcome for biodiversity. The Environment Act 2021 places a mandatory requirement for development and projects to ensure that there is at least a 10% net gain for biodiversity in development. This will ensure that the delivery of much-needed infrastructure (including that relating to transport) and housing is not at the expense of vital biodiversity.

There is a need for transport to play its part in protecting and enhancing biodiversity. As transport corridors are typically linear, ensuring connectivity of species and habitats can be both an issue and an opportunity for the LTP. There is scope to focus on redevelopment of existing assets rather than build new, to focus development away from areas of high biodiversity and ecosystem service provision, and to enhance the quality of the transport 'soft estate' alongside existing and new transport corridors, such as introducing wildflower verges, to improve habitat

connectivity. In addition, West Berkshire's geodiversity also should be conserved and enhanced where possible.

Landscape and townscape

Nearly three quarters of West Berkshire is designated as part of the North Wessex Downs Area of Outstanding Natural Beauty (AONB). AONBs are protected by the Countryside and Rights of Way (CROW) Act 2000, representing the highest level of protection for the character of the landscape at the national level. AONB landscapes are equal to National Parks in terms of quality and protection afforded. This means that any traffic infrastructure project or development needs to consider the high priority that needs to be given to conserving land, specific character and setting in the AONB area.

There is a need to prevent urban sprawl and settlement coalescence to protect West Berkshire's rural character. The settlement pattern of the district is characterised by a network of smaller towns, villages and hamlets, with larger settlements being concentrated in the Newbury & Thatcham area and the urban areas on the eastern boundary of the district adjoining Reading Borough.

West Berkshire manages around 740 miles of Public Rights of Way (PROW) made up of Public Footpaths (61%), Public Bridleways (17%), Restricted Byways (8%) and Byways Open to all Traffic (14%). In addition, 13 miles of permissive access have been provided by landowners under Countryside or Environmental Stewardship agreements. The Ridgeway and Thames Path National Trails also pass through the District. 'The Council's Rights of Way Improvement Plan 2010-2020 completed an assessment of need from the public and identified several priorities including, a better maintained access network for passage and interpretation for information and encouraging more responsible behaviour, and to enhance biodiversity and historic character. The LTP4 has role in supporting new accesses improve links between population centres and facilities including schools and for those of restricted mobility, as well as improved equestrian access away from roads.

Transport infrastructure has the potential to erode and adversely affect local character and distinctiveness, such as surfacing, signing and lighting requirements. The LTP can have a role to play in helping design improvement that are sympathetic to or enhance both landscape and townscape settings.

Green and Blue Infrastructure (GBI) describes the multifunctional network of green and blue spaces, landscapes, and natural elements within and between towns and villages. Green infrastructure covers elements such as trees, woodlands, forests, fields and parks, whereas blue infrastructure covers elements like canals, rivers, ponds, wetlands, floodplains and water treatment facilities. By connecting the centres of settlement into the surrounding landscape, GBI can facilitate prosperous, active, healthy and happy communities, contributing to wider council priority areas relating to improving health and wellbeing. This GBI network may be severed or reduced due to new transport infrastructure.

The LTP4 has a role to play in helping to develop GBI assets, especially green/blue corridors in relation to transport corridors, such as road verges, railway embankments, canal banks and towpaths. Highway design and maintenance can also consider amenity green infrastructure in the form of incorporating trees into the highway and streetscape and roadside verges. LTP4 policies can also

encourage providing good quality, accessible GBI within development and transport projects to improve health and wellbeing.

Soils

There is a need to protect West Berkshire's 'Best and Most Versatile (BMV) Agricultural Land'. Sustainability issues relating to the LTP4 largely related to future development, including transport infrastructure, may result in the degradation of BMV land.

The LTP can have a role to play in ensuring, where possible, that improvements are contained within land covered by existing transport networks to protect BMV land.

Cultural heritage (including architectural and archaeological heritage)
Within West Berkshire there are nearly 1900 listed buildings, 53 conservation areas, approximately 90 Scheduled Monuments, 12 registered Parks and Gardens, and 2 Historic Battlefields. These are outlined in West Berkshire Council's "Local List of Heritage Assets".

The 2022 English Heritage 'Heritage at Risk Register' identifies five listed buildings, five Scheduled Monuments and four historic parks and gardens at risk in West Berkshire.

The historic environment is increasingly under threat from development pressures. The creation of new infrastructure to provide for a growing population can have the potential to adversely affect the visual amenity and the settings of both designated and non-designated heritage assets, which need to be considered during project/scheme development.

Transport can adversely impact cultural heritage sites because of vehicle damage and emissions in urban areas and villages. Ancillary features of transport, such as road signs and marking, as well as car parking, can impair the setting of historic buildings and places. This indicates a need to conserve and enhance West Berkshire's rich historic environment and diverse historic landscape character.

All parts of West Berkshire are highly accessible to motor vehicles. Given the substantial increase in traffic over the last few decades, many new roads have been built or widened to cope with the flows.

Air

Road traffic has been identified as a source of air pollution in areas nationwide. As well as carbon emissions, road vehicles emit a wide range of pollutants, including nitrogen oxides (NOx) and particulate matters (PM). Nitrogen dioxide (NO2) is of principal concern as there are widespread incidences of exceedances throughout the country.

Air pollution results in damage to the natural environment. For example, NO2 contributes to acidification of soils which can lead to loss of plant diversity. NO2 adds excessive nutrients to water courses that can cause algal blooms, which in turn can cause fish mortality and loss of plant and animal diversity. Any proposed plans or projects that may affect a protected European nature conservation site are assessed under the Habitats Regulations to consider their potential impacts, including air quality, and if those impacts will adversely affect the ecological integrity of the

protected site. Trees and vegetation absorb carbon dioxide (the main greenhouse gas) and filter, absorb and reduce pollutant gasses including ozone, sulphur dioxide, carbon monoxide and NO2 as well as producing oxygen.

Nitrogen oxides are key gases that contribute to overall air pollution. In the UK, levels have been steadily decreasing since 1992. However, Defra have concluded that while long-running urban background sites show a general decrease in NO2 concentration as might be expected from the national emissions estimates, the same is not consistently true of urban traffic sites. It is likely that the trend in ambient NO2 concentration at each individual site depends, at least in part, on the quantity and type of traffic on the adjacent road.

Particulate Matter PM is released into the atmosphere from several stationary and mobile sources. The major mobile source is road transport, which produces primary particles when fuels are burned or lubricants used up in the engine, when tyres and brakes wear down and from road dust (including from ZEV's). The main stationary sources are the burning of fuels for industrial, commercial and domestic purposes. Emissions of dust can also generate high concentrations of particulate matter close to quarries and construction sites. Primary particles can also be produced from natural sources, for example sea spray and dust from the Saharan desert travelling vast distances.

There are only two areas acknowledged as having poor air quality in West Berkshire, associated with a section of the A339 in central Newbury and a section of the A4 in Thatcham. These problems are attributed to road vehicle emissions and the LTP is a critical document in helping to deliver the necessary mechanisms to improve air quality.

Being situated near a strategic road network is ideal for businesses and other services to locate. This presents a challenge in managing vehicle movements on nearby local road networks, particularly increased movements of heavy goods vehicles.

Although changes in technology mean that vehicles are producing less emissions, the number of vehicles is expected to increase, which has the potential to affect air quality and a consequence, human health, natural capital and ecological sites. Therefore, the LTP4 has a role to play in developing policies and strategies that promote sustainable and active travel opportunities for all to use, preference to catering for unrestrained car use would be preferable in helping reduce air quality impacts caused by road congestion. There is potential for improvements in air quality to impact positively on SSSIs.

Water (including flooding, water and water resources)

Over the last 30 years, water quality changes have been positive after previous periods of poor unregulated environmentally degrading industrial practices. England has the cleanest bathing waters since records began, serious pollution incidents are steadily declining and rivers that were biologically dead are reviving.

Poor water quality is typically due to a combination of agricultural runoff, untreated drainage from built-up areas and roads, and discharge from wastewater treatment works. It can affect people's health, and that of plants and animals.

Urban areas and the transport network are a source of environmental contaminants, which include hydrocarbons, metals, plastics, nutrients (such as phosphate), ammonia, pathogens, sediment and solid pollutants. Such contaminants entering surface water bodies and groundwater may have an adverse impact on water quality and ecology. As well as these pollutants the physical alteration and intersection of water bodies may result in adverse effects. Pollution arising from run-off from roads and pavements needs to be considered.

The main catchment in the District is the Kennet and its tributaries. Surface water quality is generally moderate for ecology and good for chemical status. Pollution from rural areas and waste water, physical modifications and changes to natural level and flow of water are some of the main challenges in the catchment.

The risk of flooding to many homes and businesses (as in 2007 and 2014) and its frequency within West Berkshire is widespread, arising not only from rivers but also from surface water runoff, groundwater flooding and infrastructure failure and disruption. Therefore, there is a need to avoid and reduce the impacts of surface water as well as river and groundwater flooding in parts of West Berkshire. The impacts of climate change have increased the frequency, patterns and severity of flooding incidents, and these are forecast to worsen and become more damaging.

There is a need to reduce the amount of major and significant pollution incidents which have affected the quality of West Berkshire's water resources, including because of run-off from transport networks. These can have significant implications for local communities as well as flora and fauna in West Berkshire.

Noise and Light Pollution

The WHO Environmental Noise Guidelines for the European Region (2018) states that "Noise is an underestimated threat that can cause a number of short- and long-term health problems, such as for example sleep disturbance, cardiovascular effects, poorer work and school performance, hearing impairment, etc."

Defra's report 'Environmental Noise: Valuing impacts on sleep disturbance, annoyance, hypertension, productivity and quiet' estimates the annual productivity loss to England from road traffic noise per annum (based on 2014 data) to be between £2bn and £6bn.

For West Berkshire, noise pollution may impact the health and wellbeing of people who live near the Strategic Road Network (M4/A34) or key local routes (e.g. A4 & A339) due to current levels of traffic. There may also be an issue for West Berkshire residents living near to railway lines and sites where industrial activities are undertaken. The natural environment, particularly tranquil areas, may experience an increase in transport-related noise pollution in proximity to transport corridors.

Light pollution can have harmful effects upon all areas, particularly in the more rural areas of West Berkshire (e.g. farms, hamlets and small villages in the AONB) where artificial lighting (including street lighting) has traditionally been limited. The illumination of the sky within the more urbanised areas of West Berkshire may present a problem for residents.

Social

Human health

The more deprived areas in the district in terms of health deprivation are concentrated in some the more urban areas in Newbury and Thatcham as well as the Reading fringe areas around Calcot and Purley on Thames. There are some more rural areas across the district which are ranked higher for health deprivation, including around Mortimer, Aldermaston and the Lambourn Valley. This may be in part due to lack of access to healthcare, jobs and other essential services. The LTP4 has a role to play in developing strategies to address where inequalities in access to healthcare, jobs and other services associated with transport provision.

There are negative perceptions by members of the public about noise and air pollution and the potential health impacts associated with road vehicle traffic on congested routes.

Obesity is seen as an increasing issue by health professionals, and one that will contribute to significant health impacts on individuals, including increasing the risk of a range of diseases, including heart disease, diabetes and some forms of cancer. The LTP4 and its supporting strategies will play a key role in encouraging active travel (e.g. walking and cycling) as well as accessibility to sports and recreation facilities. Continued traffic growth without adequate provision of pedestrian and cycle facilities is unsustainable.

Active travel can have a role to play in reducing obesity and improving health and well-being. The LTP4 has a role to play in developing networks that encourage greater use of walking and cycling, particularly in urban areas. Further opportunities exist to promote leisure active travel access to the network of quiet routes and footpaths in the rural areas.

Human health and quality of life can also be improved by taking a natural capital approach to the LTP4. For example, improving the quality of habitats (including tree planting, sowing wildflower mix rather than amenity grassland to improve biodiversity) alongside walking and cycling routes can help encourage more active lifestyles with benefits for people's physical and mental health and wellbeing. Views of vegetation from other modes of transport (e.g. along roads and railways) can also enhance mental wellbeing, for example by reducing stress levels.

General social considerations – Population, Education, Housing, Deprivation, Crime and Safety

The estimated population of West Berkshire (the plan area) in 2021 was 161,447 and is projected to grow beyond 166,000 by 2036. The current West Berkshire Core Strategy plans for an additional 10,500 new homes between 2006 and 2026. The current Local Plan Review (currently in progress) is proposing a provision to be made for up to 9,146 net additional homes in the West Berkshire district between 2022 and 2039. This sustained growth is likely to result in greater demands on resources, travel and local transport infrastructure.

The population of over 65s is forecast to grow by over 59% in the period 2016-2036 and the over 85s by 148% over the same period, for which future transport and mobility requirements will need to consider.

Although the level of crime is of importance to the residents of the area, it is antisocial behaviour that is of more concern as this has a direct effect on the quality of life and general appearance of the area. Fear of crime, such as thefts of bicycles or travelling alone in later evenings, can influence people's choice of travel. The LTP has a role in guiding the development of transport networks that are safe for all who wish to travel and working with other transport networks to reduce the threat of crime at interchange points, such as railway stations.

Economic / Material Assets

Transport

West Berkshire experiences traffic congestion on the Strategic Road Network (M4/A34) as well on key local routes in urban areas (e.g. A4 & A339) during peak periods. This can result in capacity pinch-points and road safety issues which reduce its efficiency leading to congestion, pollution and rat running on less suitable routes

A key challenge for the LTP is to reduce the heavy reliance on private car travel that leads to congestion and excessive demand of the road network at peak times. The LTP4 will look to encourage greater use of sustainable travel choices and transport modes instead of catering for increased road vehicle traffic. This would be achieved by improving choice of active and sustainable modes for all who wish to travel and to tackle the negative impacts of road, such as congestion, severance, road safety and increased costs of maintaining local transport assets.

The LTP will also need to consider the impact of freight movements and to look at ways to encourage more sustainable distribution and to minimise the impact of freight on local communities. Opportunities to utilise and expand the existing rail facility at Wigmore Lane, Theale should also be encouraged, where appropriate and sustainable. As such, the continued safeguarding of these sites in the Local Plan is critical.

Renewable and low carbon energy

Most of the energy used by homes and businesses in West Berkshire is understood to be generated by fossil fuels which emit greenhouse gases, contributing to the greenhouse effect. The Council has developed its Environment Strategy to 2030 to guide the development of systems to enable West Berkshire to achieve carbon neutrality by 2030. Energy is one of the key themes of this document, with an increased focus on using more renewable sources. There is potential for the LTP4 to adopt a policy approach such that low-carbon energy technologies are encouraged.

The council's Environment Strategy also identifies transport as a key theme in helping to meet the 2030 Net Zero target. Road traffic is widely recognised as a major source of carbon emissions and other pollutants. The Environment Strategy acknowledge that a focus towards developing sustainable transport is a key theme in the pathway to a greener West Berkshire in 2030. This is to be achieved by reducing reliance on private cars, increasing active travel, developing and maintaining resilient highway infrastructure and understanding the potential of ultralow emission vehicles.

The Environment Strategy indicates that the new LTP4 will build upon progress made under the current LTP in increasing travel choices. As part of this, the council

are considering several transport-related projects which will reduce carbon emissions and environmental harm whilst offering a greater number of transport options to our residents. These include:

- Working with public transport operators to increase the use of public transport.
- Establishing greater connections between sustainable travel options.
- Encouraging more sustainable car travel options where use of public transport and active travel is not practical.
- Supporting active travel, especially for short journeys.
- Working with local businesses to provide sustainable travel by staff.
- Encouraging uptake in electric vehicles by continuing to provide exemplar levels of charging points.
- Increasing use of more sustainable road surfacing options (e.g. low-temperature asphalt).
- Working with partners and stakeholders to develop and adopt sustainable travel innovations.
- Working with the government, regional and local partners to improve rail infrastructure.
- Lobbying government and relevant agencies in areas where emissions are outside of the council's control (e.g. National Highways in relation to the M4 and A34).

Minerals

There are several active minerals sites located in West Berkshire, mainly located near to the A4 corridor in the Kennet Valley. It is expected that these activities will continue, which will be guided by the Council's emerging Minerals & Waste Local Plan DPD (due to be adopted in December 2023). In addition, the rail aggregate depot at Wigmore Lane, Theale imports limestone aggregate by rail from quarries in Somerset. This aggregate is then transported by road to markets in the wider area.

The sustainability issues in relation to LTP is that firstly, the transport of minerals around the district (other aggregate trains than to the Theale railhead), is expected to remain largely reliant on the road network.

Secondly, materials (including minerals) will be required in any new transport infrastructure and maintenance schemes and in the delivery of new development sites. Similarly, application of resource efficiency including use of recycled materials is important to reducing waste and there is significant capacity for increasing the levels of recycled and secondary aggregate production used for transport infrastructure.

Waste

The Council has a responsibility to manage and maintain transport networks in the district, often requiring use of resources and production of waste. There are opportunities for the efficient use of resources, including the use of recycled and secondary aggregates in construction and maintenance practices of local highway infrastructure to help minimise waste.

Population growth in West Berkshire is likely to generate more waste, which in turn will require more transportation. This is likely to result in an increase in goods vehicle movements on the local network in terms of collecting and transferring waste.

General economic considerations

West Berkshire is an integral part of one of the most prosperous sub regions in Europe, the so-called Thames Valley business wedge spanning from South Buckinghamshire, South Oxfordshire, through all of Berkshire, North Hampshire, and Surrey. Along with Greater London and other parts of the South East, this region is recognised as "the economic engine" which leads and pulls along the rest of the UK economy. Employment space is dominated by industrial (B2 General industrial and B8 Storage and distribution) uses with office space accounting for just 31% of total stock.

Whilst B use class floor space is located across the area, it tends to be concentrated in and around the key commercial centres of Newbury, Thatcham and Theale, and to a lesser extent Hungerford. It is also clustered along the main transport routes and networks including the A4 and M4.

Transport has a key role to play in ensuring the district maintains its economic competitiveness and in attracting new businesses and investment to the district. High levels of road traffic in urban centres or key inter urban routes can result in congestion, which can result in increases in journey times and unreliability.

There is a need for the LTP4 to help ensure that appropriate sustainable, reliable and accessible transport networks are in place in West Berkshire to continue to attract and retain investment and business, and to allow all residents to access employment, education, retail and leisure opportunities. This would help sustain the economic vitality of the district and provide access for residents to well-paid employment.

Cross-boundary issues

Transport by its nature is not constrained within authority boundaries. West Berkshire is no exception and given its proximity to larger urban areas, there are considerable levels of movements across boundaries. The LTP will need to ensure that there is good partnership working with neighbouring authorities and transport operators to deliver effective improvements that provide people with greater choice and opportunities for travel.

Stage 4A – The SA Framework

The sustainability appraisal framework consists of a set of sustainability objectives and indicators derived from consideration of information in stage A3. The indicators can be used during Stage E to monitor the implementation of the LTP. Annex D shows how the SA Objectives are related to environmental, social and economic issues. Annex E indicates the relationship between the SA objectives and the aspects of the environment set out in Annex 1(f) of the SEA Directive.

Objective	Potential indicators	10	oic area

1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Distance from transport schemes to the nearest: -SSSIs -Ancient and/or Species Rich Hedgerows -Ancient Woodland -SPAs (none in West Berkshire however Thames Basin Heath SPA is 5km from south west border) -SACs -SACs -SACs -LNRs -WHSs Condition of the nearest sensitive receptors (where viable) Monitoring of Berkshire BOAs in West Berkshire as part of Berkshire Biodiversity Strategy Status / condition of priority species and habitats (Berkshire Biodiversity Strategy) Condition of SSSIs Changes in woodland and farmland bird species Site visit surveys on typical abundance and frequency of habitats (DAFOR scale) Ecological potential site assessments Mitigation measures related to West Berkshire rivers that have defined ecological potential	Biodiversity and Geodiversity
2) To maintain and enhance water quality and resources	Ecological status of rivers/canal/lakes Chemical status of rivers/canal/lakes The Water Framework Directive (WFD) aims for 'good ecological and chemical status' for all ground and surface waters by 2027 (The status of surface waters is assessed according to criteria prescribed in the WFD) Resource availability status for units of groundwater in Catchment Abstraction Management Strategy Areas Resource availability status at low flows for units of surface water and / or surface water combined with groundwater, in Catchment Abstraction Management Strategy Areas	Water (Water Quality) Biodiversity
3) To minimise the risk and impact of flooding of transport infrastructure and ensure risk of surface water flooding is reduced	Proximity and suitability of new development and transport infrastructure to floodplains SFRA identified sites/areas which will result in least detrimental impact from flooding Incidences of flood warnings in site area Distance to 'Areas susceptible to surface water flooding' – EA Maps	Water (Flooding) Climate

	On site and nearby topography via ordnance survey mapping				
	Incorporation of Sustainable drainage systems				
	Survey of vegetation on site to assess capability of plant-life to mitigate flooding				
4) To maximise the sustainable use of land and the	Location and extent of agricultural land grades 1, 2 and 3a	Soils			
protection of soils, safeguarding the	Location and extent of contaminated land				
best and most versatile agricultural land	Location and extent of development on previously developed land				
lanu	Standard of restoration schemes back to Agriculture				
5) To conserve and enhance the character of the	The location of designated and non-designated heritage assets	Cultural heritage (including Architectural and			
historic environment, cultural heritage assets, and features	The number and percentage of designated heritage assets at risk from the development of transport infrastructure	Archaeological Heritage). Transport			
of archaeological importance	New transport infrastructure proximity to, and (potential) impact on the significance of any: - Scheduled Monuments - Listed Buildings - Conservation Areas				
	- Historic Parks or Gardens - Historic Battlefields (nationally and/or locally recognised) - Designated and non-designated sites identified in the Historic Environment Record				
	Archaeological assessment reports associated with development of new transport projects				
6) To minimise the impact on landscape and	Height of proposed new or existing transport infrastructure	Landscape and townscape			
townscape character	Number and extent of field boundaries affected or return to historic field patterns				
	Extent of Landscape Character Areas affected				
	Assessment of onsite and nearby topography via ordnance survey mapping.				
	Extent of current hedgerows, trees, woodlands, landform and built development (based on Berkshire Landscape Character Assessments)				
	Number of TPOs that would be affected				
	Transport projects within, or adversely affecting, North Wessex Down AONB				
	•				

Location and extent of now revoked AQMAs Assessment of wider air quality monitoring undertaken by the Council Assessment of impact on air quality arising from traffic generated by new developments Location and extent of potentially significant junctions	Air Human health Climatic factors Transport
routes Traffic volume data from relevant WBC permanently monitored Automatic Traffic Count sites	Renewable and
relation to transport through the Environment Strategy Numbers and % of Ultra-Low Emission Vehicles registered in West Berkshire Numbers of publicly available electric vehicle charging points in West Berkshire Progress toward achieving net zero carbon emissions in West Berkshire by 2030	low-carbon energy; Air Climatic factors Transport
Projects to develop rail freight sidings at Theale Number of Ultra Low Emission Goods Vehicles Numbers of heavy goods vehicles recorded on WBC's automatic traffic counters on key routes, including West Berkshire Freight Route Network	Transport Minerals Waste
Proportion of recyclable and secondary materials used in highway construction, maintenance and surfacing works	Maintenance Waste
Local authority noise data Street lighting provision and type in rural areas	Noise and Light Pollution Health Landscape Cultural Heritage
Public Health data regarding obesity Accessibility data Number of cycle journeys recorded as part of regular LTP cycle monitoring Increase in kms of cycle routes and ROW	Health Transport
	Assessment of wider air quality monitoring undertaken by the Council Assessment of impact on air quality arising from traffic generated by new developments Location and extent of potentially significant junctions in relation to infrastructure requirements and likely routes Traffic volume data from relevant WBC permanently monitored Automatic Traffic Count sites Monitoring of West Berkshire's carbon emissions in relation to transport through the Environment Strategy Numbers and % of Ultra-Low Emission Vehicles registered in West Berkshire Numbers of publicly available electric vehicle charging points in West Berkshire Progress toward achieving net zero carbon emissions in West Berkshire by 2030 Projects to develop rail freight sidings at Theale Number of Ultra Low Emission Goods Vehicles Numbers of heavy goods vehicles recorded on WBC's automatic traffic counters on key routes, including West Berkshire Freight Route Network Proportion of recyclable and secondary materials used in highway construction, maintenance and surfacing works Local authority noise data Street lighting provision and type in rural areas Public Health data regarding obesity Accessibility data Number of cycle journeys recorded as part of regular LTP cycle monitoring

routes and footpaths in the rural areas of the district.	Number of health schemes to encourage walking and cycling leisure activities	
13) To create transport networks that are safe for all users, including improving personal safety and reducing crime	Road safety data and trends Safety audits of new transport projects and schemes Crime statistics for transport-related offences (including thefts of bicycles)	Personal safety Crime Transport
14) To increase the capacity and efficiency of the transportation network to support demographic changes, including increasing travel by active and sustainable modes of transport	ONS Census population profiles and forecasts for West Berkshire and key areas in the district Number of cycle journeys recorded as part of regular LTP cycle monitoring Traffic volume data from relevant WBC permanently monitored Automatic Traffic Count sites Number of bus journeys made in West Berkshire Office of Road & Rail Entries and Exits data for West Berkshire railway stations Increase in kms of cycle routes and ROW	Population Transport
15) To maintain economic vitality, enable well-paid employment and education across the district through provision of reliable transport networks, including with neighbouring areas.	Transport accessibility to key services and facilities, including employment, education and training ONS Journey to Work data Number of cycle journeys recorded as part of regular LTP cycle monitoring Bus ridership data (including on cross-boundary routes) ORR Entries and Exits at West Berkshire railway stations	Transport Economy Education Deprivation Cross-boundary

Local Transport 4 Vision and Objectives

The LTP4 is being developed to be a vision-led LTP, which will set out clearly the intended future outcomes for people, goods and places. There are four draft vision themes, which will be supported by a series of objectives to help steer the LTP4 to what is seeking to achieve. Note at the time of writing, these are draft and have not been subject to public consultation to date and therefore may be subject prior to formal adoption of the plan. The following proposed vision themes and objectives are as follows:

Vision theme - Support Sustainable Growth

- A) Carbon neutral development
- B) Protect and enhance strategic connectivity
- C) Reducing impact of freight
- D) Support innovation and piloting of new measures

<u>Vision theme – Decarbonise Transport</u>

- E) Net zero emissions by 2030
- F) 50% active travel (Newbury and Thatcham)
- G) Access to zero emission charging and/or vehicles

<u>Vision theme – Places for People</u>

- H) 'Vision Zero' target for road safety
- I) Safer residential and school streets
- J) Reduce dominance of vehicles in urban areas
- K) Attractive public transport vehicles

Vision theme - Sustainable Access for All

- L) Everyone is digitally connected
- M) Access to public and shared transport
- N) Seamless interchange at bus and rail stations

Compatibility of Sustainability Objectives

A total of 15 sustainability appraisal objectives have been derived for the appraisal of the LTP4 (see Table 8 above). They are based on policy advice and guidance and related to the assessment of the current state of the West Berkshire district.

A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, 42005) states that it would be useful to test the compatibility of SA objectives against one another to highlight any areas where potential conflict or tensions may arise. To test the internal compatibility of the sustainability objectives a compatibility assessment of those sustainability objectives has been undertaken.

In the compatibility matrix (Figure 1) the 15 SA objectives are numbered in sequence along each axis, and they represent a balance of economic/material assets; social and environmental factors.

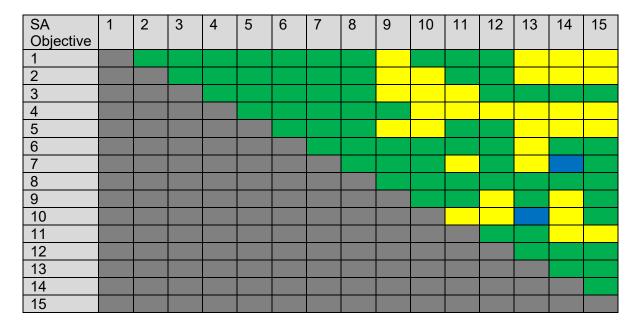
In the compatibility matrix (Figure 2) the 15 SA objectives have been tested against the draft LTP4 Vision themes and associated objectives

The function of SA/SEA and assessing compatibility is to identify benefits and minimise detrimental impacts. Instances of uncertainty between objectives are explained further. Where it is indicated that the interaction between objectives is 'neutral', although they do not conflict it is considered that they do not impact on each other or the extent to which they do is negligible.

Key for figures 1 & 2

IXCy I	of figures i & Z									
Compatible										
	Incompatible									
Neutral										
	Uncertain									

Figure 1 – Compatibility of Sustainable objectives with one another



In general terms the SA objectives are very compatible with each other with most interactions between objectives are classed as 'compatible' and 'neutral', and none being classed as 'incompatible'.

The comparison between the SA Objectives and the LTP4 Vision objectives are shown in Figure 2 below. These show that many of the SA objectives are compatible with the LTP4, particularly where there are similar themes, with most of the interactions being classed as 'compatible' or 'neutral'.

The 'uncertain' interactions generally relate to the impact of new transport infrastructure, such as electric vehicle chargepoints and interchange improvements, on sustainability objectives relating to historic buildings (5) and townscapes (6). Where such issues occur, it is expected that these would be considered at the design process with advice being taken from relevant parties, such as conservation officers.

Figure 2 – Compatibility of SA Sustainability Objectives with draft LTP4 Objectives

Objectives														
	LTP4	4 Visio	on the	me O	bjectiv									
SA	Α	В	С	D	Е	F	G	Н	1	J	K	L	М	N
Objective														
1														
3														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

Stage A5 - Consultation

As stated above the SEA Directive (Article 5.4) requires views to be sought from the three statutory environmental consultation bodies designated in the SA Regulations (Environment Agency, Natural England, and Historic England) on the scope and level of detail of the environmental information in the SA.

This report forms the principal key document that will be subject to a 5-week consultation period with the 3 statutory consultation bodies.

The consultees will be specifically requested to comment upon the following questions:

- 1. Are there any additional relevant plans and policies beyond those covered that you think are relevant to this appraisal?
- 2. Do you think that the sustainability objectives are appropriate?
- 3. Do the objectives cover all the areas of interest without repeating each other?
- 4. Do you or your organisation have information that you feel would add to the assessment of the objectives or increase the robustness of the baseline data?

The Next Stages of the SA

When Stage A5, consultation on the SR, has been completed the development of the SA will move on to Stage B, developing and refining options and assessing effects, with Stages C, D and E to follow (for more information on this please see Table 1).

The SA process is an iterative process that will be undertaken alongside the production of the LTP4 in an informative capacity. The SR will also be made available to stakeholders during the LTP4 consultation for comment. The full

Environmental Report will subsequently be made available to stakeholders in conjunction with post-consultation version of the LTP4, prior to the LTP4 going forward to Full Council for formal adoption. This approach will provide the relevant authorities and the public, early and effective opportunity to express their opinions on the Environmental Report as per Article 6(2). When Stage A5, consultation on the SR, has been completed the development of the SA will move on to Stage B, developing and refining options and assessing effects, with Stages C, D and E to follow (for more information on this please see Table 1).

West Berkshire Council

West Berkshire Local Transport Plan 4 (2023-2039) SA/SEA Environmental Report

APPENDIX C

Assessment of LTP4 Strategy Vision Themes and Objectives

West Berkshire Council

West Berkshire Local Transport Plan 4 (2023-2039) Sustainability Appraisal of LTP4 Vision Themes and Objectives

1 Introduction

1.1 Overview

- 1.1.1 The assessment of the polices will predict the following:
 - Overall effect significance (negative, positive, uncertain, both positive and negative or negligible).
 - Nature of effect (direct, indirect).
 - Spatial extent (local, regional, national, international).
 - 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).
- 1.1.2 Table A-1 below shows the key to effects that have been used within the assessments below. It should be noted that where uncertain and neutral 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, these cells have been left blank.

Table A-1: Key to Effects

Effect Significance	Key
•	,
Potential for significant positive effects	++
Potential for minor positive effects	+
Potential for minor negative effects	-
Potential for significant negative effects	
Potential for both positive and negative effects	+/-
Uncertain effects	?
Negligible / No effect	0
Nature of effect (direct / indirect)	D/I
Spatial extent (local, regional, national,	L/R/N
international)	/ I
Reversibility of effect (reversible / irreversible)	R/I
Duration (short, medium, long term)	ST / MT /
	LT

Vision Theme	Places for People													
Objective	'Visio	'Vision Zero' Target for Road Safety												
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects						
SA1 – Biodiversity and Geodiversity	+	М	I	L	R	Р	MT	There are potential positive effects upon natural capital because of the reduced degradation to biodiversity from noise and air quality improvements, and the potential for improvements to green infrastructure.						
SA2 – Water Quality	0													
SA3 – Flood Risk	+	L	I	L	R	N	MT	There are potential positive effects arising from improving drainage as part of transport improvements. These may reduce instances of flooding, which may improve safety through reduced instances of skidding and aquaplaning.						
SA4 - Soils	?							There are uncertain effects on soils due to the likelihood for development arising from this objective. It is currently uncertain if this will include the use of existing roads or within the highway boundary, or additional land take for new infrastructure.						
SA5 – Historic Environment	+	L	I	L	R	Р	MT/ LT	There are minor positive effects anticipated for the historic environment because of this outcome. Indirectly, improvements to the landscape and landscape setting are likely to improve the setting of local heritage assets, and reductions in noise are also likely to contribute to improving the setting, therefore improving the significance of settings.						
SA6 – Landscape & Townscape	++	М	D	R	I	Р	LT	There are significant positive effects anticipated for landscape because of this outcome. The outcome is likely to result in improvements to the local landscape setting through reductions in traffic disturbance, as well as contributing to improvements to the public realm through the development of quieter and safer streets. There is also likely to be improvements to the landscape through the development of attractive pedestrian and cyclist environments and reducing the dominance of motor vehicles.						

				1	I		ı	
SA7 – Air Quality	+/-	M	D/I	R	R/I	Р	MT/ LT	The development of improved infrastructure, speed limit changes, and increasing the network of quiet roads is likely to reduce congestion throughout the District. The development of safer pedestrian and cycle infrastructure is also likely to encourage a modal shift towards active travel modes, improving air quality along these routes. Additionally, the development of additional quieter rural roads may improve air quality in rural areas of the District. However, there is potential that changing speed limits may result in increased congestion on heavily utilised routes such as the A339 and A4.
SA8 – Climate Change and Greenhouse Gases	+/-	L	D/I	R	R/I	Р	MT/ LT	There is potential that increases in road infrastructure may encourage additional private car use, resulting in increased greenhouse gases. However, improving the routes, encouraging active travel and increased take-up of EV's is likely to result in reductions in greenhouse gases.
SA9 – Minerals	?							Uncertain effects have been identified for minerals as there is potential for development arising from this objective. However, the extent of the use of minerals from transport projects is currently unclear.
SA10 – Waste	?							Uncertain effects have been identified for waste as there is potential for development arising from this objective. However, the generation of waste from development and maintenance programmes, and/or the use of recyclable materials is currently unclear.
SA11 - Noise & Light	+/-	L	I	L	R/I	Р	LT	There are anticipated minor positive effects upon noise because of this outcome. The outcome is likely to reduce both the speed and volume of vehicles on the District's roads, indirectly reducing noise. There is potential that increasing the network of rural roads may result in increased vehicles in these areas, and low-level noise increase, however this is likely to be low level due to the quieter nature of the roads. Safety projects in rural areas may have the potential to increase lighting in the designated 'dark sky' areas of the NWD NLA.
SA12 – Access to the Countryside	+	L	D	L	R	Р	MT / LT	There are anticipated minor effects arising from improved access to the Countryside. This could be a result of providing or improving existing active travel routes into the rural areas from the District's urban areas and/or improvements to the PROW network in line with projects outlined in the ROWIP.
SA13 – Health & Wellbeing	++	М	D	L	R	Р	MT / LT	The development of the outcome results in improvements to road safety throughout the District's urban centres, residential areas and along the main road corridors (e.g. A4, A339 and A340), reducing the number of KSI on these routes. Additionally, the outcome also provides improved safety to schools' streets and routes to school, reducing the number of accidents involving children. The development of safer school routes, as well as the development of pedestrian and cyclist routes, is also likely to encourage active travel and subsequently improve physical activity and health amongst the population.

SA14 – Active & Sustainable Travel	+	М	D	L	R		MT / LT	The proposed development of active travel infrastructure will provide increased connectivity and provide residents with sustainable active travel options. Further details of the development of active travel infrastructure and initiatives will be outlined in a new Active Travel Strategy for the District, along with the priority areas identified in the LCWIPs.			
SA15 – Economy & Employment	+	L	I	L	R		LT	Developments to the local network as proposed have the potential to result in improved connectivity between the town centre and rural areas. This is likely to improve accesses to employment and the local economy.			
Potential Cumulative / Synergistic Effects		There are potential for cumulative effects upon health, population and landscape due to the increased safety and development of routes. There are also potential cumulative effects upon biodiversity, noise, air quality and greenhouse gases due to changes in vehicle volumes.									
Mitigation and Enhancement Measures	The ou	The outcomes of the vision could be enhanced through incorporating drainage methods to minimise flood risk within development.									
EqIA Considerations	road Chil San Preg Peo	 Older people, disabled users and those with long term health conditions, and younger people are more vulnerable to collisions on roads Children in West Berkshire walking and cycling to school may be vulnerable to collisions. Same sex couples may be targeted on streets Pregnant women and new mothers may struggle accessing public transportation People holding a religion or belief may experience discrimination on public transport LGBTQ+ can experience sexual orientation-based discrimination on public transport 									
Recommendations	The ou inclusi The ou	The outcome could be expanded to include reference to how the network of safer pedestrian and cycle routes will allow access for all inclusively. The outcome could be expanded to specify how routes to school will be improved, including safer crossings and lower speeds. To improve safer streets, motor vehicle traffic should be reduced or excluded entirely.									

Vision Theme	Place	aces for People											
Objective	Safer	Safer Residential, School and Town Centre Streets											
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects					
SA1 – Biodiversity and Geodiversity	+	М	I	L	R	Р	МТ	There are potential positive effects upon natural capital because of the reduced degradation to biodiversity from noise and air quality improvements, and the potential for improvements to green infrastructure to be provided as part of measures to reduce the impact of vehicles on urban streets.					
SA2 – Water Quality	0												
SA3 – Flood Risk	0												
SA4 - Soils	?							There are uncertain effects on soils due to the likelihood for development arising from this objective. It is currently uncertain if this will include the use of existing roads or within highway boundary, or additional land take for new infrastructure					
SA5 – Historic Environment	+	L	I	L	R	Р	MT / LT	There is potential for positive effects to the setting of heritage assets because of improvements to the public realm through reducing the impact of motor vehicles in urban areas.					
SA6 – Landscape & Townscape	+	М	D	R	I	Р	LT	If positively designed, local transport schemes which promote active travel and reduce the dominance of vehicles may result in improvements to the streetscape in urban areas. Additionally, a reduction in vehicles in town centres should help improve the townscape setting.					
SA7 – Air Quality	+/-	М	D/I	R	R/I	Р	LT	The development of improved infrastructure and speed limit changes will help to improve safety throughout West Berkshire. The development of safer pedestrian and cycle infrastructure is also likely to encourage a modal shift towards active travel modes, improving air quality along these routes. Similarly, the development of additional quieter rural roads may improve air quality in rural areas. In addition, the transition to EV's should help reduce vehicle emissions However, there is potential that changing speed limits may result in increased congestion on heavily utilised routes such as the A339 and the A4.					

SA8 – Climate Change and Greenhouse Gases	+/-	L	D/I	R	R/I	Р	MT / LT	There is potential that increases in road infrastructure and the closure of some local routes to improve safety may encourage additional car use, resulting in increased greenhouse gases. However, improving local routes and encouraging active travel is likely to result in reductions in greenhouse gases.					
SA9 – Minerals	?							Uncertain effects have been identified for minerals as there is potential for development arising from this objective. However, the use of minerals from development is currently unclear.					
SA10 – Waste	?							Uncertain effects have been identified for waste as there is potential for development arising from this objective. However, the generation of waste from development and/or the use of recyclable materials is currently unclear.					
SA11 - Noise & Light	+/-	М	I	L	R	Р	МТ	There are anticipated minor positive effects upon noise because of this outcome, which is likely to reduce both the speed and volume of vehicles on the District's roads, indirectly reducing noise. Safety projects in rural areas may have the potential to increase lighting in traditional 'dark sky' areas of the District.					
SA12 – Access to the Countryside	0												
SA13 – Health & Wellbeing	++	М	D	R	I	Р	LT	The development of the outcome results in improvements to road safety throughout urban areas, reducing the number of KSI. Additionally, the outcome also provides improved safety to schools' streets and routes to school, reducing the number of accidents involving children. The development of safer school routes, as well as the development of active travel routes, is also likely to encourage active travel and subsequently improve physical activity and health amongst the population.					
SA14 – Active & Sustainable Travel	++	M	D	R	I	Р	MT / LT	The development of active travel infrastructure and measures to reduce the impact of vehicular traffic will provide increased connectivity and provide residents with safer active travel options. Further details of the development of active travel infrastructure and initiatives will be outlined in a new Active Travel Strategy for the District.					
SA15 – Economy & Employment	+	L	I	R	R	Р	LT	There are anticipated minor improvements to economy and employment because of increased space for businesses in urban areas, especially town centres. Additionally, improving the pedestrian environment and improving cycle facilities is likely to encourage residents to access town centres.					
Potential Cumulative / Synergistic Effects		There are potential for cumulative effects upon health, population and landscape due to the increased safety and development of routes. There are also potential cumulative effects upon biodiversity, noise, air quality and greenhouse gases due to changes in vehicle volumes											

Mitigation and Enhancement Measures	No mitigation or enhancement measures have been identified at this stage. Mitigation is likely to be based on individual schemes that may arise because of the LTP4.
EqIA	Older people, disabled users and those with long term health conditions, and younger people are more vulnerable to collisions on
Considerations	roads.
	Children in West Berkshire walking and cycling to school may be vulnerable to collisions.
	All age groups may be more likely to utilise safer active travel routes.
	Disabled users may be less likely to use unsuitable environments with inaccessible areas.
	Adapted cycle parking increasing accessibility for disabled users.
	Women are generally primary caregivers for the first 26 weeks after birth and tend to accompany children to school and childcare.
	Pregnant women and new mothers may struggle accessing public and active travel.
Recommendations	The outcome could be expanded to include reference to how the network of safer streets will allow access for all inclusively.
	The outcome could be expanded to specify how routes to school will be improved, including safer crossings and lower speeds.
	To improve safer streets, motor vehicle traffic should be reduced, be subject to reduced speed limits or excluded entirely.

Vision Theme	Place	s for F	People					
Objective	Increa	ased le	evels o	f Physi	ical Act	tivity		
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects
SA1 – Biodiversity and Geodiversity	0							
SA2 – Water Quality	0							
SA3 – Flood Risk	0							
SA4 - Soils	?							There are uncertain effects on soils due to the likelihood for development arising from this objective. It is currently uncertain if this will include the use of existing roads, or additional land take for new infrastructure.
SA5 – Historic Environment	+/-	L	D	L	R/I	Р	LT	There is potential for positive effects to the setting of heritage assets because of improvements to the public realm through reducing the impact of motor vehicles in urban areas. However, the development of active travel infrastructure may impact the setting of heritage assets through increased signage and markings.
SA6 – Landscape & Townscape	+	М	D	R	I	Р	LT	Positively designed active travel infrastructure can help improve townscape setting. Additionally, reductions in vehicles can improve land and townscape setting.
SA7 – Air Quality	+	M	D/I	Р	R/I	Р	MT / LT	Minor positive effects are anticipated for air quality because of vehicle changes within urban areas. Additionally, the outcome contributes to encouraging a modal shift away from private car use, towards healthier active travel modes including cycling and walking.
SA8 – Climate Change and Greenhouse Gases	++	М	D/I	L	R/I	Р	MT / LT	There is potential for reductions in greenhouse gases through a modal shift from the use of private cars, particularly for regular journeys through the widespread encouragement of active travel modes.
SA9 - Minerals	?							
SA10 – Waste	?							

SA11 - Noise & Light	+/-	M	I	L	R	Р	MT	There are minor anticipated effects because of this objective. Measures to encourage and increase levels of active travel may yield a decrease in vehicle journeys and associated noise. The development of active travel infrastructure in rural areas may increase undesirable lighting in dark sky areas in rural areas.				
SA12 – Access to the Countryside	++	М	D	R	ı	Р	MT / LT	The development of active travel schemes that link urban and rural areas, as well as the development of ROWIP schemes will have a positive outcome in terms of encouraging the use of active travel modes.				
SA13 – Health & Wellbeing	++	М	D	L	R	Р	МТ	There are significant positive effects anticipated for health as the developments within urban areas improve pedestrian and cycle infrastructure, which are likely to encourage active travel modes, improving physical activity and therefore health. Additionally, the outcome results in improvements to user safety, reducing the number of accidents.				
SA14 – Active & Sustainable Travel	++	М	D	L	R	Р	MT / LT	There are significant positive effects anticipated for active and sustainable travel. Developing schemes, measures and initiatives to increase active travel will result in increased levels of physical activity.				
SA15 – Economy & Employment	+	There are minor anticipated effects for economy and employment. Increased										
Potential Cumulative / Synergistic Effects	impact There	ts of the are also	se are li	kely to r e effects	esult in on tow	reduced n centre	greenh s throug	to the countryside, health s& wellbeing and active & sustainable travel. The resultant ouse gases as more people switch to active travel mode instead of using cars. In improved streetscene and air quality, as well as encouraging more trips to town modes.				
Mitigation and Enhancement Measures			or enhar ause of			res have	e been id	dentified at this stage. Mitigation is likely to be based on individual schemes that				
EqIA Considerations	DisaAdaWor	 All age groups may be more likely to utilise safer active travel routes Disabled users may be less likely to use unsuitable environments with inaccessible areas Adapted cycle parking increasing accessibility for disabled users Women are generally primary caregivers for the first 26 weeks after birth and tend to accompany children to school and childcare. Pregnant women and new mothers may struggle accessing public and active travel 										
Recommendations	The ob	jective		so outlir				identified in the LCWIP. neys will be promoted to all societal groups to encourage active travel and increase				

Vision Theme	Susta	ustainable Access for All												
Objective	Easie	r Jour	neys											
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects						
SA1 – Biodiversity and Geodiversity	?							Uncertain effects have been identified as it is unclear as to whether any projects associated with this objective will have an impact on both Biodiversity and Geodiversity. This is likely to be determined during the development of individual projects associated with this LTP objective.						
SA2 – Water Quality	?							Uncertain effects have been identified as it is unclear as to whether any projects associated with this objective will have an impact on water quality. This is likely to be determined during the development of individual projects associated with this LTP objective.						
SA3 – Flood Risk	?							Uncertain effects have been identified as it is unclear as to whether any projects associated with this objective will have an impact on flood risk. This is likely to be determined during the development of individual projects associated with this LTP objective.						
SA4 - Soils	?							Uncertain effects have been identified as it is unclear as to whether any projects associated with this objective will have an impact on soils. This is likely to be determined during the development of individual projects associated with this LTP objective						
SA5 – Historic Environment	+/-	L	I	L	I	Р	LT	There is potential for positive effects to the setting of heritage assets because of improvements to the public realm through reducing the impact of motor vehicles in urban areas. However, the development of public and/or active travel infrastructure may impact the setting of heritage assets through increased signage and markings.						
SA6 – Landscape & Townscape	+/-	М	I	L	I	Р	LT	Positive designed public and/or active travel infrastructure may help to improve townscape settings. However, the provision of transport infrastructure in rural areas may have a negative impact on landscape setting.						
SA7 – Air Quality	+	М	D/I	Р	R/I	Р	MT / LT	Minor positive effects are anticipated for air quality because of vehicle changes within urban areas. Additionally, the outcome may help contribute toward						

					1		1						
								encouraging a modal shift away from private car use, towards public and active travel choices.					
SA8 – Climate Change and Greenhouse Gases	+/-	М	D/I	L	R/I	Р	MT / LT	There is potential for reductions in greenhouse gases through a modal shift from the use of private cars, particularly for regular journeys through the widespread encouragement of public and active travel modes. However, easier journeys may also encourage some additional car use (particularly from remote areas).					
SA9 – Minerals	?							Uncertain effects have been identified as it not possible to assess the potential impact arising from new transport infrastructure projects at this stage.					
SA10 – Waste	?												
SA11 - Noise & Light	0												
SA12 – Access to the Countryside	++	М	D	R	ı	Р	MT / LT	The development of active travel schemes that link urban and rural areas, as well as the development of ROWIP schemes will have a positive outcome in terms of encouraging the use of active travel modes. Similarly, public transport improvements may also improve linkages between urban and rural areas					
SA13 – Health & Wellbeing	++							There are significant positive effects anticipated for both health and wellbeing through projects that enable people to make easier journeys. Measures to promote active travel can help improve physical activity and health. Additionally, enabling people to make easier journeys to everyday services and facilities will have a positive impact on people's wellbeing.					
SA14 – Active & Sustainable Travel	++	М	D	R	I	Р	MT / LT	The development of measures to allow people to make easier journeys are likely to result in increased levels of active and sustainable transport. Further details of the development of active travel projects will be outlined in a new Active Travel Strategy, with the BSIP outlining measures to improve local bus services.					
SA15 – Economy & Employment	+	М	D	L	I	Р	LT	There are minor anticipated effects for economy and employment. Enabling people to make easier journeys by public and active transport should improve accessibility to town centres and to employment areas					
Potential Cumulative / Synergistic Effects	impact There	There are potential for cumulative effects on access to the countryside, health & wellbeing and active & sustainable travel. The resultant impacts of these are likely to result in reduced greenhouse gases as more people switch to active travel mode instead of using cars. There are also positive effects on town centres through improved streetscene and air quality, as well as encouraging more trips to town centres through providing people with greater accessibility by both public transport and active travel modes.											
Mitigation and Enhancement Measures	may a	No mitigation or enhancement measures have been identified at this stage. Mitigation is likely to be based on individual schemes that may arise because of the LTP4.											
EqIA Considerations	• Disa	 All age groups would benefit from increased choices of public and active travel options Disabled users may be less likely to use unsuitable environments with inaccessible areas Adapted cycle parking increasing accessibility for disabled users 											

	 Women are generally primary caregivers for the first 26 weeks after birth and tend to accompany children to school and childcare. Pregnant women and new mothers may struggle accessing public and active travel
Recommendations	The objective could be expanded by including proposals outlined in the LCWIP and BSIP documents. The objective could also outline how various improved travel options will be promoted to all societal groups to enable more people to be
	aware of the various sustainable travel options available to them.

Vision Theme	Susta	inable	Acces	s for A	.II								
Objective	Every	veryone is Digitally Connected											
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects					
SA1 – Biodiversity and Geodiversity	0												
SA2 – Water Quality	0												
SA3 – Flood Risk	0												
SA4 - Soils	0												
SA5 – Historic Environment	0												
SA6 – Landscape & Townscape	+/-	L	I	L	I	Р	LT	The increased use of digital technology may enable fewer journeys to be made in both urban and rural areas. However, the provision of digital infrastructure may have an intrusive effect on both townscape and landscape areas.					
SA7 – Air Quality	+	М	I	L	I	Р	MT / LT	There are slight positive benefits arising from this objective. Allowing people to be more digitally connected will reduce their need to travel and as a result there will be less vehicle trips, which should help improve air quality.					
SA8 – Climate Change and Greenhouse Gases	+/-	M	I	L	I	Р	MT / LT	There are positive benefits through allowing people to remotely access work, home shopping and healthcare facilities, which should help reduce the need for travel and reduce vehicle emissions. However, increases in home deliveries has resulted in an increase in LGV delivery vehicles. These will need to be converted to ZEVs, but a slow uptake will lead to a slower reduction in greenhouse gases.					
SA9 - Minerals	0							, , , , , , , , , , , , , , , , , , ,					
SA10 – Waste	0												
SA11 - Noise & Light	0												

SA12 – Access to the Countryside	+/-	L	I	R	I	Р	MT / LT	There are minor positive effects arising from people being better digitally connected being able to access information on routes to and within the countryside.					
SA13 – Health & Wellbeing	+	L	I	L	I	Р	LT	Minor positive effects in health and wellbeing are achieved through people having more convenience to manage their day to day lives and to use digital technology to help plan journeys and travel options.					
SA14 – Active & Sustainable Travel	+	М	-	L	ı	Р	MT / LT	Ensuring everyone is digitally connected will allow people to be more aware of their potential travel options, such as real time information and journey planning, which will allow them to make more active and sustainable journeys.					
SA15 – Economy & Employment	+	L	I	R	R	Р	LT	Minor positive effects have been identified for the economy because of this objective outcome. The outcome will help people to be able to plan their journeys, therefore helping them to access employment opportunities. This also likely to improve access to retail and services across the District.					
Potential Cumulative / Synergistic Effects	everyo	There are potential cumulative effects on air quality, access to the countryside, active & sustainable travel and economy because of everyone being digitally connected. This will help provide people with options to travel less through home working/shopping and to plan active and sustainable travel options for day-to-day journeys and for leisure journeys (e.g. into the countryside).											
Mitigation and Enhancement Measures		No mitigation or enhancement measures have been identified at this stage. Mitigation is likely to be based on individual schemes that may arise because of the LTP4.											
EqIA Considerations	HovLan	 All age groups would benefit from increased choices of public and active travel options. However, older people who may not be conversant with digital technology and lower income households may be disadvantaged. Language issues may need to be considered for non-English speakers. 											
Recommendations	The olareas.	ojective	will need	to cons	sider wid	der prop	osals fro	om the Council to improve broadband access in the District, especially in rural					

Vision Theme	Susta	inable	Acces	s for A	.II			
Objective	A Bet	ter Ma	intaine	d Netv	vork			
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects
SA1 – Biodiversity and Geodiversity	0							
SA2 – Water Quality	0							
SA3 – Flood Risk	+	М	D	R	I	Р	MT / LT	A better maintained network would include improved drainage and gulley emptying measures, which would better deal with run-off during wet weather thus reducing the risk of surface water flooding.
SA4 - Soils	0							
SA5 – Historic Environment	0							
SA6 – Landscape & Townscape	+	L	I	L	R	Р	МТ	Improving the maintenance of the transport network, including active travel use, has the potential to result in positive effects upon landscape and townscape through improved maintenance and public realm improvements.
SA7 – Air Quality	+	М	D/I	L	R/I	P/T	ST / MT	There are anticipated minor positive effects on air quality because of the objective. Indirectly, improving the maintenance programme links with the active travel improvements has the potential to improve the quality of the active travel facilities and environment, encouraging users and therefore improving air quality.
SA8 – Climate Change and Greenhouse Gases	++	М	D	R	I	Р	LT	There are anticipated significant positive effects on climate resilience because of the objective. It is currently unclear what these climate resilience measures will be, however it is anticipated that these will include heat and rainfall resilience measures.
SA9 – Minerals	+	М	D	L	I	P/T	LT	There are potential positive effects for minerals because of this objective. This could include the use of recycled materials in project construction and maintenance programmes.

0440 1444-								There are notatial positive effects for wests because of this chiesting. This could					
SA10 – Waste						D/T	1.7	There are potential positive effects for waste because of this objective. This could					
	+	M	D	L	I	P/T	LT	include the use of recycled materials in project construction and maintenance					
CA44 Noise 9								programmes, which would result in less waste.					
SA11 - Noise &	0												
Light													
SA12 – Access to	0												
the Countryside	O												
SA13 – Health &	?							Uncertain effects have been identified as it is unclear what the construction and					
Wellbeing	f							maintenance of assets will have on safety.					
SA14 – Active &								There are minor positive effects for active and sustainable travel because of this					
Sustainable Travel	+	١,	ı	L	R	Р	MT	objective. A well-maintained network will provide comfortable journeys for active					
		-	ı	L			IVII	travel and public transport and reduce damage because of poor surfaces / pot					
								holes.					
SA15 – Economy &		A better maintained network will help reduce the damage to vehicles, thus											
Employment	+							reducing the cost of repairs for businesses, public transport operators and					
								households.					
Potential	There	are note	antial cu	mulative	affacts	on air a	uality h	oiodiversity and health because of the objective's contribution towards achieving					
Cumulative /								e are anticipated due to increased climate resilience within the network.					
Synergistic Effects	largets	s. Additi	orial pos	ilive ene	olo on t	ciiiiate i	Comenc	e are anticipated due to increased climate resilience within the network.					
Mitigation and													
Enhancement	No mit	tigation	or enhar	ncement	measu	res have	been i	dentified at this stage. Mitigation is likely to be based on individual schemes.					
Measures		=						- ,					
EqIA													
Considerations	• Con	Construction and maintenance works can impact the way people travel and restrict users											
Recommendations	The po	The policy could be expanded to include examples of measures to contribute towards targets. Additionally, this point could state that											
	succes	ssful me	easures v	will be p	ermane	ntly impl	emente	d.					
	The po	olicy cou	ıld also l	oe expa	nded to	include	specific	measures that will improve climate resilience.					

Vision Theme	Deca	Decarbonise Transport										
Objective	Net Z	Net Zero Emissions										
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects				
SA1 – Biodiversity and Geodiversity	+	М	D	R	R	P/T	MT / LT	There are likely to be minor positive effects on biodiversity because of decarbonising transport due to improvements in air quality and reductions in noise and traffic. This is likely to reduce the disturbance to local biodiversity, particularly those in habitats bordering the District's busiest roads, and may also contribute to reducing biodiversity loss because of poor air quality.				
SA2 – Water Quality	+	М	ı	R	R	Р	LT	There may be minor positive effects because of decarbonising transport due to reductions in particulate emissions entering local watercourses. This will particularly be the case where measures lead to reduction in vehicle numbers as there will be less pollutants arising from degradation of vehicle tyres and brakes.				
SA3 – Flood Risk	0											
SA4 - Soils	+	М	I	R	R	Р	LT	There are minor positive effects due to a reduction in pollutants entering soils, particularly along verges and hedgerows adjacent to the District's busiest roads.				
SA5 – Historic Environment	+	L	I	L	R	Р	МТ	Poor air quality has been linked to increased degradation of the surfaces of heritage assets. Therefore, improvements to air quality within the District are likely to result in reductions in the degradation of heritage assets. There is also the potential that reductions in noise pollution may improve the setting of heritage assets				
SA6 – Landscape & Townscape	+	L	I	R	R	Р	LT	Reducing the number of vehicles on the District's roads is likely to result in reduced congestion. This, alongside a reducing in vehicle noise, is likely to improve the setting of West Berkshire's landscape and townscape.				
SA7 – Air Quality	++	М	D/I	R	R/I	P/T	MT / LT	There are likely to be improvements to air quality because of the decarbonising transport objective. There is anticipated to be a reduction in vehicle movements on the District's, with encouragement of the transition to zero emissions buses. The objective outcome also includes the development of electric vehicle (EV) charging infrastructure. These outcomes are likely to contribute to reducing the number of private vehicles on the network, including petrol and diesel vehicles, and				

								encourage a modal shift towards sustainable transport. Therefore, there is likely to be a reduction in emissions across the District, contributing to improvements in air quality		
SA8 – Climate Change and Greenhouse Gases	++	М	D	R	R/I	Р	MT / LT	There are anticipated significant positive effects on GHGs because of decarbonising transport. A reduction in total traffic movements, combined with an encouragement of ZEVs and decarbonisation of the transport network, including zero emission buses. This is likely to result in a reduction in GHG emissions from transport, particularly due to the transition away from petrol and diesel fuelled vehicles.		
SA9 - Minerals	0									
SA10 – Waste	0									
SA11 - Noise & Light	++	М	I	R	R	Р	LT	An overall reduction in total traffic movements in WBC is likely to result in a reduction in road noise. This is particularly likely to occur on heavily congested and noisy routes, including the A339, A4, A340, A338, M4, A34 and other busier local routes in urban areas. Additionally, EVs result in lower noise levels than petrol and diesel vehicles. Therefore, encouraging a shift towards the use of EVs is likely to result in reduced noise along roads across the District.		
SA12 – Access to the Countryside	+/-									
SA13 – Health & Wellbeing	+	М	I	R	R	Р	МТ	Indirectly, the Net Zero Emissions objective is likely to positively impact upon health. Air quality improvements are likely to result in improved health, particularly as air quality has been linked to poor health. For residents located close to areas of poor air quality, or those who regularly use highly congested routes, there are likely to be reductions to the exacerbation of respiratory conditions such as asthma. Additionally, a reduction in noise for those residents close to noisy routes is likely to result in improved mental wellbeing because of reduced disturbance.		
SA14 – Active & Sustainable Travel	0									
SA15 – Economy & Employment	+	М	I	R	R	Р	МТ	There are anticipated to be indirect effects on economy and employment because of the decarbonising transport objective. There are likely to be improvements to journey times because of reductions in the number of vehicles on the district's roads. This is likely to improve the reliability of transport networks and journey to work times.		
Potential Cumulative / Synergistic Effects	diesel	There are potential cumulative effects on air quality and greenhouse gases because of encouraging a modal shift away from petrol and diesel vehicles across the transport network. Subsequently, there is also potential for cumulative benefits to health, biodiversity, and noise if multiple developments were to arise.								

Mitigation and Enhancement Measures	No mitigation or enhancement measures have been identified at this stage. Mitigation is likely to be based on individual schemes that may arise because of the LTP4.
EqIA Considerations	 Younger working aged people may struggle to access EV charging infrastructure in areas with limited off-street parking. Implementing driverless buses may increase isolation amongst the elderly People undergoing gender reassignment and same sex couples may feel unsafe on public transport BAME communities may be more at risk of discrimination on public transport Pregnant women and new mothers are vulnerable to social isolation. People holding a religion or belief may experience discrimination on public transport. People with disabilities, deaf or hard of hearing, blind or with poor vision, may struggle to hear low noise vehicles and may be more at
Recommendations	risk of accidents. The objective outcome could be developed to be more specific about the quantity of total traffic reduction on WBC roads. The objective outcome could be expanded to outline where the sustainable transport improvements would be located.

Vision Theme	Deca	Decarbonise Transport											
Objective	50%	50% Active Travel in Newbury & Thatcham											
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects					
SA1 – Biodiversity and Geodiversity	+	L	I	L	R	Р	МТ	There are minor positive effects anticipated for biodiversity because of this outcome. The reduction in vehicles in urban centres is likely to reduce noise and air quality impacts on local biodiversity.					
SA2 – Water Quality	0												
SA3 – Flood Risk	0												
SA4 - Soils	0												
SA5 – Historic Environment	+	L	Ι	L	R	Р	LT	Indirectly, improving air quality and reducing noise within Newbury and Thatcham is likely to improve the settings and reduce the degradation of heritage assets within both the urban areas of both towns.					
SA6 – Landscape & Townscape	+	L	I	L	R	Р	LT	If positively designed, the developments to active travel infrastructure, including cycle parking, are likely to result in improvements to the streetscape. Additionally, a reduction in vehicles in both town centres improves the landscape setting.					
SA7 – Air Quality	++	М	D/I	L	R/I	Р	MT / LT	There may be significant positive effects are anticipated for air quality because of vehicle changes within Newbury and Thatcham. Reducing the dominance of vehicles and reducing the number of vehicles within the urban areas, especially the town centre and previously declared AQMAs, contributes to improving air quality. Additionally, the outcome contributes to encouraging a modal shift away from private car use, towards active travel modes including cycling and walking.					
SA8 – Climate Change and Greenhouse Gases	+							Minor positive effects have been identified for greenhouse gases because of changes to vehicle infrastructure. A reduction in cars within Newbury and Thatcham contributes to a reduction in greenhouse gases. Additionally, reducing the speed limit to 20mph results in a reduction in GHG emissions from cars as lower speeds require less energy, and therefore emit lower levels of GHGs.					
SA9 - Minerals	0												
SA10 – Waste	0												

SA11 - Noise & Light	+	М	I	L	R	Р	MT	There are anticipated minor positive effects upon noise because of the outcome. Reductions of speed limits are likely to reduce vehicle noise along key routes in both Newbury and Thatcham. Additionally, reducing the dominance of vehicles in urban communities contributes to reductions in noise.			
SA12 – Access to the Countryside	+	L	I	L	R	Р	LT	Minor positive effects to access to the countryside may be achieved by improving active travel linkages from the urban areas of Newbury and Thatcham to the surrounding rural areas.			
SA13 – Health & Wellbeing	++	М	D	L	R	Р	МТ	There are significant positive effects anticipated for health as the developments within town centres improve pedestrian and cycle infrastructure, which is likely to encourage active travel modes, improving physical activity and therefore health. Additionally, the outcome results in improvements to user safety, reducing the number of accidents.			
SA14 – Active & Sustainable Travel	++	М	D	L	R	Р	МТ	Significant positive effects are anticipated for active and sustainable travel because of 50% active travel journeys in Newbury and Thatcham. This will be led through the development of coherent active travel routes in both towns linking urban communities with key destinations and will be complemented by improvements to cycle parking at key locations, including railway stations.			
SA15 – Economy & Employment	+	М	D	L	ı	Р	LT	There are anticipated minor positive improvements to economy and employment because of the increased space for businesses within both urban areas. This provides more space for economies. Additionally, improving the pedestrian environment and improving cycle facilities is likely to encourage residents to access town centres and other key locations.			
Potential Cumulative / Synergistic Effects	There are potential for cumulative effects upon air quality, noise, population and health due to improvements within town centres for safety and improved active travel facilities. There are also potential cumulative effects upon economy due to town centre developments and increased space for business.										
Mitigation and Enhancement Measures		No mitigation or enhancement measures have been identified at this stage. Mitigation is likely to be based on individual schemes that may arise because of the LTP4.									
EqIA Considerations	DisaAdaWorPres	 All age groups may be more likely to utilise safer active travel routes Disabled users may be less likely to use unsuitable environments with inaccessible areas Adapted cycle parking increasing accessibility for disabled users Women are generally primary caregivers for the first 26 weeks after birth and tend to accompany children to school and childcare. Pregnant women and new mothers may struggle accessing public and active travel 									
Recommendations	The of	ojective olicy cou	could be ıld outlin	e expand le how v	ded to or ehicle d	utline the	e high-c ce will b	uality cycle facilities from the LCWIP that will be carried into the LTP4. e reduced within both town centres			

Vision Theme	Deca	Decarbonise Transport											
Objective	Acces	Access to Zero Emission Vehicles and/or Charging											
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects					
SA1 – Biodiversity and Geodiversity	+	L	ı	R	I	Р	LT	There are anticipated to be minor positive effects because of this objective. The encouragement of					
SA2 – Water Quality	0												
SA3 – Flood Risk	0												
SA4 - Soils	0												
SA5 – Historic Environment	-	L	D	L	I	Р	MT / LT	There are potential minor negative effects relating to the historic environment because of this object through the possible installation of electric vehicle charging infrastructure close to heritage assets.					
SA6 – Landscape & Townscape	-	L	D	L	I	Р	MT / LT	Potential minor negative effects relating to townscape and landscape may arise through the siting of electric vehicle charging points in urban centres, which may affect townscape setting. In addition, the provision of charging points in rural areas may affect landscape settings in villages and individual properties					
SA7 – Air Quality	++	M	D	R	I	Р	LT	There is potential for significant improvements in air quality because of increase take-up of electric vehicles (both car and LGV) during the LTP4 period. This objective will seek to ensure that there is increased opportunity to access electric vehicles (e.g. West Berkshire Car Club) and to expand the public charging network across the District.					
SA8 – Climate Change and Greenhouse Gases	++	M	D	R	I	Р	LT	The transition to ZEV's during the LTP4 has the potential to provide a significant contribution towards the District achieving carbon neutrality. This will be achieved through increased EV ownership among residents and businesses and further expansion of the publicly available charging network across the District.					
SA9 - Minerals	0												
SA10 – Waste	0												

SA11 - Noise & Light	+/-	L	I	L	I	Р	LT	The greater uptake in EV use is likely to reduce road noise as these vehicles are significantly quieter than their petrol and diesel counterparts. However, the development of public EV charging infrastructure in rural dark sky areas may result in undesirable light pollution.			
SA12 – Access to the Countryside	0										
SA13 – Health & Wellbeing	+	L	D	L	I	Р	LT	There may be slight positive effects on noise and disturbance arising from increased use of EV's as these are much quieter than petrol or diesel vehicles.			
SA14 – Active & Sustainable Travel	+	L	D	R	I	Р	LT	There may be slight positive effects on active and sustainable travel associated with access to EVs and charging points. Electric bus and car club vehicles provide sustainable choices, particularly for longer journeys to neighbouring urban areas and from rural areas.			
SA15 – Economy & Employment	+	L	I	L	I	Р	LT	There are anticipated to be indirect effects on economy and employment because of the access to electric vehicles objective. There are likely to be improvements to journey times because of reductions in the number of vehicles on the District's local road network, which is likely to improve the reliability of transport networks and journey to work times.			
Potential Cumulative / Synergistic Effects	diesel	There are potential cumulative effects on air quality and greenhouse gases because of encouraging a modal shift away from petrol and diesel vehicles across the transport network. Subsequently, there is also potential for cumulative benefits to health, biodiversity, and noise if multiple developments were to arise.									
Mitigation and Enhancement Measures	No mitigation or enhancement measures have been identified at this stage. Mitigation is likely to be based on individual schemes that may arise because of the LTP4.										
EqIA Considerations	 Younger working aged people may struggle to access EV charging infrastructure in areas with limited off-street parking. Implementing driverless buses may increase isolation amongst the elderly People undergoing gender reassignment and same sex couples may feel unsafe on public transport BAME communities may be more at risk of discrimination on public transport Pregnant women and new mothers are vulnerable to social isolation. People holding a religion or belief may experience discrimination on public transport. People with disabilities, deaf or hard of hearing, blind or with poor vision, may struggle to hear low noise vehicles and may be more at risk of accidents. 										
Recommendations								about the potential numbers of EV's using the local transport network. ncil's EV charging strategy			

Vision Theme	Supp	Support Sustainable Growth											
Objective	Carbo	on Neu	ıtral De	evelopr	nent								
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Permanence	Duration	Description of potential Effects					
SA1 – Biodiversity and Geodiversity	?							Uncertain effects have been identified as the Council's Residential Design guidance has not yet been published. There is potential that this guidance may include measures that support biodiversity net gain.					
SA2 – Water Quality	0							•					
SA3 – Flood Risk	0												
SA4 - Soils	0												
SA5 – Historic Environment	+	L	1	L	R	Р	MT	Indirectly, the improvements to the landscape and townscape setting improves the setting of local heritage assets					
SA6 – Landscape & Townscape	++	М	D/I	L	I	Р	LT	The objective is likely to result in significant positive effects on landscape and townscape because of attractive streets and high-quality developments. This is likely to improve streetscapes as well as the public realm, and local townscape settings.					
SA7 – Air Quality	?							Uncertain affects have been determined regarding air quality. It is unclear as to whether individual developments will have an impact on existing air quality levels in the District.					
SA8 – Climate Change and Greenhouse Gases	+/-	М	D	L	R	P/T	MT / LT	The objective includes the development of infrastructure for new development. This is likely to result in localised increases in greenhouse gas emissions because of construction equipment. However, subsequently, improvements to this infrastructure are likely to reduce congestion, reducing greenhouse gases. Additionally, improving active and sustainable travel options reduces GHGs.					
SA9 – Minerals	+/-	M	D	L	I	Р	MT / LT	The provision of infrastructure may result in the provision of new transport infrastructure, which will result in a need for minerals-related materials. However, there may be opportunities to recycle existing aggregates in the redevelopment of brownfield sites.					
SA10 – Waste	0												

SA11 - Noise & Light	0												
SA12 – Access to the Countryside	0												
SA13 – Health & Wellbeing	+							There are anticipated minor positive effects on health as the improvements in accordance with Living Streets improves access to social and leisure facilities, and services. This is likely to improve the wellbeing of local residents. Additionally, developing active travel options is likely to result in increased physical activity rates, and improved physical health.					
SA14 – Active & Sustainable Travel	+/-							There are anticipated minor positive effects for active and sustainable travel associated with new developments as these can be built in to new developments and on surrounding networks to create neighbourhoods with good accessibility levels. However, new development is likely to result in an increase in vehicle journeys in the vicinity of the site which may impact local active travel and public transport services.					
SA15 – Economy & Employment	0												
Potential Cumulative / Synergistic Effects								andscape and townscape and health due to the connectivity and high quality ents that encourage modal shift may result in cumulative effects on air quality.					
Mitigation and Enhancement Measures						res have	been i	dentified at this stage. Mitigation is likely to be based on individual schemes that					
EqIA Considerations	PeoSam routBAMPeo	 Construction and maintenance works can impact the way people travel and restrict users. People undergoing gender reassignment are more likely to feel unsafe on active travel routes. Same sex couples are more likely to be a victim of harassment or discrimination and are more likely to feel unsafe on active travel routes. BAME and ethnic minority groups may experience harassment and are more likely to feel unsafe on active travel routes. People holding a religion or belief may experience discrimination and are more likely to feel unsafe on active travel routes. LGBTQ+ can experience sexual orientation-based discrimination and are more likely to feel unsafe on active travel routes. 											
Recommendations													

Vision Theme	Supp	ort Su	stainab	le Gro	wth			
Objective	Prote	ct and	Enhan	ce Str	ategic	Conne	ctivity	
SA Objective	Significance	Magnitude	Nature of effect	Spatial Extent	Reversibility	Description of potential Effects Dougland Description of potential Effects		Description of potential Effects
SA1 – Biodiversity and Geodiversity	-							
SA2 – Water Quality	0							
SA3 – Flood Risk	?							Uncertain effects have been established for flood risk. It is unclear if there will be development on the SRN or rail network within defined Flood Zones. Therefore, there may be potential for the risk of flooding arising from new development or infrastructure, particularly if there are increases in hard standing and impermeable surfaces near flood zones.
SA4 - Soils	?							It is currently uncertain whether any projects associated with the LTP4 are likely to require additional land take.
SA5 – Historic Environment	0							
SA6 – Landscape & Townscape	0							
SA7 – Air Quality	+/-	M	D/I	R	R/I	Р	MT / LT	Improvements to the frequency of services on the Outer Thames Valley services may result in indirect positive effects on air quality due to a modal shift away from the utilisation of private transport to rail travel. Additionally, it is uncertain whether the management of freight will increase the amount of freight within West Berkshire, there is a potential that increases in freight may decrease air quality.
SA8 – Climate Change and Greenhouse Gases	+/-	М	D/I	R	R/I	Р	LT	There is potential that improvements to infrastructure, including the M4 and A34 corridors, service frequency service on the Berks & Hants line west of Newbury may result in vehicle related greenhouse gases. Also, improving the ease of access to the road network, and freight, has the potential to increase greenhouse gases along these routes.

SA9 - Minerals								It is unclear whether there are any proposed improvements to strategic transport				
SA9 – Willierais	?							networks in the District will require additional materials.				
SA10 – Waste	?							It is unclear whether any proposed improvements to strategic transport networks in the District will generate significant waste that cannot be recycled.				
SA11 - Noise & Light	-							There may be some minor negative effects surrounding noise and light where improvements on strategic transport networks may take place. This may include loud late-night piling or resurfacing works. In addition, improvements within the dark sky areas of the NWD NLA may adversely affect light pollution.				
SA12 – Access to the Countryside	0											
SA13 – Health & Wellbeing	+	M	D	R	I	Р	LT	Improving safe access to the M4 and A34 results in positive impacts on health because of reductions in accidents along these corridors, particularly in relation to the A34 north of the M4, where the slip roads are not to current standards.				
SA14 – Active & Sustainable Travel	+ L D L R P LT There are anticipated positive effects upon population as increasing the accessibility of both strategic road and rail networks provides increased capa for current and future population needs. It is also relating to the safe crossing strategic networks by active travel corridors. This objective also provides improved the connectivity, allowing access to the wider area, facilities and leisure opportunity. The continuation and expansion of freight operations further links West											
SA15 – Economy & Employment	+	M	D	R	R	The continuation and expansion of freight operations further links West Berkshire's economy with the wider region, resulting in minor positive effec						
Potential Cumulative / Synergistic Effects								ainable travel and economy through the improved connectivity between West eading urban area.				
Mitigation and Enhancement Measures	sustair	nable tra	vel opti	ons and	to ensu	re that s	strategio	·				
EqIA Considerations	PeoSamBANPeo	 Construction and maintenance works can impact the way people travel and restrict users. People undergoing gender reassignment are more likely to feel unsafe on active travel routes. Same sex couples are more likely to be a victim of harassment or discrimination and are more likely to feel unsafe on AT routes. BAME and ethnic minority groups may experience harassment and are more likely to feel unsafe on active travel routes. People holding a religion or belief may experience discrimination and are more likely to feel unsafe on active travel routes. LGBTQ+ can experience sexual orientation-based discrimination and are more likely to feel unsafe on active travel routes. 										
Recommendations	This of	ojective	could be	e expan	ded to c	onsider	the imp	act of strategic networks on local routes.				

Vision Theme	Supp	upport Sustainable Growth											
Objective	Impro	ving F	reight										
SA Objective	Significance Nature of effect Spatial Extent Bermanence stability stability stability stability stability stability												
SA1 – Biodiversity and Geodiversity	-	M	D	L	I	Р	LT	Freight movements are likely to result in increased noise and disturbance to local biodiversity, particularly in relation to habitats along main freight corridors. The development or expansion of freight facilities may impact existing nature and potential minerals sites. These will need to be identified at the development stage, along with any opportunities for Biodiversity Net Gain. There is potential that the development of freight policies at a sub-regional level may seek to reduce or better manage freight movements, but this is currently unclear.					
SA2 – Water Quality	0												
SA3 – Flood Risk	0												
SA4 - Soils	?							Uncertain effects have been identified for soils as the development of new road/rail freight interchange infrastructure may require additional undeveloped farmland.					
SA5 – Historic Environment	+/-	М	D	L	I	Р	LT	There is potential for freight management policies to route HGV's away from sensitive historic assets. However, increased volumes of road freight can potentially negative impact on local heritage assets.					
SA6 – Landscape & Townscape	+/-							Freight management policies could help improve town and landscape settings by restricting freight movements in sensitive locations. The increased need for freight and driver welfare facilities may result in the development of rural areas adjacent to strategic road and rail corridors.					
SA7 – Air Quality	0												
SA8 – Climate Change and Greenhouse Gases	0												

SA9 – Minerals	?							It is unclear whether improvements to freight facilities in the District will require the use of new minerals.			
SA10 – Waste	?							It is unclear whether any new freight facilities will generate significant volumes of waste materials that cannot be recycled.			
SA11 - Noise & Light	-										
SA12 – Access to the Countryside	0										
SA13 – Health & Wellbeing	0	0									
SA14 – Active & Sustainable Travel	0										
SA15 – Economy & Employment	+	М	D	R	R	Р	МТ	The continuation of freight operations further links West Berkshire's economy with the wider region, resulting in minor positive effects. Additionally, the provision of driver facilities will improve condition for HGV drivers and help in the recruitment and retention of drivers, which is a national issue.			
Potential Cumulative / Synergistic Effects	region	. There	are also	potenti	ial bene	fits for c	ommuni	ough the improved connectivity between the West Berkshire District and the wider ties arising from the better management of road freight. I impact on the biodiversity where this is expected to occur.			
Mitigation and Enhancement Measures		Freight management policies could encourage freight movements by rail, reducing freight on roads. This can be taken forward in the revision of the LTP Freight Strategy.									
EqIA Considerations		 Increased freight on local roads could discriminate against those most likely to be on foot, including lower income, young people, older people and women escorting children to school. 									
Recommendations	The obmeasu	jective ires that	could als are like	so be ex ly to be	cpanded included	l to outlind within	ne how s this.	ions as to how freight will be managed. safe and efficient access will result in positive effects upon user safety, and the ail on proposals to increase rail/road transfer in the District.			

West Berkshire Council

West Berkshire Local Transport Plan 4 (2023-2039) SA/SEA Environmental Report

APPENDIX D

Equalities Impact Assessment

West Berkshire Council

Equity Impact Assessment

TEMPLATE March 2023

Section 1: Summary details

Directorate and Service Area	Place Directorate / Climate Change Service Area
What is being assessed (e.g. name of policy, procedure, project, service or proposed service change).	West Berkshire Council, Local Transport 4 Strategy (2024 – 2039) Consultation Draft
Is this a new or existing function or policy?	New
Summary of assessment Briefly summarise the policy or proposed service change. Summarise possible impacts. Does the proposal bias, discriminate or unfairly disadvantage individuals or groups within the community?	
(following completion of the assessment).	
Completed By	Chris Sperring
Authorised By	
Date of Assessment	

Section 2: Detail of proposal

Context / Background Briefly summarise the background to the policy or proposed service change, including reasons for any changes from previous versions.

Good transport is a vital factor in building sustainable local communities. This includes contributing towards safer and stronger communities, and improved equality and social inclusion through improved accessibility to services and facilities. Transport also play an important role is supporting the local and national economy. However, transport is one of the largest polluting sectors and traffic can be a barrier to healthy lifestyles, so transport policy needs to strike the right balance.

The Local Transport Plan (LTP) has an important role in influencing and developing transport at a local level by outlining the District's transport policies and investment priorities. The fourth LTP, covering the period 2024-2039, currently being prepared will need to consider national and local transport priorities. Since the current Local Transport Plan 3 was published in 2011, the population in West Berkshire has increased around 5%. There have also been major technological advancements relating to digital access that have transformed how people work and access services. More people can work from home and there is a greater use of online shopping and accessing facilities, such as healthcare.

There has also been an increased emphasis on Climate Change and the need at all levels to reduce carbon emissions. This can be seen through national strategies and targets to introduce zero emission vehicles and encourage sustainable and active travel, and at the local level with the Council's declaration of a Climate Emergency in 2019 and publication of its Environment Strategy to guide the transition to net zero by 2030.

The new LTP4 has been developed around a vision that will deliver on local priorities for West Berkshire. This vision and associated objectives have been developed from national, regional and local strategies, engagement with officers and elected members in West Berkshire Council and refined to reflect feedback from public consultation.

This draft vision sets out the local priorities and associated objectives that the LTP will support, these are.

- ☐ Create Places for People
- ☐ Provide Sustainable Access for All
- ☐ Decarbonise Transport
- ☐ Support Sustainable Growth

Proposals

Explain the detail of the proposals, including why this has been decided as the best course of action.

The draft vision LTP has been developed to deliver on local priorities for West Berkshire, which are outlined in the objectives below. Both the vision and associated objectives have been developed from national, regional and local strategies, engagement with officers and elected members in West Berkshire Council and refined to reflect feedback from public consultation on the first consultation draft for the LTP4 in February 2023.

Create Places for people

- A Vision Zero target so that no one to be killed or fatally injured on the West Berkshire road network
- Safer residential and town centre streets will support better places to live, encourage people to shop and eat locally and allow children and young people to walk/cycle to school safely
- These changes will contribute to **increasing physical activity**, benefitting people's health and improved wellbeing.

• Sustainable Access for All

- Improve travel choices and facilitate **easier journeys**, by increasing access to public and shared transport, improved interchange and to improve the attractiveness of public transport vehicles.
- Support **improved digital connectivity** and facilitate the role of technology in helping people to access services and transforming the transport system.
- Provide a **better-maintained network**, including embracing technology, improved co-ordination and reducing the carbon impact of operating and maintaining the transport network.

• Decarbonise Transport

- Support the **transition of the transport sector to net zero** through a combination of infrastructure improvements and behavioural change.
- Supported by 50% of trips in Newbury and Thatcham to be made by active travel.
- As active or public transport is not feasible for every trip, we need cleaner fuels and the LTP4 will support access to zero emission charging and emission facilities.
- Support Sustainable Growth
- The movement of people, goods and services in and through the district is vital to the economy and the LTP aims to **protect and enhance strategic connectivity**.
- Support **more sustainable movement of freight**, including transition to more sustainable modes and management of freight in and through urban centres.

• Align with the Local Plan to support sustainable growth, including carbon neutral development.

The way people travel depends on a range of factors such as proximity to services, trip purpose and the standard of digital and/or transport infrastructure. These factors typically are heavily influenced by the 'place' that people live in. Taking this into account, the LTP4 then provides an outline as to how these objectives will be delivered across the district according to three place types.

- Newbury and Thatcham
- Rural areas (including villages and Hungerford falling within North Wessex Downs NLA)
- Eastern Area (including Theale and Calcot)

In addition to the place areas, there are fundamental aspects of the transport network, such as maintenance and strategic connectivity that apply across the whole of West Berkshire.

Evidence / Intelligence List and explain any data, consultation outcomes, research findings, feedback from service users and stakeholders etc, that supports your proposals and can help to inform the judgements you make about potential impact on different individuals, communities or groups and our

ability to deliver our climate

commitments.

The development of the draft LTP4 Strategy has been underpinned by a robust evidence base comprising data across a range of different factors and travel modes. This data identifies existing conditions within West Berkshire, current challenges, opportunities, and suitable benchmarks against which the emerging LTP 4 should be considered. The supporting evidence base was made available on the Council website as part of the first draft consultation in February 2023.

Accessibility

- Access to services amenities, services and employment (including food store and healthcare)
- Education
- Employment
- Digital access including people working from home
- Impacts of Covid-19
- Car ownership levels split according to the three place areas

Population

- Current population 2021 Census data by place area, density, age group (including trends such as 33.8% increase in over-65 between 2011 & 2021)
- Migration
- Deprivation based on IMD data
- Experian mosaic data groups together of individuals likely to share similar demographics, lifestyles and behaviours.

• Travel Trends

- Mode choice compared to national and regional averages
- District-wide modal choice 2021 Census
- District-wide commuting trends
- Travel trends and mode choice by place

Active Travel

- Active Travel networks
- 2021 Census walking and cycling usage
- WBC Active Travel monitoring
- Network planning West Berkshire and Reading Urban Area LCWIP's
- Public Transport

- Bus network
- Community transport
- Bus patronage including 2021 Census data
- Bus service improvement plan (BSIP)
- Rail including station catchment areas and station accessibility (i.e., step-free access)
- Rail station patronage based on ORR Station Usage data
- Travel to work data 2021 Census
- Freight
 - Road freight including HGV flows on West Berkshire roads
 - Rail freight
- Road traffic
 - Traffic flows from WBC ATC sites

Alternatives considered / rejected

Summarise any other approaches that have been considered in developing the policy or proposed service change, and the reasons why these were not adopted. This could include reasons why doing nothing is not an option.

Rolling the current LTP3 forward – This is in effect a 'do nothing scenario', which would see the current LTP3 remaining in place beyond 2026. This approach was not considered as this would be unable to consider changes in transport and policy issues that have occurred since 2011 and would be considered contrary to the Local Transport Act 2000, which requires local transport authorities to keep LTPs up to date. This includes national and local strategies and targets for carbon reduction and transport's role in helping to achieve net zero and increase use of digital connectivity which has allowed more people to work from home or remotely access services and facilities.

LTP4 Carbon Approach – This scenario would seek to deliver higher levels of carbon reduction through more widespread active travel and public transport measures, along with potential options to manage the demand of vehicular travel. The outcomes would include greater levels of accessibility for all and a greater reduction in the amount of greenhouse gases produced at the local level. This approach was not considered to be suitable as it was considered highly unlikely that there would be the level of funding or resources available to effectively design and deliver the number of schemes associated with this option. In addition, some of the potential measures aimed at curbing vehicular use may not have the level of local support.

Section 3
Impact Assessment - Protected Characteristics - Objective: Vision Zero target for Road Safety

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		×		Certain age groups, such as young and elderly people may be more vulnerable to collisions due to reduced awareness and mobility. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets.			
Disability		×		People with a disability may be more at risk of injury than people without a disability. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets			
Gender Reassignment	\boxtimes						
Marriage & Civil Partnership		×		The LTP4 will look to further develop initiatives such as Safer School Streets. This may potentially benefit those in a marriage or civil partnership whose children attend school.			
Pregnancy & Maternity	\boxtimes						

Race			On average, there are 86 ethnic minority casualties per 10,0000 pedestrian casualties compared to 68 White pedestrians per 10,0000 pedestrian casualties. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets.		
Sex	\boxtimes				
Sexual Orientation			People that identify as LGBTQ+ can experience sexual orientation-based discrimination; typically resulting in reduced feelings of safety when using public transport, walking or cycling. The LTP4 seeks to introduce targeted interventions to improve safety and enhance pedestrian accessibility.		
Religion or Belief	\boxtimes				

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities		\boxtimes		People residing in rural communities can be at risk using rural routes and accessing urban centres. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions, active travel linkages to urban areas and quiet rural roads.			
Areas of deprivation		×		People residing in less affluent neighbourhoods are more likely to be killed or injured on roads than people living in more affluent areas. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets.			
Displaced communities	×						
Care experienced people	×						

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
The Armed Forces Community	\boxtimes						

Impact Assessment - Protected Characteristics - Objective: Safer residential, school and town streets

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		\boxtimes		Certain age groups, such as young and elderly people may be more vulnerable to collisions due to reduced awareness and mobility. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets.			
Disability		\boxtimes		People with a disability may be more at risk of injury than people without a disability. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets			
Gender Reassignment							
Marriage & Civil Partnership		×		The LTP4 will look to further develop initiatives such as Safer School Streets. This may potentially benefit those in a marriage or civil partnership whose children attend school.			
Pregnancy & Maternity	\boxtimes						

Race		\boxtimes	On average, there are 86 ethnic minority casualties per 10,0000 pedestrian casualties compared to 68 White pedestrians per 10,0000 pedestrian casualties. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets.		
Sex	\boxtimes				
Sexual Orientation		\boxtimes	People that identify as LGBTQ+ can experience sexual orientation-based discrimination; typically resulting in reduced feelings of safety when using public transport, walking or cycling. The LTP4 seeks to introduce targeted interventions to improve safety, and enhance pedestrian accessibility		
Religion or Belief	\boxtimes				

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities		\boxtimes					
Areas of deprivation		\boxtimes		People residing in less affluent neighbourhoods are more likely to be killed or injured on roads than people living in more affluent areas. LTP4 improvements could include targeted interventions at cluster sites, speed limit revisions and quiet rural and residential streets.			
Displaced communities							
Care experienced people							
The Armed Forces Community	×						

Impact Assessment - Protected Characteristics - Objective: Increased levels of physical activity

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		\boxtimes		All age groups are less likely to cycle if they perceive the local environment to be unsafe. The LTP4 aims to increase the proportion of people cycling through the delivery of high-quality cycle facilities. Younger people may have a higher dependence on active travel and public transport services due to the expense associated with private vehicle travel and obtaining a licence. The LTP4 seeks to improve access to the countryside, such as the extension of the Eling Way to Newbury.			
Disability		×		Disabled people may be less likely to cycle due to unsuitable environments, infrastructure not being accessible for adaptive cycles, and a lack of support. The LTP4 aims to increase the proportion of people cycling through the delivery of high-quality cycle facilities.			
Gender Reassignment		×		People that propose to undergo, are undergoing, or have undergone gender reassignment may be less likely to engage in active travel modes because of fear of discrimination in the public realm. The LTP4 aims to increase the proportion of people cycling through the delivery of high-quality cycle facilities.			

Marriage & Civil Partnership	\boxtimes				
Pregnancy & Maternity			Mothers tend to take shorter journeys for childcare, work, and household responsibilities; these are more likely to involve multi-stop journeys outside of peak hours ('trip chaining'). These journey types are less likely to be served by public transport corridors due to their unique, indirect nature and can be more expensive than direct trips. The LTP4 will aid in this dilemma by providing increasing public transport services.		
Race			People from ethnic minorities are more likely to have reduced access to green spaces6. LTP4 seeks to improve access to green space, such as the extension to Eling Way to Newbury.		
Sex		\boxtimes	All people benefit from the enablement of sustainable development. The LTP4 aims to provide streets that are attractive and permeable for pedestrians and cyclists which will bring about improvements to the public realm and overall contribute positively to the wellbeing of residents in the area. Specifically, improvements to safety under this policy will be beneficial for women and girls who are disproportionately exposed to issues of gender-based violence on the streets.		

Sexual Orientation			All people benefit from the enablement of sustainable development. The LTP4 aims to provide streets that are attractive and permeable for pedestrians and cyclists which will bring about improvements to the public realm and overall contribute positively to the wellbeing of residents in the area. Specifically, improvements to safety under this policy will be beneficial for members of the LGBTQ+community who are disproportionately exposed to issues of identity-based violence on the streets.		
Religion or Belief	\boxtimes				

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities	\boxtimes						
Areas of deprivation							
Displaced communities	\boxtimes						
Care experienced people	\boxtimes						
The Armed Forces Community	\boxtimes						

Impact Assessment - Protected Characteristics - Objective: Easier Journeys

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		\boxtimes		A lack of suitable infrastructure can be a barrier to active travel for younger people and the elderly due to actual / perceived safety issues.	The LTP4 aims to deliver high quality walking, cycling, and public transport through improved throughout the district.		
Disability		\boxtimes		A lack of suitable infrastructure for disabled people and people with shortand long-term health conditions can be a barrier to active travel. A lack of infrastructure that supports disabled people and people with shortand long-term health conditions can lead to difficulty boarding and alighting public transport, leading to a greater journey time.	The LTP4 aims to deliver high quality walking, cycling, and public transport through improved throughout the district. The LTP4 aims to work with bus and rail operators to deliver improved interchange and access facilities at stations in the district.		
Gender Reassignment		×		A lack of infrastructure that supports people with short-term health conditions due to undergoing / having undergone gender reassignment can lead to difficulty boarding and alighting public transport, leading to a greater journey time.	The LTP4 looks to deliver improved interchange and access facilities at railway stations in the district, to increase access and journey quality.		
Marriage & Civil Partnership	\boxtimes			Due to its high-level and indirect impact on transport users that are in a marriage or civil partnership, the LTP4 is deemed to potentially have a neutral impact on this group.			

Pregnancy & Maternity			People that are pregnant or travelling with small children may require or use adapted cycles to travel, such as bike seats, cargo bikes, etc. The presence of uneven surfaces and lack of dropped kerbs can all also limit the mobility of parents / carers with a younger person, especially if using aids such as pushchairs, walkers, wheelchairs, etc	The LTP4 seeks to increase adapted cycle parking provision across the district. In addition, the LTP4 will seek deliver street-scene improvements which will provide even surfaces and dropped-kerbs where required.	
Race		\boxtimes	Bus usage by people in ethnic minority groups is typically higher than for people in White groups.	The LTP4, along with the BSIP, seeks to improve bus services along key corridors.	
Sex	\boxtimes	\boxtimes	Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.		
Sexual Orientation	\boxtimes		Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.		
Religion or Belief	\boxtimes		Due to its high-level and indirect impact on transport users that visibly hold a religion or belief, the LTP4 is to potentially have a neutral impact on this group.		

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities				Reduced public transport services and inadequate active travel connections in rural areas can result in social exclusion.	The LTP4, along with the BSIP, seeks to develop options for flexible bus services to serve rural communities. The LTP4 will also explore options to provide better active travel connections to urban areas, such as the extension of the Eling Way.		
Areas of deprivation				The upfront and associated costs of owning a private vehicle may be unobtainable for people that are socio-economically disadvantaged; whilst cycling does incur a cost, it is a significantly cheaper alternative.	The LTP4 looks to deliver high quality cycle facilities as part of the strategic cycle corridors identified in the LCWIPs.		
Displaced communities	\boxtimes			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			
Care experienced people	×			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
The Armed Forces Community	\boxtimes			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			

Impact Assessment - Protected Characteristics - Objective: Everyone is digitally connected

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		\boxtimes		Older people may experience challenges in accessing and using digitally based services, such as accessing transport services and appbased parking payments. This may lead to digital exclusion.	Ensuring that the provision of digital services and technology which are accessible and easy to use by all. This can be achieved by fulfilling the government's accessibility requirements for digital services, utilising inclusive design practices and by undertaking Digital Accessibility Audits		
Disability				Some people with a disability may not have access to certain advanced technologies and therefore may be excluded through use of digital applications.	Access through digital technology to any such information or ticketing schemes (via the use of apps for example) should be inclusive of those with disabilities (sensory and learning).		
Gender Reassignment	\boxtimes			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			
Marriage & Civil Partnership	\boxtimes			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			
Pregnancy & Maternity	×			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			

Race		×	Those with lower levels of fluency in the English language may not have access to certain advanced technologies and therefore may be excluded through use of digital applications	Access through digital technology to any such information or ticketing schemes (via the use of apps for example) should be inclusive of those with language barriers. This can be achieved by fulfilling the government's accessibility requirements for digital services, utilising inclusive design practices and by undertaking Digital Accessibility Audits.	
Sex	\boxtimes		Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.		
Sexual Orientation	\boxtimes		Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.		
Religion or Belief	\boxtimes		Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.		

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities				Some rural communities and households may find it difficult to remotely access services and facilities due to poor internet connection.	Improving digital connectivity in rural areas and other areas where through the roll out of superfast broadband will provide opportunities for individuals to work from home and access e-education, e-training, and e-health services.		
Areas of deprivation				Households and communities that are the most deprived may not have access to certain advanced technologies and therefore may be excluded through use of digital applications	Access through digital technology to any such information or ticketing schemes (via the use of apps for example) should be inclusive of those who are most deprived. This can be achieved by fulfilling the government's accessibility requirements for digital services, utilising inclusive design practices and by undertaking Digital Accessibility Audits.		
Displaced communities	\boxtimes			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Care experienced people	\boxtimes			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			
The Armed Forces Community	\boxtimes			Due to its high-level and indirect impact on transport users, the LTP4 is to potentially have a neutral impact on this group.			

Impact Assessment - Protected Characteristics - Objective: A better maintained network

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		\boxtimes		A well-maintained transport network will be beneficial to all age groups throughout the district.			
Disability		\boxtimes		Whilst a well-maintained transport network is beneficial to disabled people, construction and maintenance works can impact the way in which people travel. Temporary disruption to and blocking of pedestrian routes by construction and maintenance vehicles and plant is particularly detrimental to those reliant on mobility aids. Equally, increased air pollution because of construction will adversely affect those with health issues including respiratory conditions.	These are deemed to potentially have a low negative impact on this group in the short-term, but a positive impact in the longer term: Test and trial measures that reduce maintenance needs whilst contributing to the district's active travel, air quality and road safety targets. Work with operators to share operational and real time data to improve transport services and maintenance.		
Gender Reassignment	×			Due to its high-level and indirect impact on individuals that propose to undergo, are undergoing, or have undergone gender reassignment, this LTP4 objective is deemed to potentially have a neutral impact on this group.			
Marriage & Civil Partnership	×			Due to its high-level and indirect impact on transport users that are in a marriage or civil partnership, this LTP4 objective is deemed to potentially have a neutral impact on this group.			

Pregnancy & Maternity	×		Due to its high-level and indirect impact on people who are pregnant or with young children, this LTP4 objective is deemed to potentially have a neutral impact on this group.		
Race	\boxtimes		Due to its high-level and indirect impact on race, this LTP4 objective is deemed to potentially have a neutral impact on this group.		
Sex	\boxtimes		Due to its high-level and indirect impact on sex, this LTP4 objective is deemed to potentially have a neutral impact on this group.		
Sexual Orientation	×		Due to its high-level and indirect impact on sex, this LTP4 objective is deemed to potentially have a neutral impact on this group.		
Religion or Belief			Due to its high-level and indirect impact on race, this LTP4 objective is deemed to potentially have a neutral impact on this group.		

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities	\boxtimes			Due to its high-level and indirect impact on rural communities, this LTP4 objective is deemed to potentially have a neutral impact on this group.			
Areas of deprivation				Due to its high-level and indirect impact on areas of deprivation, this LTP4 objective is deemed to potentially have a neutral impact on this group.			
Displaced communities	×			Due to its high-level and indirect impact on displaced communities, this LTP4 objective is deemed to potentially have a neutral impact on this group.			
Care experienced people	\boxtimes			Due to its high-level and indirect impact on rural care experienced people, this LTP4 objective is deemed to potentially have a neutral impact on this group.			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
The Armed Forces Community	\boxtimes			Due to its high-level and indirect impact on the armed forces community, this LTP4 objective is deemed to potentially have a neutral impact on this group.			

Impact Assessment - Protected Characteristics - Objective: Net Zero emissions

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age				Younger working aged people may have a higher dependence on active travel and public transport services due to the cost of purchasing a vehicle and its associated (upfront and prolonged) costs. Elderly people are typically inhibited from accessing public transport services because of digital barriers to viewing travel times and cost, leading to a reliance on motor vehicles.	The LTP4 seeks to explore expanding the Electric Vehicle network (car clubs). This objective would also support improvements to digital accessibility, which may aid the uptake of public transport by elderly residents.		
Disability				The inhibited access to public transport experienced by disabled users results in a reliance on motor vehicles. Disabled people and people with shortand long-term health conditions (particularly those with mobility issues) may struggle to access and/or use Electric Vehicle charging infrastructure due to inaccessible parking or the presence of heavy charging cables.	Disabled people who are not able to cycle, walk and/or wheel, nor access public transport, the LTP4's aim to reduce total traffic movements on the district's roads would help to improve journey times for Disabled people reliant on a private vehicle(s). The LTP4 seeks to deliver suitable provisions with a priority focus in urban areas, as well as promote of peer-topeer electric charging networks to meet growing demand for EV charging and providing suitable EV charging infrastructure to support carbon neutral development.		

Gender Reassignment			The potential implementation of a network of shared electric vehicles (car clubs) may have adverse impacts for those that propose to undergo, are undergoing or have recently undergone gender reassignment as the low level of regulation and causal nature of this proposed scheme may lead to people experiencing identity-based discrimination in this space.	The policing of such car clubs by both the car club operator and the Council would be necessary to ensure such negative effects are not felt by this group.	
Marriage & Civil Partnership	\boxtimes		Due to the high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		
Pregnancy & Maternity		\boxtimes	A reduction in traffic movements under this objective will be beneficial to pregnant women as it will enable them more reliable estimations of journey time to maternity appointments.		
Race	\boxtimes		Due to the high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		
Sex	\boxtimes		Due to the high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		
Sexual Orientation			The potential implementation of a network of shared electric vehicles (car clubs) under this policy may have adverse impacts for those identifying as Lesbian, Gay, Bisexual or Other (LGBTQ+) as the low level of regulation and causal nature of this proposed scheme may lead to people experiencing identity-based discrimination in this space.	The policing of such car clubs by both the car club operator and the Council would be necessary to ensure such negative effects are not felt by this group.	

Religion or Belief	\boxtimes			Due to the high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
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Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities		\boxtimes		People in rural communities are likely to be more reliant on private cars due to lack of realistic transport options.	LTP4 seeks to reduce vehicle movements, with a focus on urban areas. Also, LTP4 seeks to increase public EV charging in both urban and rural areas.		
Areas of deprivation		\boxtimes		Typically, urban areas tend to experience higher levels of both deprivation and congestion. A lack of affordable private options for travel may mean that access to services (education, employment, healthcare, etc.) is restricted for people on lower incomes.	LTP4 seeks to reduce vehicle movements on the district's roads, which would reduce emissions in urban areas. The LTP4 seeks to explore expanding the Electric Vehicle network (including the West Berkshire car club).		
Displaced communities	\boxtimes			Due to the high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Care experienced people	×			Due to the high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
The Armed Forces Community		\boxtimes					

Impact Assessment - Protected Characteristics - Objective: 50% Active Travel in Newbury & Thatcham

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		\boxtimes		All age groups are less likely to cycle if they perceive the local environment to be unsafe. A lack of secure cycle parking can dissuade all age groups from cycling.	LTP4 aims to increase the proportion of people cycling through the delivery of high-quality cycle facilities. The LTP4 & LCWIP seeks to increase secure cycle parking provision at key locations.		
Disability		×		Disabled people and people with short- and long-term health conditions may be less likely to cycle due to unsuitable environments, infrastructure not being accessible for adaptive cycles, and a lack of support.	The LTP4 aims to increase the proportion of people cycling through the delivery of high-quality cycle facilities.		
Gender Reassignment		×		People that propose to undergo, are undergoing, or have undergone gender reassignment may be less likely to engage in active travel modes because of fear of discrimination in the public realm.	The LTP4 aims to increase the proportion of people cycling through the delivery of high-quality cycle facilities.		
Marriage & Civil Partnership	\boxtimes			Due to the high-level and indirect impact on transport users in a marriage or civil partnership, this LTP4 objective is deemed to have a potentially neutral impact on this group			

Pregnancy & Maternity	\boxtimes			Due to the high-level and indirect impact on transport users that are pregnant or recently given birth, this LTP4 objective is deemed to have a potentially neutral impact on this group		
Race		\boxtimes		People from ethnic minorities are less likely to have access to green spaces.	The LTP4 seeks to improve access to green spaces and the countryside from the Newbury and Thatcham urban areas, including extending the Eling Way from Hermitage to Newbury.	
Sex			×	Women and girls may be less likely to cycle due to a lack of perceived safety and fear of gender-based discrimination.	The LTP4 & LWCIP aims to increase the proportion of people cycling through the delivery of high-quality cycle facilities. Such improvements will only be likely to bring about positive effects, if cycle facilities are implemented with personal safety measures such as CCTV and lighting.	
Sexual Orientation		\boxtimes		Due to its high-level impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		
Religion or Belief	\boxtimes			Due to its high-level impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities	\boxtimes			Due to its high-level impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Areas of deprivation	\boxtimes			The large cost associated with cycling in relation to bicycle purchase, maintenance and additional equipment such as locks and lights may inhibit the uptake of cycling among economically disadvantaged groups.	The LTP4 would seek to deliver secure cycle parking at local destinations. This would alleviate fear of bike theft and money loss for this group.		
Displaced communities	×			Due to its high-level impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Care experienced people	\boxtimes			Due to its high-level impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
The Armed Forces Community	×			Due to its high-level and indirect impact on Service People, this LTP4 objective is deemed to have			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
				a potentially neutral impact on this group			

Impact Assessment - Protected Characteristics - Objective: Access to zero emission charging &/or vehs

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age	\boxtimes			Due to its high-level impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Disability		×		Disabled people may struggle to access and/or use Electric Vehicle charging infrastructure due to inaccessible parking or the presence of heavy charging cables.	The LTP4 seeks to deliver suitable EV charging provisions at key locations in the district, as well as the promotion of peer-to-peer electric charging networks and the expansion of EV vehicles into the West Berkshire Car Club.		
Gender Reassignment	\boxtimes			Due to its high-level and indirect impact on transport users that propose to undergo, are undergoing, or have undergone gender reassignment, this LTP4 objective is deemed to have a potentially neutral impact on this group			
Marriage & Civil Partnership	\boxtimes			Due to its high-level and indirect impact on transport users that are in a marriage or civil partnership, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Pregnancy & Maternity		×		Due to its high-level and indirect impact on transport users that are in a marriage or civil partnership, this LTP4 objective is deemed to have a potentially neutral impact on this group			

Race	\boxtimes		Due to its high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		
Sex	\boxtimes		Due to its high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		
Sexual Orientation		×	The potential implementation of a network of shared electric vehicles (car clubs) under this policy may have adverse impacts for those identifying as Lesbian, Gay, Bisexual or Other (LGBTQ+) as the low level of regulation and causal nature of this proposed scheme may lead to people experiencing identity-based discrimination in this space.	The policing of such car clubs by both the car club operator and the Council would be necessary to ensure such negative effects are not felt by this group.	
Religion or Belief	\boxtimes		Due to its high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.		

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities	\boxtimes			Due to its high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Areas of deprivation				A lack of affordable private options for travel may mean that access to services (education, employment, healthcare, etc.) is restricted for people on lower incomes.	The LTP4 seeks to expand and continue to add electric vehicles to the West Berkshire Car Club.		
Displaced communities	\boxtimes			Due to its high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Care experienced people	×			Due to its high-level and indirect impact on transport users, this LTP4 objective is deemed to have a potentially neutral impact on this group.			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
The Armed Forces Community		\boxtimes		Service People (those who have served / serve in the armed forces) who are Disabled or have a military-related injuries may struggle to access and/or use Electric Vehicle charging infrastructure due to inaccessible parking or the presence of heavy charging cables.	The LTP4 and Environment Strategy seek to promote peer- to-peer electric charging networks to meet growing demand for EV charging and providing suitable EV charging infrastructure to support carbon neutral development.		

Impact Assessment - Protected Characteristics - Objective: Carbon Neutral development

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age		\boxtimes		All age groups will benefit from the enablement of carbon neutral development.	The LTP4 looks aims to provide streets that are attractive and permeable for pedestrians and cyclists. This will encourage the uptake of active travel amongst the young and elderly through improvements to safety and connectivity.		
Disability				Disabled people are likely to be dependent on measures built into transport schemes, such as dropped kerbs and tactile paving to be able to walk or wheel within urban street environments.	The LTP4 aims to provide streets that are attractive and permeable for pedestrians and cyclists, the accessibility and adaptation considerations of which will be of particular benefit to disabled groups in the area.		
Gender Reassignment	\boxtimes			All people benefit from the enablement of sustainable development, therefore this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Marriage & Civil Partnership	\boxtimes			All people benefit from the enablement of sustainable development, therefore this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Pregnancy & Maternity	\boxtimes			All people benefit from the enablement of sustainable development, therefore this LTP4 objective.is deemed to have a potentially neutral impact on this group.			

Race	×		All people benefit from the enablement of sustainable development, therefore this LTP4 objective.is deemed to have a potentially neutral impact on this group.		
Sex			All people benefit from the enablement of sustainable development. The LTP4 aims to provide streets that are attractive to and permeable for pedestrians and cyclists which will bring about improvements to the public realm and overall contribute positively to the wellbeing of residents in the area.	Specifically, improvements to safety under this objective will be beneficial for women and girls who are disproportionately exposed to issues of gender-based violence on the streets.	
Sexual Orientation			All people benefit from the enablement of sustainable development. The LTP4 aims to provide streets that are attractive to and permeable for pedestrians and cyclists which will bring about improvements to the public realm and overall contribute positively to the wellbeing of residents in the area.	Specifically, improvements to safety under this policy will be beneficial for members of the LGBTQ+ community who are disproportionately exposed to issues of identity-based violence on the streets.	
Religion or Belief	\boxtimes		All people benefit from the enablement of sustainable development, therefore this LTP4 objective.is deemed to have a potentially neutral impact on this group.		

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities				All people benefit from the enablement of sustainable development, therefore this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Areas of deprivation				All people benefit from the enablement of sustainable development, therefore this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Displaced communities	×			All people benefit from the enablement of sustainable development, therefore this LTP4 objective is deemed to have a potentially neutral impact on this group.			
Care experienced people	×			All people benefit from the enablement of sustainable development, therefore this LTP4 objective is deemed to have a potentially neutral impact on this group.			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
The Armed Forces Community				All people benefit from the enablement of sustainable development. The LTP4 aims to provide streets that are attractive to and permeable for pedestrians and cyclists which will bring about improvements to the public realm and overall contribute positively to the wellbeing of residents in the area. In terms of this group, a lack of suitable parking infrastructure for Service People who are disabled or have military-related injuries can be a barrier to travel.	The LTP4 aims to increase disabled vehicle and adapted cycle parking provision across the district.		

Impact Assessment - Protected Characteristics - Objective: Protect and enhance strategic connectivity

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age	×			All age groups benefit from strategic connectivity. The LTP4 looks to improve service frequencies on key bus and rail corridors, which will enhance connectivity for all residents. This will enable young people to access a wider range of employment and training opportunities.			
Disability				All people benefit from the use of strategic connectivity.			
Gender Reassignment	\boxtimes			All people benefit from the use of strategic connectivity.			
Marriage & Civil Partnership				All people benefit from the use of strategic connectivity.			
Pregnancy & Maternity				All people benefit from the use of strategic connectivity.			
Race	\boxtimes			All people benefit from the use of strategic connectivity.			
Sex	\boxtimes			All people benefit from the use of strategic connectivity.			

Sexual Orientation	\boxtimes		All people benefit from the use of strategic connectivity.		
Religion or Belief	\boxtimes		All people benefit from the use of strategic connectivity.		

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities	\boxtimes			All people benefit from the use of strategic connectivity.			
Areas of deprivation				All people benefit from the use of strategic connectivity.			
Displaced communities	\boxtimes			All people benefit from the use of strategic connectivity.			
Care experienced people				All people benefit from the use of strategic connectivity.			
The Armed Forces Community	\boxtimes			All people benefit from the use of strategic connectivity.			

Impact Assessment - Protected Characteristics - Objective: More sustainable movement of freight

Protected Characteristic	No Impact	Positive	Negative	Description of Impact	Any actions or mitigation to reduce negative impacts	Action owner* (*Job Title, Organisation)	Timescale and monitoring arrangements
Age	\boxtimes			All age groups would benefit from more sustainable movement of freight.			
Disability	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Gender Reassignment				All groups will benefit from more sustainable movement of freight.			
Marriage & Civil Partnership	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Pregnancy & Maternity	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Race	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Sex	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Sexual Orientation	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Religion or Belief	\boxtimes			All groups will benefit from more sustainable movement of freight.			

Additional community impacts	No Impact	Positive	Negative	Description of impact	Any actions or mitigation to reduce negative impacts	Action owner (*Job Title, Organisation)	Timescale and monitoring arrangements
Rural communities	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Areas of deprivation	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Displaced communities	\boxtimes			All groups will benefit from more sustainable movement of freight.			
Care experienced people	\boxtimes			All groups will benefit from more sustainable movement of freight.			
The Armed Forces Community	×			All groups will benefit from more sustainable movement of freight.			

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