West of England

STRATEGIC ENVIRONMENTAL ASSESSMENT: NON-TECHNICAL SUMMARY

Joint Local Transport Plan 4
West of England

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Joint Local Transport Plan 4

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NON-TECHNICAL SUMMARY

INTRODUCTION

The West of England comprises the unitary authority areas of Bath & North-East Somerset, Bristol City, North Somerset and South Gloucestershire. Under the Local Transport Act 2008, the West of England are currently updating their joint local transport plan (JLTP) into what is known as the “JLTP4”. The objectives of JLTP4 are:

- Support sustainable economic growth;
- Enable equality and improve accessibility;
- Address poor air quality and take action against climate change;
- Contribute to better health, wellbeing, safety and security; and
- Create better places.

The aim is to provide a well-connected sustainable transport network that offers greater, realistic travel choice and makes walking, cycling and public transport the natural way to travel. Policies and interventions under the new JLTP are structured around improving connectivity at four levels:

- Beyond the West of England – strategic road and rail, port and airport;
- Within the West of England – between the urban areas, longer than 10km;
- Local – up to 10km; and
- Neighbourhood – journeys within local communities.

Central to this is the major schemes programme based around the West of England's Joint Transport Study. The JTS was developed as part of the supporting technical work to the West of England Joint Spatial Plan.

The JLTP4 and the JSP are therefore intrinsically linked, with the former providing the transport schemes and infrastructure needed to address current transport challenges as well as to enable the sustainable delivery of new housing and employment growth to be delivered through the JSP and Local Plans.

METHODOLOGY

This Strategic Environmental Assessment (SEA) is being prepared alongside the JLTP4. SEA is a process required by law for certain types of plan or programme, such as a local transport plan. The overall aim of the SEA process is to ensure better protection for the environment, population and human health by making decision-makers aware at an early stage of the likely effects of the plan on the environment and by seeking to introduce measures that can be undertaken either to avoid adverse effects or to help improve the environment.

The SEA process is undertaken in five key stages which are:

- Stage A – Scoping: Setting the context and objectives, establishing the baseline and deciding on the scope;
- Stage B – Environmental Assessment: Developing and refining alternatives and assessing effects;
- Stage C – Reporting: Preparing the SEA Environmental Report;
- Stage D – Consultation: Consulting on the draft programme and the SEA Environmental Report; and
- Stage E – Adoption: Adopting the SEA report and the JLTP4.
Stage E – Monitoring: Monitor the significant effects of implementing the plan or programme on the environment.

ENVIRONMENTAL BASELINE

The SEA Directive and associated UK Regulations state that the SEA must consider the following topic areas:

- Biodiversity;
- Population;
- Human health;
- Flora and Fauna;
- Soil;
- Water;
- Air;
- Climatic factors;
- Material assets;
- Cultural heritage, including archaeological and architectural heritage;
- Landscape; and
- The interrelationship between these factors.

Population

The population of the West of England has been growing and if trends continue, is predicted to increase from 938,070 in 2018 to 1,071,102 in 2036 (14%) and 1,101,496 in 2041 (17%). In addition, the population is ageing, meaning it will be necessary to provide for the needs of more elderly population. The West of England has a high urban population but Bath & North East Somerset and North Somerset also have considerable rural populations.

The Joint Spatial Plan will provide a framework to deliver up to 105,000 net additional new homes between 2016 and 2036, including the committed growth within the four Core Strategies.

The West of England supports high numbers of tourists, placing seasonal pressures on the transport system. Although in general the West of England supports a more prosperous economy than average for the South West and the UK, there are particular areas of Bristol, Bath and Weston-super-Mare where communities fall within the 10% most deprived areas of the UK.

Air Quality

Air pollution levels in parts of Bristol, Bath & North East Somerset and South Gloucestershire continue to exceed government standards for nitrogen dioxide. Poor air quality, related to transport emissions, is a significant problem in Bristol and Bath. To improve air quality, the Government has requested 29 councils across England – including Bath & North East Somerset Council and Bristol City Council – to achieve compliance with nitrogen dioxide limits ‘in the shortest possible time’.
Climate Change

Within the West of England, transport emissions contribute approximately 29% of total carbon emissions in the West of England\(^1\). The climate of the South West is changing. Projections show that the South West of England could see an average summer temperature rise of 5°C by the 2080s\(^2\). Several locations in the West of England are vulnerable to flooding from the sea (storm surges) and/or rivers and surface water. The effect of climate change and sea level rise is a major concern for Weston-super-Mare, areas of Bristol, Avonmouth and the tidal River Severn.

Issues related to the predicted climate change include risks to transport associated with increased incidents of flooding, storms and increased incidents of fatigue due to heat waves.

Biodiversity

The unitary authorities of the West of England have action plans to protect and promote certain habitats, plants and animals in the interest of improving overall biodiversity. There are several legally protected sites within the West of England, including European Sites. Transport has the potential to damage and fragment habitats, however transport can also help improve biodiversity, for example roadside verges and railway embankments can support many species of nature conservation value.

Human Health

The health of people in Bath & North East Somerset, North Somerset and South Gloucestershire is generally better than average for England although some health inequalities within these areas have been identified.

The West of England has made significant progress in improving options for travel by active modes, bus and rail, with substantial growth in the numbers of trips made by cycling, bus and rail during the last decade (60% by rail, 30% by bus and 50% by cycling between 2008/09 and 2015/16)\(^3\).

Soil

Soil erosion and field run-off linked to agricultural land management is currently one of the biggest issues for the region. It is leading to impacts on water quality, aquatic wildlife and bathing waters as well as the cause of a large proportion of surface water flooding incidents. The pressure for growth in the West of England is likely to increase pressure on land, including greenfield land. In turn this is likely to contribute to incremental loss of soils as well as compaction, organic matter decline and erosion.

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\(^1\) 2014 data, includes industrial, commercial, domestic and surface transport sources (excluding motorways). Source: UK local authority and regional carbon dioxide emissions national statistics: 2005-2014, National Statistics


\(^3\) Source: Joint Local Transport Plan monitoring, West of England Office.
Water

The quality of water in rivers, streams, rhynes and ditches can be affected by the construction of transport infrastructure as well as its operation. Pollution of watercourses can occur through the organic content of silt, other organic substances such as engine oil and rubber, de-icing salt, metals (mainly as a result of vehicle corrosion), and fertilisers and pesticides from roadside verge maintenance. In addition, there is the risk of occasional spillages of pollutants in the event of an accident. Pollutants can particularly accumulate during long dry spells and lead to highly polluting surface water run-off when it rains.

Material Assets

Material assets relate to the consumption of natural resources, the generation of waste and the state of existing transport infrastructure. The Ecological Footprint for the South West shows that if everyone on the planet consumed natural resources and energy like the average South West resident, it would take three planets to support us.

Within the West of England approximately half of all municipal, commercial and industrial waste was sent to landfill each year, much of this transported outside of the sub-region.

Cultural Heritage

The West of England is rich in cultural heritage assets such as listed buildings, scheduled monuments and archaeological remains. The City of Bath is a World Heritage Site and therefore internationally valued. Another key issue is how the JLTP4 responds to the likely increased demands on transport from a growing population whilst not compromising the local distinctiveness of the historic environment and assets.

Landscape and Townscape

The West of England has a number of landscape designations including Greenbelt land, two Areas of Outstanding Natural Beauty (the Cotswolds and the Mendips), and a Community Forest (the Forest of Avon). New transport infrastructure can have significant effects on the natural landscape, Therefore the potential impact of the transport plan on landscape character, built environment and areas of tranquillity will be considered as part of the SEA.

STRATEGIC ENVIRONMENTAL ASSESSMENT

SEA OBJECTIVES AND KEY FINDINGS

The Scoping Stage, which included statutory consultation with Natural England, Historic England and the Environment Agency, provided the baseline information on the topics listed above and identified the SEA Objectives listed in Table A below. SEA Objectives are a way of strategically assessing whether the LTP has an effect on environmental and social aspects.

The policies and interventions (interventions comprise activities and new schemes) within JLTP4 were assessed against the SEA Objectives. The key findings of this assessment in terms of potential significant are summarised in Table A below.

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. Table A also sets out the key mitigation measures proposed for adverse and uncertain impacts.
Table A JLTP4 SEA Objectives, potential significant effects and mitigation

<table>
<thead>
<tr>
<th>SEA OBJECTIVE (SEAO)</th>
<th>POTENTIAL SIGNIFICANT EFFECTS</th>
<th>MITIGATION</th>
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<tr>
<td>SEAO 1: ‘Improve accessibility for a growing and aging population’</td>
<td>Most of the policies and interventions included in the JLTP4 aim at improving accessibility which aligns with this SEA Objective resulting in likely long term major beneficial effects.</td>
<td>There is a need to ensure that services and employment or education opportunities are accessible by those with limited mobility. Charging should not result in creating a barrier to employment or education opportunities, particularly for those who are unemployed or on low income. Strategic and major schemes will be delivered through the appropriate consenting process and will need to be subject to assessments including health and equalities assessments. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process.</td>
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<td>SEAO 2: Reduce transport related air pollution</td>
<td>Many of the policies and interventions within JLTP4 have the potential to reduce traffic congestion and associated air pollution. Major long-term beneficial health effects on urban population are therefore expected from policies and interventions which encourage modal shift away from private car use and those that promote active travel. Minor adverse health effects for population near strategic road network, and those close to new proposed road links are expected from policies promoting additional road links or upgrading local and strategic road network. Future cleaner technologies may play a key role in reducing the amount of air pollution from transport in the longer term.</td>
<td>Public transport vehicles should be of high modern standards to utilise alternative fuels where possible and minimise emissions. Where schemes / initiatives are time limited, subsequent schemes should be implemented to ensure benefits over time. Promoting exposure reduction and ensure that any new road links are isolated from vulnerable receptors, would reduce the harmful effects of the policies promoting additional road links or upgrading local and strategic road network. Strategic and major schemes will be delivered through the appropriate consenting process and will need to be subject to Environmental Impact Assessment and other relevant environmental legislation. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at the scheme level.</td>
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<td>SEAO 3: ‘Reduce transport related carbon emissions in line with national targets’</td>
<td>Numerous policies within the LTP4 will have a minor or potential major positive effect on this SEA objective. However, there is significant uncertainty in the assessment. Most of the polices require a modal shift away from private car use, to more sustainable mode of transports (e.g. bus, rail, tram, cycling). Success of the policies in the long term will depend upon whether traffic growth can be curbed and whether the required behavioural change associated with a shift towards sustainable travel modes takes place.</td>
<td>Public transport vehicles should be of high modern standards. Where schemes / initiatives are time limited, subsequent schemes should be implemented to ensure benefits over time. Strategic and major schemes will be delivered through the appropriate consenting process and will need to be subject to Environmental Impact Assessment and other relevant environmental legislation. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at the scheme level.</td>
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<td>SEAO 4: ‘Adapt transport network’</td>
<td>It is expected that new transport infrastructure will be designed to be more resilient to climate change.</td>
<td>Strategic and major transport infrastructure schemes will have to be designed to take into account climate change resilience.</td>
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<td><strong>SEAO 5: ‘Protect and enhance biodiversity and ecological networks’</strong></td>
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<td>Policies and interventions involving strategic and major transport infrastructure schemes have been identified as having adverse effects on this SEA Objective, some of them potentially major adverse. European designated sites are particularly sensitive receptors. A ‘Screening exercise’ which is undertaken under the ‘Habitats Regulations’ has identified some likely significant effects of major schemes on European sites and therefore further assessment will be required. The assessment of the effects on this SEA objective are therefore preliminary and will need to be informed by the findings of the further assessment.</td>
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<td>The West of England (WoE) Joint Spatial Plan commits the authorities to develop a WoE Green Infrastructure Plan and to delivering a ‘net gain’ for the environment. The Green Infrastructure Plan, currently under preparation, will identify the strategic measures and mechanisms to support, guide and implement the delivery of environmental commitments set within the Joint Spatial Plan and Local Plans, including mitigation for protected sites. Further development of GI Plans at an authority level should also reflect schemes within this JLTP. All strategic and major schemes will be delivered through the appropriate consenting process and will be subject to Environmental Impact Assessment and relevant environmental mitigation. Detailed mitigation and monitoring measures will be developed as part of the Environmental Impact Assessment process. It is recommended that major schemes have a Construction Environmental Management Plan. Further assessment under the ‘Habitats Regulations’ provides further information with regards to mitigation associated with potential significant effects on European sites.</td>
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<th><strong>SEAO6: ‘Promote human health’</strong></th>
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<td>Most of the policies and interventions included in the Draft JLTP4 have as key objective promoting more sustainable and active modes of travel which would result in likely long-term benefits on human health. Encouraging more journeys to be made by active travel modes improves physical and mental health, quality of life and the environment. Direct beneficial effects on human health would result from increased physical activity whilst indirect effects may derive from less congested roads as well as improved access to services and opportunities which may tackle some of the inequality issues which may also underlain health issues. Beneficial effects might be offset by increased noise, air pollution and/or severance resulting into the effects of climate change in line with national policy and best practice design. Additionally, all strategic and major schemes will be delivered through the appropriate consenting process and will be subject to Flood Risk Assessment and Environmental Impact Assessment. Detailed mitigation and enhancement opportunities will be developed as part of the design and consenting process at the scheme level. Use of information regarding weather conditions and impact on travel can benefit transport users.</td>
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<td>All strategic and major schemes will be delivered through the appropriate consenting process and will be subject to Environmental Impact Assessment which includes assessment of health. Detailed mitigation and monitoring measures to minimise potential adverse effects will be developed as part of the Environmental Impact Assessment process. Enhancement opportunities should also be considered as part of the development and consenting process of the larger schemes. Any charging scheme should consider exemptions for drivers with specific need, those on low income or unemployed seeking access to employment or education opportunities.</td>
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from some of the proposed strategic road and rail improvements.

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<th>SEAO7: Improve road safety, particularly for vulnerable users, and to reduce road casualties’</th>
<th>The majority of polices will have a positive impact on improving road safety. Particularly, Policy W2 (which improves the road safety for motorcyclists), Policy L1 (through providing education for cyclists) and Policy L2 (using education and implementation of cycle lanes etc.) will all have a long-term major positive impact on the SEA objective.</th>
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<td>SEAO8: Minimise adverse effects on soils such as loss, compaction, erosion and pollution from transport-related activities’</td>
<td>Policies and interventions involving major transport infrastructure schemes have been identified as having adverse effects on this SEA Objective. Strategic and major road and rail infrastructure schemes would result in direct adverse effects on soils in terms of loss and compaction where these are to be delivered on undeveloped land. Operational effects may result in pollution, erosion and increased run-off. Due to the relative permanence and irreversibility of soil loss, the potential effect should be regarded as significant. Transport schemes to be delivered on previously developed land would result in beneficial effects through the remediation of contaminated soils.</td>
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<tr>
<td>SEAO9: ‘Protect, and where possible improve, water quality’</td>
<td>Policies and interventions involving major transport infrastructure schemes have been identified as having potential to result in adverse effects on this SEA Objective. The quality of water in rivers, streams, rhynes and ditches can be affected by the construction of transport infrastructure as well because of its operation through pollution and accidental spillages. It is expected, however, that new transport infrastructure will be designed following current best practice guidance and hence should include mitigation measures inherent to the scheme design. Overall, the potential effect on this SEA objective has been assessed as being uncertain for those policies involving major infrastructure works. There is the potential for adverse effects but also opportunities for beneficial effects through improved drainage design.</td>
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Where schemes / initiatives are time limited, new replacement measures need to be implemented to maximise the opportunity for benefits over time. Road safety camera enforcement provides opportunity for driver education. Targeting road safety campaigns at motorcyclist safety. Motorcyclists are disproportionately represented in road accident statistics. New projects should be subject to safety audit checks and aim to improve road safety through design.

As noted under SEAO 5 above, further development of GI Plans at an authority level should also reflect schemes within this JLTP. All strategic and major schemes will be delivered through the appropriate consenting process and it is recommended that major schemes have a Construction Environmental Management Plan. This would include mitigation and monitoring measures to avoid and minimise the degradation of soil resources.

As noted under SEAO 5 above, further development of GI Plans at an authority level should also reflect schemes within this JLTP. All strategic and major schemes will be delivered through the appropriate consenting process and will be subject to Environmental Impact Assessment and relevant environmental mitigation. Detailed mitigation and monitoring measures will be developed as part of the Environmental Impact Assessment process. It is recommended that major schemes have a Construction Environmental Management Plan. Detailed design should follow best practice guidance such as that provided within CIRIA Report C753 The SuDS Manual. The guidance covers the planning, design, construction and maintenance of Sustainable Drainage Systems to assist with their effective implementation within both new and existing developments. It looks at how to maximise amenity and biodiversity benefits, and deliver the key objectives of managing flood risk and water quality.
| **SEA010:** ‘Minimise waste produced and resources consumed by transport infrastructure and operation of transport services’ | Generally, policies and interventions under consideration seek to make good use of existing infrastructure whilst new schemes would be designed in line with relevant policy and legislation aimed at minimising the production of waste and making sustainable use of resources. However, JLTP 4 comprises major new transport infrastructure which will result in significant use of materials such as aggregates and generation of waste. Interventions aimed at promoting alternative modes to private car would reduce reliance on fossil fuels. The overall effect on this SEA objective is likely to be adverse. | Seek to make best use of existing infrastructure to minimise resource consumption and waste generation before constructing new facilities. Ensure scheme design incorporates sustainable use of materials as well as measures to minimise future maintenance requirements. For construction projects, a Site Waste Management Plan should be implemented. New development can be designed to increase the potential for recycling waste. New transport modes should use sustainable fuels (electric). There should also be modal shift to public transport and active travel from car use. |
| **SEA011:** Protect and enhance the rich diversity of the historical and cultural environment, its heritage assets and their setting' | In the short and medium term, the construction of strategic and major schemes is likely to adversely affect heritage. However, some policies (W5 and W1) are likely to reduce pressure from traffic in the cities of Bath and Bristol and therefore reduce impacts on their cultural heritage assets. Due to the relative permanence and irreversibility of damage to heritage assets, the potential effects (both adverse and beneficial) should be regarded as significant. | The JLTP provides an opportunity to improve the setting and integrity of the WoEs historic places, and ensure future development is appropriately considered and designed to respond to local context. Good design (following best practice guidance such as Highways England – the road to good design (2018)), and cultural heritage assessments (as part of Environmental Impact Assessment where appropriate) should be required for all strategic and major schemes to minimise potential adverse impacts and maximise opportunities for benefits. |
| **SEA012:** Maintain and enhance the quality and character of the built environment and landscape’ | Noise and congestion from traffic can seriously degrade the quality of the urban environment. The policies which are likely to have the most positive on this SEA objective are those which limit opportunity for private car use within urban centres and free up space for other activities and improvements to the urban realm. Impacts from major schemes are likely to be on green belt land around the urban fringes. Introduction of new infrastructure would result in negative impacts on the landscape in terms of visual impacts and increased noise during construction and operation. Major development schemes also have the potential to have impacts on landscape setting. | Good design (following best practice guidance such as Highways England – the road to good design (2018)), and landscape/townscape and visual assessments (as part of Environmental Impact Assessment where appropriate) should be required in all strategic and major schemes to minimise potential adverse impacts and maximise opportunities for benefits. Design the proposed infrastructure sensitively to reduced visual impact and to include effective landscaping scheme to soften any major structures. It is recommended that signage and infrastructure for pedestrians and cyclists is designed to be sympathetic to the local distinctiveness whilst remaining clear, visible and informative. Further development of The West of England’s GI Plans at an authority level should also reflect schemes within this JLTP. A modal shift away from car use is needed to maximise the potential beneficial impacts of JLTP4 on this SEA objective. Measures to discourage car use within urban centres should be pursued to maximise use of alternative modes. |
Generally, the certainty of the assessment has been assessed as being low to medium. The main reasons for this are listed below:

- Despite the strong commitment to shift journeys into cleaner and more sustainable transport modes, there are various degrees of uncertainty with regards to planned actions, programme and funding of some of the interventions;
- There is uncertainty regarding whether improvements to the public transport system from the major schemes would be sufficient to counteract traffic growth and associated adverse environmental effects. The implications of removal of the Severn Crossing Toll are a key unknown;
- Advanced technologies are currently in early development stages;
- Uncertainty regarding the rate of climate change and the degree to which it will alter weather patterns in the medium and longer term;
- Information from the Habitats Regulations Assessment is required to better understand potential adverse effects on European designated sites;
- Effects are likely to be both variable across the region and dependent upon proximity of the sensitive receptors to the road network;
- There are also uncertainties about route alignments as well as specific design details such as use of material and sitting; and
- The combined effect of the predicted growth in the region with the various transport infrastructure schemes that may go ahead are likely to adversely affect biodiversity, soils and potentially water quality. This is also the case for potential effects on cultural and built environment. Mitigation / enhancement measures included as part of the design and implementation of the specific schemes may offset some of the adverse effects.

**ALTERNATIVES**

The SEA Regulations require an assessment of the plan and its “reasonable alternatives”. In order to assess reasonable alternatives, different options for delivering strategic level transport across the West of England were developed and assessed against the established SEA objectives and environmental baseline.

The SEA considers the following alternatives;

- JLTP4 Scenario- This situation considers the development and eventual adoption of the policies contained in the JLTP4;
- Retention of JLTP3 - This scenario represents a continuation of existing policies planning principles and policies outlined in the JLTP3 document, with the accompanying Major Schemes programme and priorities packages with the plan period being extended to cover the period up until 2036;
- The “Without Plan” scenario - This scenario assumes that the JLTP3 is completed with no replacement LTP in place, so no transport planning principles, policies or interventions would be in place.
Generally, continuation of JLTP3 and JLTP4 perform equally in SEA Objectives 1, 2, 4, 7, 8, 9 and 12. JLTP4 performs better against SEA Objectives 3 and 6, whilst Continuation of JLTP3 performs better against SEA Objectives 5, 10 and 11. The “Without Plan” performs worst against all the SEA objectives.

CUMULATIVE EFFECTS

The SEA Regulations require that cumulative effects are considered when identifying likely significant effects. As noted above and also referred to in section 2.3 above, the JLTP4 is intrinsically linked to the JSP. The type of development involved in both plans will result in similar type of effects and in some locations, they will affect the same environmental and other assets. Cumulative effects are therefore expected from the implementation of these two plans. A coordinated and supportive approach to mitigation and enhancement between the plans will assist with minimising the likelihood and scale of adverse effects and maximising potential benefits. The development and implementation of the West of England’s GI Plan has been identified as the environmental strategic framework to facilitate this.

The cumulative effect between the JLTP4 and the Local Air Quality Strategies of the West of England’s and those of the neighbouring authorities have been assessed as being beneficial. A combination of both adverse and beneficial effects is expected as a result of the JLTP4 in combination with the West of England’s Adopted Joint Waste Core Strategy 2011 and the local transport plans of the neighbouring authorities. Scheme design and the relevant consenting processes will provide opportunities to mitigate adverse effects and promote enhancements.

EQUALITY IMPACT ASSESSMENT FINDINGS

Equality Impact Assessment considers the impact of a project or policy on persons or groups of persons who share characteristics which are protected under section 4 of the Equality Act 2010 (“protected characteristics”) and might also include others considered to be vulnerable within society such as low income groups. It is an information gathering tool which enables decision makers within public bodies to implement their equality duty under the Equality Act 2010. The Equality Impact Assessment concluded that the JLTP4 should have a positive impact on the general public that are living, working or visiting the West of England by providing a safer, resilient, sustainable and convenient transport opportunities for the region. Some of the most vulnerable groups will particularly benefit, specifically:

- People with limited or no access to cars;
- People with respiratory illnesses, and those more susceptible to poor air quality (children and young people and older people); and
- People that require access to employment, education, health and/or other services.

Although positive, the Equality Impact Assessment concluded that there still possible adverse impacts that would be felt by people who are reliant on the use of a car (such as people with a disability), particularly if charging is introduced, or those with limited mobility who are unable to participate in active travel (such as older people of people with a disability).

HEALTH IMPACT ASSESSMENT FINDINGS

Health Impact Assessment is a systematic approach to identifying the differential health and wellbeing impacts, both positive and negative, of projects and plans.
The single greatest potential health outcome of the draft Joint Local Transport Plan has been assessed as the indirect health benefits from improved access to, and accessibility of, transport options. These benefits have been assessed as being of long-term, permanent, major benefit for all groups. In addition, the proposed development has been assessed as providing indirect health benefits as a consequence of improving air quality in urban areas, encouraging greater physical activity through active travel, and providing economic and employment benefits in the region.

In contrast to the beneficial impacts above, the draft Joint Local Plan has been assessed as potentially contributing to adverse health outcomes as a consequence of potential noise impacts. Potential moderate adverse health outcomes were predicted as a result of an unlikely reduction in traffic on transport networks despite improvements to the road networks and public transport provisions in the region. These potential adverse effects would be scheme and location specific and the implementation of mitigation measures associated with Policy N1 and / or the Environmental Impact Assessment process (where relevant) are likely to reduce their impact. These adverse health effects associated with noise are considered temporary, as improvements might be made through technological development.

**MONITORING**

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 environmental outcome of the final JLTP4, and to measure the performance of the plan against environmental objectives and targets. Monitoring is also used to manage uncertainty, improve knowledge and enhance transparency and accountability.

A monitoring framework for the SEA will be developed following consultation on this SEA. A number of indicators have been identified as relevant to the potential impacts of the JLTP4 on the SEA objectives and may be considered for inclusion within the JLTP4 monitoring framework. Given the links between JLTP4 and the Joint Spatial Plan, a co-ordinated approach to monitoring of the plans will be considered.

**NEXT STEPS**

The SEA Environmental Report will be made available at the same time as the draft plan or programme, as an integral part of the consultation process. The SEA Environmental Report and a separate Non-Technical Summary will be made available on the travelwest website https://travelwest.info.

If you would like any further information or if you have any comments on the SEA of the draft Joint Local Transport Plan we would be grateful to receive them. Comments should be sent no later than 20th March 2019 and submitted to the West of England Combined Authority by post or e-mail: transport@westofengland.org.

The West of England Combined Authority

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Comments received will be taken into account during the development of the final JLTP4. When the JLTP4 is adopted it will be accompanied by an SEA Statement.