West of England
Joint Spatial Plan
Sustainability Appraisal

NOVEMBER 2017
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Non-Technical Summary

The West of England Joint Spatial Plan (JSP) is a formal Development Plan Document being prepared by Bath and North East Somerset Council, Bristol City Council, North Somerset Council and South Gloucestershire Council. It plans for growth of up to 105,500 homes between 2016 and 2036, around 30% being affordable homes, and 82,500 jobs. It aims to meet needs sustainably through improved facilities and travel opportunities and a protected and enhanced environment. As a strategic plan, the JSP does not provide exact locations for development. Further detail will be provided through Local Plans and/or Neighbourhood Plans.

Preparation of the JSP has been subject to an integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA). SA is a structured process for identifying and evaluating the likely significant effects – economic, environmental and social – of implementing a plan. It is a statutory requirement for all emerging Development Plan Documents, incorporating the separate requirements for SEA.

Work has been undertaken to accompany each stage of JSP production. The SA of the Publication Version of the JSP uses a set of tables to examine the plan’s policies, including each of the 12 Strategic Development Locations (SDLs). It outlines the likely significant economic, social and environmental effects of the preferred approach contained in the plan. It uses objectives, derived from relevant wider strategies and baseline data and conclusions about the area, to score the policies and locations and suggest possible mitigation measures. Highlights of the locational assessment are shown in the table below. Earlier work applied the same overall method to alternative options, based on known opportunities, and should be read alongside the current report.

Comments are invited, by 10th January 2018. The SA Report will then be finalised for submission along with the plan to the Secretary of State. The final SA Report will include additional information on the planning context, baseline information and measures envisaged concerning monitoring.

Highlights of Policies assessments

<table>
<thead>
<tr>
<th>Policy</th>
<th>Highlight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy 1: The housing requirement</strong></td>
<td>The policy sets out the housing requirements for the sub-region. The housing target is based upon the calculated need for each authority area and then forms the basis of the wider strategy and the identification of Strategic Development Locations (SDLs) and the distribution of growth throughout the sub-region. The delivery of housing growth has strong benefits for the economic and social sustainability of the sub-region in isolation and without mitigation, there is potential to cause harm. As such, the role of the spatial strategy must be incorporated into the assessment of the sustainability of Policy 1. Potentially negative impacts arising from the delivery of housing are mitigated through the rest of the Plan’s policies.</td>
</tr>
<tr>
<td><strong>Policy 2: The spatial strategy</strong></td>
<td>The spatial strategy relates predominantly to sustainability objectives 2a and 2b, new development is encouraged towards the most suitable locations the policy also links strongly with Policy 4. As Policy 2 is part of the delivery mechanism for Policy 1, the commentary for that policy is also relevant here.</td>
</tr>
<tr>
<td>Policy 3: The affordable housing target</td>
<td>Policy 3 specifies the target figure for Affordable Housing for the sub-region in terms of assessing against sustainability objectives, should be read in the wider context of the strategic policies. The policy seeks to ensure a suitable mix of housing types, relevant only to objective 2b.</td>
</tr>
<tr>
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</tr>
<tr>
<td>Policy 4: The employment land requirement</td>
<td>The growth of employment land is linked to the growth in housing and, therefore, supplying the appropriate quantum of employment land increases the economic and social sustainability of the sub-region. In respect to specific sustainability objectives, the policy relates to objectives 3a and 3b; setting out the overall targets for employment growth in the sub-region to meet need. Policy 4 prioritises the delivery of employment land at existing employment Enterprise Zones and Areas as well as designated Town Centres. Both existing and new locations of employment growth must be mitigated with suitable transport infrastructure to ensure good access as growth continues.</td>
</tr>
<tr>
<td>Policy 5: Place-shaping principles</td>
<td>Policy 5 provides a set of principles for development to follow, both at SDLs and non-strategic development and support a wide range of sustainability issues. The policy scores well against the majority of sustainability objectives. Development on previously developed land is advocated through Policy 2 and so is also mitigated against within the Plan.</td>
</tr>
<tr>
<td>Policy 6: Strategic infrastructure requirements</td>
<td>Policy 6 acts as mitigation to any impacts of delivering the scale of growth the Plan seeks and identifies key strategic infrastructure, relating to transport, energy and flooding among others, that is critical to support housing and employment growth. The policy defers to the West of England Infrastructure Delivery Programme and to individual Local Plans to pinpoint where infrastructure will be required and programme the delivery timescales.</td>
</tr>
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</table>

### Highlights of locational assessments

<table>
<thead>
<tr>
<th>Location</th>
<th>Highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B&amp;NES</strong></td>
<td><strong>7.1 North Keynsham</strong></td>
</tr>
<tr>
<td></td>
<td>• Good link to National Cycle Route 4, Regional 16, Avon Cycle Route and other local routes. East part of the area has good access to Manor Wood and Saltford Community Association recreational grounds.</td>
</tr>
<tr>
<td></td>
<td>• An AQMA was declared for the Centre of Keynsham. It is also close to the AQMA in Saltford.</td>
</tr>
<tr>
<td></td>
<td>• There is a relatively good range of healthcare facilities and community services in Keynsham Town Centre. It also has good public transport links to large urban centres in Bath and Bristol.</td>
</tr>
<tr>
<td></td>
<td>• Policy requires a new local centre with facilities to provide a focus for the new community to meet their needs including a new primary school.</td>
</tr>
<tr>
<td></td>
<td>• Policy facilitates around 1,500 new homes of which 1,400 homes in the plan period.</td>
</tr>
</tbody>
</table>
In general good access to local employment sites, Bristol EZ and Bath EA with public transport and Policy facilitates around 50,000 sq.m of employment space.

- Parts of the area are highly sensitive associated with Keynsham and Queen Charlton Conservation Areas.
- Some land is or close to protected ecological sites the Stidham farm geological SSSI of which a small part is a RIG. The River Avon SNCI runs north of the site boundary, The Broad Mead SNCI field lies entirely within the site at the eastern end.
- Cotswolds AONB lies east of Salford.
- Policy facilitates the implementation of key transport infrastructure prior to the housing development.
- Mainly Flood Zone 1. Existing industrial area is within FZ2.

### 7.2 Whitchurch

- The area has good access to National Route 3.
- The northern part of the area is designated as Ecological Networks through B&NES Placemaking Plan Policy NE4 and Green Infrastructure Policy NE1.
- Not in AQMA but close to Bristol AQMA. The Council has started a short term monitoring scheme (6 months) to clarify the levels of NO2 in Whitchurch.
- Residential expansion is likely to relate better to Bristol or Keynsham rather than Bath for local facilities. There are limited facilities at Whitchurch village. However Policy requires to provide retail, healthcare and community facilities, two new primary schools and a secondary school.
- Policy facilitates approximately 2,500 new homes of which 1,600 homes in the plan period.
- Policy requires to include employment spaces at a quantum and of a type to be determined though the Local Plan.
- The west of Whitchurch village is very sensitive within the setting of the Maes Knoll, Wansdyke Scheduled Ancient Monuments and a number of listed buildings. The area towards Queen Charlton is very sensitive within the setting of Queen Charlton Conservation Area.
- The area is located within the Dundry Plateau landscape area. The assets and aspects of significance including the Maes Knoll and Wansdyke Scheduled Ancient Monument, the historic landscape around Whitchurch, a visually important references point for much of southern Bristol and countryside to the south of the ridge and the interface with the distinctive landscape of the Chew Valley contributes to the distinctiveness of this part of the Dundry plateau area.
- The area around the village lies almost entirely within FZ1.
- There is good connection to Bristol with existing footpath and cycle path infrastructure, and opportunities for enhancing routes in to Keynsham.

### Bristol

#### 7.3 Brislington

- Near Stockwood Local Nature Reserve, which sits to the south of the location, while Durley Park is found to the east. Bath Road Allotments are located adjacent to the location.
- The area is not within an Air Quality Management Area, but sits between the Keynsham and Bristol AQMAs.
There is good public transport availability along the A4 to SE Bristol, Keynsham and Bath where a range of facilities, jobs and services can be accessed.

Although on-site development would be residential led, a mix of uses is also being encouraged in policy. These supporting uses will be identified through the masterplanning process.

The Grade II Registered Garden of Brislington House, along with the Avon Valley Conservation Area terminates at the northern side of the A4.

The surface water flooding area follows the path of Scotland Bottom and generally follow the areas of Flood Zone.

**North Somerset**

### 7.4 Backwell
- Village expansion, accessible to largely existing facilities, with some enhancements required.
- Lack of capacity on A370 corridor – Backwell crossroads a particular constraint.
- Existing station and opportunity to improve links to Bristol with MetroBus.
- Ecological issues related to bat foraging and commuting routes.
- Impact on nearby heritage assets to be considered.
- Loss of high-grade agricultural land.
- Local surface water flooding issues.

### 7.5 Banwell Garden Village
- New development location with potential for community infrastructure package.
- Not currently well-located in relation to employment, retail or public transport, though close to Weston-super-Mare.
- Delivery of Banwell Bypass would enable environmental conditions in the centre of Banwell to be improved.
- No secondary school.
- Ecological sensitivities in relation to bat flight corridors.
- Impact on AONB to the south.
- Low flood risk generally but some surface water issues.

### 7.6 Churchill Garden Village
- New development location, accessible to Churchill Academy, with potential for community infrastructure package.
- Not currently well-located in relation to employment, retail or public transport, though relatively good for a rural area and potential for growth.
- Impact on AONB to the south, and also sensitive local topography, particularly west of Churchill village.
- Ecological sensitivities in relation to bat flight corridors.
- Local surface water flooding issues.
- High probability of high-grade agricultural land.

### 7.7 Nailsea
- Town expansion, remote from all existing town facilities and so requiring extensive community infrastructure package.
- Not currently well-located in relation to employment, retail or public transport, though potential for growth.
- Resumed housing growth addresses demographic imbalance in Nailsea resulting from past expansion.
- Existing station and opportunity to improve links to Bristol with MetroBus.
- Ecological sensitivities in relation to bat flight corridors.
- Landscape and heritage sensitivities, requiring high quality mitigation but little detail yet available.
- Loss of high-grade agricultural land, with no apparent scope to avoid through design.
- Low flood risk generally but complex surface water issues to be resolved affecting biodiversity and drainage.

**South Gloucestershire**

### 7.8 Buckover Garden Village
- The vision for Buckover Garden Village is to deliver a holistically planned, free standing garden village which enhances the natural environment and provides high-quality and innovative homes, with local jobs in a beautiful, healthy place with diverse communities and delivers step-change in local sustainable transport opportunities.
- Potential medieval settlement located between Horseshoe Farm and Milbury Heath. Roman Road runs east-west through northern part of strategic development location. Two Grade II Listed Buildings towards the centre of the locality. Also consider setting of Tortworth Court (II*) and Eastwood Park.
- Development requires a package of local and strategic transport improvements.
- No known significant ecological constraints. Two geological SSSIs (Buckover Road Cutting and Brinkmarsh Quarry). SNCI at Ridgewood. Some landscape value on slopes to south and east of the locality. Limited flood risk.

### 7.9 Charfield
- To the south of Charfield the small hamlet of Churchend contains the Grade I listed Church of St James, the Grade II listed Rectory Manor Cottages and other locally listed buildings. LBs also at Poolfield Farm and Park Farm.
- Development requires a package of local and strategic transport improvements.
- Escarpment, slopes and wooded areas through the west and northwest of the village and Elbury Hill to the east have landscape value. Flood risk limited to the Little Avon running along the Stroud District boundary to the east.
- Tortworth Copse is a designated SNCI and Cullimore’s Quarry is both a geological SSSI and Regionally Important Geological Site (RIGS). Some associated ecological value to northwest of the village, along the Little Avon River and SNCI’s to the south.

### 7.10 Coalpit Heath
- Historic coalmining across the site.
- Good proximity to employment opportunities and other services in the North & North East Bristol Fringe, and Yate rail station.
- Development requires a package of local and strategic transport improvements.
- Development requires sensitive response to building on ridgeline.
- Setting of Listed Buildings and historic Dramway will require careful consideration.
| 7.11 Thornbury | Development requires a package of local and strategic transport improvements.  
As a market town, there is a good range of town centre services and facilities in Thornbury  
Scarp slope running from north east to south west around the eastern edge of the town and around the southern end of the town is a significant physical constraint to development. Development will be contained within this landscape feature.  
Some ecological constraints including SNCI and ancient woodland in the area.  
Flood risk along river corridors at Crossways. |
| 7.12 Yate | There are Listed Buildings and some archaeological potential across the SDL area.  
Potential for some localised air quality issues   
As a market town, there is a good range of town centre services and facilities in Yate and nearby Chipping Sodbury  
Yate has good access to employment areas in the north & northeast Bristol Fringe  
Yate has a main line rail station. Development requires a package of local and strategic transport improvements.  
Some limited local flood risk and some ecological interest along Frome valley and tributaries. |
1. **Introduction**

What the SEA Regulations state:

**Interpretation**

2.—(1) In these Regulations—

“plans and programmes” means plans and programmes, including those co-financed by the European Community, as well as any modifications to them, which—

(a) are subject to preparation or adoption by an authority at national, regional or local level; or
(b) are prepared by an authority for adoption, through a legislative procedure by Parliament or Government; and, in either case,
(c) are required by legislative, regulatory or administrative provisions;

<table>
<thead>
<tr>
<th>Environmental assessment for plans and programmes: first formal preparatory act on or after 21st July 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.—(1) Subject to paragraphs (5) and (6) and regulation 7, where—</td>
</tr>
<tr>
<td>(a) the first formal preparatory act of a plan or programme is on or after 21st July 2004; and (b) the plan or programme is of the description set out in either paragraph (2) or paragraph (3), the responsible authority shall carry out, or secure the carrying out of, an environmental assessment, in accordance with Part 3 of these Regulations, during the preparation of that plan or programme and before its adoption or submission to the legislative procedure.</td>
</tr>
<tr>
<td>(2) The description is a plan or programme which—</td>
</tr>
<tr>
<td>(a) is prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, and (b) sets the framework for future development consent of projects listed in Annex I or II to Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC.</td>
</tr>
<tr>
<td>(3) The description is a plan or programme which, in view of the likely effect on sites, has been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive.</td>
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</tbody>
</table>

**Consultation procedures**

13.—(1) Every draft plan or programme for which an environmental report has been prepared in accordance with regulation 12 and its accompanying environmental report (“the relevant documents”) shall be made available for the purposes of consultation in accordance with the following provisions of this regulation.

(2) As soon as reasonably practicable after the preparation of the relevant documents, the responsible authority shall—

(a) send a copy of those documents to each consultation body;
(b) take such steps as it considers appropriate to bring the preparation of the relevant documents to the attention of the persons who, in the authority’s opinion, are affected or likely to be affected by, or have an interest in the decisions involved in the assessment and adoption of the plan or programme concerned, required under the Environmental Assessment of Plans and Programmes Directive (“the public consultees”);
(c) inform the public consultees of the address (which may include a website) at which a copy of the relevant documents may be viewed, or from which a copy may be obtained; and
(d) invite the consultation bodies and the public consultees to express their opinion on the relevant documents, specifying the address to which, and the period within which, opinions must be sent.

(3) The period referred to in paragraph (2)(d) must be of such length as will ensure that the consultation bodies and the public consultees are given an effective opportunity to express their opinion on the relevant documents.
Purpose of the Report

1.1 Sustainability Appraisal (SA) is a structured process for identifying and evaluating the likely significant effects – economic, environmental and social – of implementing a plan. It is a statutory requirement for all emerging Development Plan Documents, incorporating the separate requirements for Strategic Environmental Assessment (SEA).

1.2 The preparation of the West of England Joint Spatial Plan (JSP) has been subject to a fully integrated Sustainability Appraisal and Strategic Environmental Assessment in line with the requirements of:

- the Planning and Compulsory Purchase Act 2004 and National Planning Policy Framework which set out the requirement for SA of emerging Development Plan Documents;
- the SEA Regulations (Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004) which require an environmental assessment to be carried out on certain plans and programmes prepared by public authorities that are likely to have a significant effect upon the environment; and
- relevant Government guidance including Planning Practice Guidance.

The 2005 guidance from the Office of the Deputy Prime Minister, Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (‘the ODPM guide’), though no longer having formal status, remains a useful source of practical advice.

Components of the Report

1.3 Work has been undertaken to accompany each stage of JSP production. Chapter 3 identifies all the documents produced. At this stage, to accompany the Publication Version of the JSP, the documents added are this covering report and the appraisal tables for the vision and policies and each of the 12 Strategic Development Locations (SDLs). This report is the main output of the SA.

1.4 The documents produced meet the requirements for an environmental report set out in the SEA Regulations. Appendix E signposts the relevant elements of the Draft SA Report in relation to the contents required.

1.5 This chapter introduces the SA process. The rest of this report is structured as follows:

- Chapter 2 describes the contents and main objectives of the JSP;
- Chapter 3 outlines the methodology used in the SA;
- Chapter 4 describes the plan’s relationship with other plans, programmes and environmental / sustainability objectives;
- Chapter 5 describes the sustainability baseline;
- Chapter 6 sets out the reasons for selecting the alternatives dealt with and the results of the appraisal of options considered in the development of the draft JSP;
- Chapter 7 sets out the results of the appraisal of the policies within the draft JSP;
- Chapter 8 outlines initial proposals for monitoring the sustainability effects of the options; and
- Chapter 9 describes the next steps.

How to comment on this Report

1.6 The Draft SA will be published for consultation alongside the Publication Version of the Joint Spatial Plan from 22nd November 2017 to 10th January 2018. During the consultation period, statutory environmental bodies and other interested parties will have the opportunity to review the Draft SA.
1.7 If you have comments, please send these to:

West of England Joint Spatial Plan
c/o South Gloucestershire Council
Planning
PO Box 1954
Bristol
BS37 0DD

For general inquiries on the JSP program and consultation programme please email: info@jointplanningwofe.org.uk.

If you are submitting comments on the JSP and evidence base documents please email: comment@jointplanningwofe.org.uk.

Other assessments undertaken

1.8 The JSP has been subject to a parallel Habitats Regulations Assessment (HRA). The HRA of plans is a requirement of the Habitats Regulations 2010 and relates to the protection of European designated nature conservation sites. European sites are collectively termed Natura 2000 sites and comprise Special Areas for Conservation (SACs) and Special Protection Areas (SPAs) together with Ramsar sites. The potential effect of the JSP on these sites will be considered in detail as part of the assessments carried out under the Habitats Regulations. The final HRA report will be published alongside the SA for consultation on the 22nd November 2017.

1.9 An Equalities Impact Assessment (EqIA) has also been produced. The Equalities Impact Assessment and SA are two separate processes. The EqIA has been carried out alongside the SA to assess the impact on equality of emerging policies and documents. The EqIA is available on the Joint Planning West of England consultation website.
2. West of England Joint Spatial Plan

What the SEA Regulations state:

Information for environmental reports (Schedule 2):

1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.

Contents of the JSP

2.1 The Joint Spatial Plan is a formal Development Plan Document being prepared by the four West of England (WoE) unitary authorities of Bath and North East Somerset Council, Bristol City Council, North Somerset Council and South Gloucestershire Council. It will cover the period 2016-2036.

2.2 The JSP identifies two Housing Market Areas that operate across the West of England. One is focussed on the wider Bristol HMA, which includes Weston-super-Mare as a sub housing market area, and the other is focussed on Bath. The Bath SHMA has been updated to provide consistent information to 2036.

2.3 The Spatial Strategy has been formulated to deliver the Objectively Assessed Need of 97,800 new homes and the Housing Requirement of 102,200 new homes. The SHMA prepared for the West of England evidenced an Objectively Assessed Need (OAN) for housing of 97,800 dwellings for the plan period 2016-2036. This comprises 85,000 dwellings for Wider Bristol Housing Market Area (HMA) and 12,800 dwellings for the Bath HMA. It identifies an overall supply of 105,500 new homes to enable flexibility.

2.4 The JSP will provide the framework to deliver up to 105,500 additional new homes between 2016 and 2036, of which around 32,200 (30%) should be affordable homes. The housing target supports the planned job growth of 82,500 jobs for the period 2016-2036 (or 125,900 jobs between the period from 2010-2036).
2.5 The JSP is a strategic plan, focused on provision to meet identified housing and employment needs over the plan period, through area-wide policies and through the identification of SDLs. Once adopted, it will provide the framework for Local Plans and Neighbourhood Plans. It is through these that the JSP policies will be put into effect. These plans will make site-specific allocations and include other detail not available at this stage and will, where required, be subject to SA and/or SEA in their own right.

Main Objectives of the JSP

2.6 The plan’s objectives – its ‘strategic priorities’ – are:

“1. To meet the sub-region’s identified housing needs, in a sustainable way. In particular to make a substantial step change in the supply of affordable housing across the plan area.

2. To pursue inclusive economic growth by accommodating the economic growth objectives of the LEP Strategic Economic Plan. Particularly to:
   • promote the growth of existing employment centres such as the Enterprise Zones and Enterprise Areas; and
   • ensure more inclusive growth and life chances for all, across the West of England, and improve accessibility to jobs.

3. To deliver a spatial strategy which:
   • focuses on three primary centres of Bristol, Bath and Weston-super-Mare and recognises the complementary role of market towns to achieve sustainable growth
   • ensures that new development is properly aligned with infrastructure and maximises opportunities for sustainable and active travel
   • through a place making approach promotes places of density and scale with a range of facilities and which encourages healthy lifestyles and cultural wellbeing
   • integrates high quality, multi-functional green infrastructure. Reduces greenhouse gas emissions and ensure resilience to the impacts of climate change.

4. To protect and enhance the sub-region’s diverse and high quality natural, built and historic environment and secure a net gain in biodiversity.

To prioritise development on brown field locations, optimise densities and retain the overall function of the Bristol and Bath Green Belt.”

These plan priorities are important in the development of options to be appraised (see Chapter 6) because ‘reasonable alternatives’ are defined “taking into account the objectives and the geographical scope of the plan or programme” (SEA Regulation 12).

2.7 The relationship between the SA objectives and JSP Spatial Priorities largely been considered to be compatible, neutral or uncertain. There are some uncertain effects identified, but these are likely come about for facilitating development, and can be balanced by the inclusion of appropriate policies in the plan.

<table>
<thead>
<tr>
<th>Spatial Priority 1</th>
<th>Spatial Priority 2</th>
<th>Spatial Priority 3</th>
<th>Spatial Priority 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1a. Achieve reasonable access to public open space</strong></td>
<td>✓</td>
<td>0</td>
<td>✓</td>
</tr>
<tr>
<td><strong>1b. Minimise impacts on air quality and locate sensitive development away from areas of poor air quality</strong></td>
<td>✓</td>
<td>?</td>
<td>✓</td>
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</tr>
<tr>
<td>1c. Achieve reasonable access to healthcare facilities</td>
<td>✓</td>
<td>0</td>
<td>✓</td>
</tr>
<tr>
<td>2a. Deliver a suitable quantum of high quality housing for the West of England sub-region</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2b. Deliver a suitable mix of high quality housing types and tenures (including affordable housing) for all parts of society within the West of England sub-region</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2c. Achieve reasonable access to community facilities (post office, meeting venues, youth centres)</td>
<td>✓</td>
<td>0</td>
<td>✓</td>
</tr>
<tr>
<td>2d. Achieve reasonable access to educational facilities</td>
<td>✓</td>
<td>0</td>
<td>✓</td>
</tr>
<tr>
<td>2e. Achieve reasonable access to town centre services and facilities</td>
<td>✓</td>
<td>0</td>
<td>✓</td>
</tr>
<tr>
<td>2f. Reduce poverty and income inequality, and improve the life chances of those living in areas of concentrated disadvantage</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3a. Deliver a reasonable quantum of employment floorspace/land and increase access to work opportunities for all parts of society within the West of England sub-region</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3b. Achieve reasonable access to major employment areas</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4a. Minimise impact on and where appropriate enhance the historic environment, heritage assets and their settings</td>
<td>?</td>
<td>?</td>
<td>0</td>
</tr>
<tr>
<td>4b. Minimise impact on and where possible enhance habitats and species (taking account of climate change)</td>
<td>?</td>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>4c. Minimise impact on and where appropriate enhance valued landscapes</td>
<td>?</td>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>4d. Promote the conservation and wise use of land, maximising the re-use of previously developed land</td>
<td>?</td>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>4e. Minimise the loss of productive land, especially best and most versatile agricultural land</td>
<td>?</td>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>4f. Minimise vulnerability to tidal / fluvial flooding (taking account of climate change), without increasing flood risk elsewhere</td>
<td>✓</td>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>4g. Minimise vulnerability to surface water flooding and other sources of flooding, without increasing flood risk elsewhere</td>
<td>✓</td>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>4h. Minimise harm to, and where possible improve, water quality and availability</td>
<td>✓</td>
<td>0</td>
<td>✓</td>
</tr>
<tr>
<td>5a. Achieve reasonable access to sustainable transportation (rail station, bus stops, cycle paths, footways)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5b. Reduce non-renewable energy consumption and ‘greenhouse’ emissions, and provide opportunities to link into existing heat networks</td>
<td>✓</td>
<td>0</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Key:**

- ✓ Compatible
- X Incompatible
- 0 No Link/neutral
- ? Uncertain or Unknown
3. **Methodology**

<table>
<thead>
<tr>
<th>What the SEA Regulations state:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preparation of environmental report:</strong></td>
</tr>
</tbody>
</table>

**12.**—(1) Where an environmental assessment is required by any provision of Part 2 of these Regulations, the responsible authority shall prepare, or secure the preparation of, an environmental report in accordance with paragraphs (2) and (3) of this regulation.

(2) The report shall identify, describe and evaluate the likely significant effects on the environment of—
   (a) implementing the plan or programme; and
   (b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.

(3) The report shall include such of the information referred to in Schedule 2 to these Regulations as may reasonably be required, taking account of—
   (a) current knowledge and methods of assessment;
   (b) the contents and level of detail in the plan or programme;
   (c) the stage of the plan or programme in the decision-making process; and
   (d) the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

(4) Information referred to in Schedule 2 may be provided by reference to relevant information obtained at other levels of decision-making or through other Community legislation.

(5) When deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies.

---

Developing the SA approach

3.1 The methodology for this appraisal was developed in accordance with the ODPM guide as outlined in Table 1 below.
Table 1: SA process and Local Plan preparation

<table>
<thead>
<tr>
<th>Sustainability appraisal process</th>
<th>Local Plan preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage A:</strong> Setting the context and objectives, establishing the baseline and deciding on the scope</td>
<td></td>
</tr>
<tr>
<td>1. Identify other relevant policies, plans and programmes, and sustainability objectives</td>
<td></td>
</tr>
<tr>
<td>2. Collect baseline information</td>
<td></td>
</tr>
<tr>
<td>3. Identify sustainability issues and problems</td>
<td></td>
</tr>
<tr>
<td>4. Develop the sustainability appraisal framework</td>
<td></td>
</tr>
<tr>
<td>5. Consult the consultation bodies on the scope of the sustainability appraisal report</td>
<td></td>
</tr>
<tr>
<td><strong>Stage B:</strong> Developing and refining alternatives and assessing effects</td>
<td></td>
</tr>
<tr>
<td>1. Test the Local Plan objectives against the sustainability appraisal framework</td>
<td></td>
</tr>
<tr>
<td>2. Develop the Local Plan options including reasonable alternatives</td>
<td></td>
</tr>
<tr>
<td>3. Evaluate the likely effects of the Local Plan and alternatives</td>
<td></td>
</tr>
<tr>
<td>4. Consider ways of mitigating adverse effects and maximising beneficial effects</td>
<td></td>
</tr>
<tr>
<td>5. Propose measures to monitor the significant effects of implementing the Local Plan</td>
<td></td>
</tr>
<tr>
<td><strong>Stage C:</strong> Prepare the sustainability appraisal report</td>
<td></td>
</tr>
<tr>
<td><strong>Stage D:</strong> Seek representations on the sustainability appraisal report from consultation bodies and the public</td>
<td></td>
</tr>
<tr>
<td><strong>Stage E:</strong> Post adoption reporting and monitoring</td>
<td></td>
</tr>
<tr>
<td>1. Prepare and publish post-adoption statement</td>
<td></td>
</tr>
<tr>
<td>2. Monitor significant effects of implementing the Local Plan</td>
<td></td>
</tr>
<tr>
<td>3. Respond to adverse effects</td>
<td></td>
</tr>
</tbody>
</table>

- **Evidence gathering and engagement**
- **Consult on Local Plan in preparation (regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012).** Consultation may be undertaken more than once if the Local Planning Authority considers necessary.
- **Stage C:** Prepare the publication version of the Local Plan
- **Seek representations on the publication Local Plan (regulation 19) from consultation bodies and the public**
- **Submit draft Local Plan and supporting documents for independent examination**
- **Outcome of examination**
  - Consider implications for SA/SEA compliance
- **Local Plan Adopted**
- **Monitoring**
  - Monitor and report on the implementation of the Local Plan

3.2 This chapter outlines the work undertaken on the SA at each stage of plan-making. Previously published SA reports for the Issues and Options (November 2015) and Towards the Emerging Spatial Strategy (November 2016) should be read as component parts of this report. Table 2 below outlines the documents produced at each stage.

Table 2: SA iterations

<table>
<thead>
<tr>
<th>Iteration and date</th>
<th>Stage</th>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>0: June 2015</td>
<td>A</td>
<td>• Draft Scoping Report (produced for consultation with statutory environmental bodies)</td>
</tr>
</tbody>
</table>
| 1: November 2015   | A/B   | • Revised Scoping Report  
|                    |       | • Interim SA report: Issues & Options |
| 2: November 2016   | A/B   | • Explanatory Note and assessment of Non Green Belt and Emerging Technical Scenario  
|                    |       | • Summary of Findings  
|                    |       | • Methodology Paper  
|                    |       | • Locational Assessments |
| 3: November 2017   | B/C   | • Draft SA Report (this document) |

https://www.jointplanningwofe.org.uk/

Stage A: Scoping

3.3 Stage A has been completed. A SA Scoping Report, to help ensure that the SA process for the JSP covers the key sustainability issues for spatial planning in the West of England, was produced and consulted on from 15th June to 20th July 2015. The ‘consultation bodies’ for the purposes of the SEA Regulations – Historic England, Natural England and the Environment Agency – were consulted. The Scoping Report was revised, responding to the comments received during the consultation, and republished in November 2015.

3.4 The Scoping Report presents the outputs of all the tasks in Stage A (the scoping phase of the SA) and includes a review of relevant plans, baseline information, and identification of significant sustainability issues for the JSP. From the information collected, an “SA Framework”, or set of sustainability objectives, was developed, against which the various components of the JSP have been appraised. The SA framework provides a way in which sustainability effects can be described, analysed and compared. The process of undertaking a SA involves the identification of sustainability objectives which are used to measure and monitor the success of the plan. These can differ from the plan’s own objectives; they are designed to document the full range of relevant economic, social and environmental effects rather than to define what the plan aims to achieve. A draft SA Framework was included in the Scoping Report and has been updated following consultation on the Scoping Report and in the light of experience with the early iterations of the SA. Appendix C reproduces the current SA Framework. This includes the 21 objectives against which the plan’s policies have been scored.

3.5 The starting point for this SA framework is the Scoping Reports prepared for WoE authorities’ Development Plans. These were reviewed and amended to ensure their relevance to the scope of the
JSP. The policy context and baseline information have been kept under review to ensure that they remain up-to-date.

3.6 To ensure that the submission plan is accompanied by the most up-to-date information on the policy context and sustainability baseline, it is planned to include revised data on each (Appendices A and B respectively) in the final SA Report.

Stage B: Assessing Options

3.7 The integration of sustainability into the plan starts formally at the stage of Issues and Options. The effects of the options have been assessed in broad terms with the aim of assisting in the selection of the preferred approach. The interim SA report was produced and published and subject to public consultation alongside the JSP Issues and Options document from 9th November 2015 to 29th January 2016.

3.8 Through the process of preparing the draft Plan, options were further reviewed due to changes in circumstances such as market change, site availability and changes in national guidance. Thus relevant options were reviewed taking into account the objectives of the JSP. Alternative Options appraisals therefore helped to inform the draft Plan. The appraisals of the draft Plan policies are presented in Appendix D.

3.9 Matrices have been used to identify the sustainability effects of the options. These matrices are designed to help identify the potential impacts of the plan on each SA topic (guided by the SA objectives, posed as questions). The matrix for the assessment of the options is a relatively simple matrix. It allows for a discussion and comparison of each of the options under consideration. The simplicity of the matrix reflects the limitation that options at a strategic level should (and in many cases can only) be assessed in broad terms due to a lack of spatial expression. A combination of expert judgement, local knowledge and analysis of baseline data has been used to judge the effects of the options.

3.10 The SA process relies on expert judgement, which is guided by knowledge of the likely impacts of the plan, the baseline data available and responses and information provided by consultees and other stakeholders. The assessment has been carried out and reported using a matrix enabling an expert, judgement-led qualitative assessment to be made in most cases. The assessment does not seek to identify the likely level of influence of other strategies or policy documents and represents a ‘face value’ assessment of the likely effects of the JSP proposed policy options. A ‘precautionary approach’ is taken, especially where qualitative judgements are made, and mitigation is suggested if there is any doubt as to the effect of the plan.

3.11 The SA has been developed alongside other workstreams. It does not consider the Green Belt status of potential development locations, nor does it consider in detail whether proposed developments are viable and deliverable. Scoring reflects the assumptions on deliverability and phasing made by the plan itself. However, where further work is needed to confirm these, the scoring and potential for mitigation also reflects this uncertainty.

Stage C: Preparing the SA Report

3.12 This document is the main part of the SA Report. It outlines the likely significant effects on the environment, social and economic factors of the Publication Version. Those of reasonable alternatives considered as part of the options assessment have been published in earlier work. It outlines the
reasons for selecting the preferred approach and the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects of implementing the plan.

**Stage D: Consulting on the SA Report**

3.13 The Draft SA Report has been produced for consultation alongside the Publication Version of the JSP. The consultation period for the draft plan and SA Report is 22<sup>nd</sup> November 2017 to 10<sup>th</sup> January 2018. The next stages of the production of the JSP are:

<table>
<thead>
<tr>
<th>March 2018</th>
<th>March 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2018</td>
<td>Submission to the Secretary of State</td>
</tr>
<tr>
<td>Mid 2018</td>
<td>Examination in Public; and</td>
</tr>
<tr>
<td>Late 2018</td>
<td>Adoption</td>
</tr>
</tbody>
</table>
4. Planning context

What the SEA Regulations state:

<table>
<thead>
<tr>
<th>Information for environmental reports (Schedule 2):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.</td>
</tr>
<tr>
<td>5. The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.</td>
</tr>
</tbody>
</table>

4.1 As identified in Chapter 3, the purpose of this stage is to document how the plan is affected by outside factors and suggest ideas for addressing any constraints. In order to fulfil the requirements of the SEA Regulations (above), a review has been undertaken of other relevant plans, policies, programmes (PPPs) and objectives.

4.2 Reviews of relevant plans and programmes were referenced in the Scoping Report. The information from the four unitary authorities mentioned there dates either from 2014 or from 2015. It will be further updated to take account of publications since the draft Scoping Report in June 2015 and this updated information will be presented as Appendix A within the final SA report.

4.3 Many of the plans, policies and programmes that have been reviewed pick up on some aspect of the “sustainable development” agenda but this may not be their primary purpose. Some of the key “sustainable development” messages coming out of the review of plans, policies and programmes are presented in Table 3.

Table 3: Sustainable development messages identified in the review of plans, policies and programmes

<table>
<thead>
<tr>
<th>Topic</th>
<th>Sustainable Development Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air quality and noise</td>
<td>• Improve air quality and reduce air, noise and light pollution;</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>• Protect and enhance biodiversity;</td>
</tr>
<tr>
<td>Climate change and flood risk</td>
<td>• Flood risk is increasing with climate change and there is a need to adapt to all predicted consequences of climate change;</td>
</tr>
<tr>
<td>Community, health and well-being</td>
<td>• Improve peoples’ health and reduce health inequalities;</td>
</tr>
<tr>
<td></td>
<td>• Improve access to health and well-being facilities;</td>
</tr>
<tr>
<td></td>
<td>• Protect and provide access to appropriate levels of open space and community facilities;</td>
</tr>
<tr>
<td></td>
<td>• Create mixed, safe communities and promote social inclusion;</td>
</tr>
<tr>
<td>Employment</td>
<td>• Promote high quality and sustainable tourism;</td>
</tr>
<tr>
<td></td>
<td>• Ensure a resilient and economically sustainable food system;</td>
</tr>
<tr>
<td></td>
<td>• Facilitate building competitive economy and improve access to employment and training opportunities;</td>
</tr>
<tr>
<td>Energy and carbon emissions</td>
<td>• Support low carbon economies;</td>
</tr>
<tr>
<td></td>
<td>• Achieve successful and competitive businesses both urban and rural;</td>
</tr>
<tr>
<td></td>
<td>• Promote energy efficiency;</td>
</tr>
<tr>
<td></td>
<td>• Promote and provide for renewable energy;</td>
</tr>
<tr>
<td>Historic environment</td>
<td>• Protect and enhance the historic environment;</td>
</tr>
<tr>
<td></td>
<td>• Promote good design and sustainable construction;</td>
</tr>
</tbody>
</table>
| Housing           | • Meet strategic housing requirements for the sub-region;  
|                  | • Provide affordable housing to meet identified needs;  
|                  | • Promote good design and sustainable construction;  
|                  | • Incorporate the principles of sustainable development;  
| Natural resources| • Make the best use of previously developed land;  
|                  | • Promote higher densities of development in accessible locations;  
|                  | • Protect soil resources including high quality agricultural land;  
|                  | • Promote water efficiency;  
|                  | • Promote local food production;  
| Landscape        | • Protect and provide access to appropriate levels of open space;  
|                  | • Protect and enhance landscape settings;  
| Transport        | • Reduce the need to travel;  
|                  | • Promote a sustainable way of travelling;  
|                  | • Encourage walking and cycling and public transport.  |
5. Baseline information

What the SEA Regulations state:

<table>
<thead>
<tr>
<th>Information for environmental reports (Schedule 2):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.</td>
</tr>
<tr>
<td>3. The environmental characteristics of areas likely to be significantly affected.</td>
</tr>
<tr>
<td>4. Any existing environmental 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 Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive.</td>
</tr>
</tbody>
</table>

5.1 The comprehensive baseline information which describes the WoE area is presented in the Revised Scoping Report. Key baseline data has been updated and Table 4 below provides a summary. Appendix B in the final SA Report will elaborate on this. In addition, trend information reported in the Scoping Report has been used to identify the “future baseline”, the potential evolution of the baseline in the absence of the plan.

**Table 4: Summary of the sustainability baseline data**

<table>
<thead>
<tr>
<th>SEA Topic(s)</th>
<th>Scoping Report Topic</th>
<th>Summary of Baseline</th>
<th>Likely Evolution without the Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>(c) human health; (h) air; (i) climatic factors;</td>
<td>Air Quality</td>
<td>There is a clear association between long-term exposure to particulate air pollution (PM2.5 and sulphate and sulphur dioxide) and a reduction in life-expectancy caused by cardiovascular disease. The interaction between particulates, nitrogen dioxide and ozone can aggravate these issues. <strong>Bristol City Council</strong> - in the City Centre where nitrogen dioxide (NO2) and fine particles (PM10) are being monitored. <strong>Bath &amp; North East Somerset Council</strong> - in Bath, Keynsham and Saltford. <strong>South Gloucestershire Council</strong> - in the district: Kingswood, Staple Hill and Cribs Causeway (adjacent to M5 Junction 17). The main air pollutant of concern locally is nitrogen dioxide (NO2), which originates primarily from road traffic emissions. <strong>North Somerset</strong> - No AQMA. However the council has a duty to monitor and manage air quality within the District.</td>
<td>Without a co-ordinated strategic approach to development and infrastructure, existing issues of air quality may be exacerbated, particularly in urban centres. There are parts of the West of England, particularly the central urbanised areas, where on average over the course of a year air quality is unlikely to achieve national objectives. Nitrogen oxides like nitric oxide (NO) and nitrogen dioxide (NO2) can react in the air to produce ozone and other harmful pollutants that lead to smog. Nitrogen dioxide emissions can also be further oxidised in air to acid gases, which contribute to the production of acid rain. Particulate matter, especially very fine particles, is thought to have a very large impact on human health and is one of the major problems facing environmental professionals. PM10 particles and even smaller fractions (PM2.5) can reach deep into our lungs and can cause severe respiratory problems as well as possibly...</td>
</tr>
</tbody>
</table>
contributing to many other conditions and diseases. The WoE Transport Strategy is a major transport programme designed to provide an improved public transport system, relieve traffic congestion and improve emissions.

(c) human health; Noise
There is no consistent data relating to noise mapping in the plan area. The Defra Strategic Noise Mapping and associated mapping tool was investigated as a potential source of baseline information and appraisal tool for noise levels. Despite major transport corridors in North Somerset and South Gloucestershire, substantive data is only available for the Bristol urban area.

Noise problems related to traffic may increase. There is uncertainty over what will happen to neighbourhood noise in the future.

(b) population; (c) human health; Health
The West of England is relatively ‘healthier’ than the national average, with N.Somerset, B&NES and S.Glos indicating higher than average life expectancy levels than the national average. However, Bristol shows a slightly lower life expectancy than national averages.

In general, poor health is more prevalent in areas of deprivation, where broad determinants of health often score less well.

The Plan can ensure the built environment contributes to delivering health benefits, and supports healthy, inclusive and active communities. Without a Plan in place development is less likely to deliver health benefits.

Obesity is an increasing issue facing the whole of the country.

(b) population; (c) human health; (j) material assets; Community Facilities
In rural areas the level of service deprivation is naturally high due to geographical distance to the services, while urban areas have increased access to a range of different services.

Potential negative effects on access to the right type of services. Services and infrastructure falling behind population growth, leading to communities without the required infrastructure and services.

(b) population; (c) human health; Housing
There are two housing market areas across the West of England, the Wider Bristol Housing Market Area (HMA) and the Bath HMA. The new Strategic Housing Market Assessment (SHMA) provides the updated evidence of the need for market and affordable housing for the Wider Bristol Housing Market Area (HMA).

Across the plan area, there is a diverse population formed by communities with different needs, A less co-ordinated approach to housing delivery and risk of development not being directed to areas where it is needed most or occurring in inappropriate locations. Without the Plan, the market led development approach may result in inappropriate uses take up the key sites resulting not meeting the housing objectives.
who require access a range of different services and housing tenure. There is a general trend, particularly in urban areas of Bath and Bristol where average wages compared to average house prices make access to the property market unattainable for many.

Furthermore, the urban areas experience a growing population above the national average, leading to a high demand for new housing in an area with limited land supply.

Delivery of Affordable Housing was slightly below yearly target levels in N.Somerset, S.Glos and B&NES, while Bristol is currently on target to meet long term Affordable housing provision.

With the improvements in the Building Regulations the sustainability of new houses is likely to improve. Undersupply of housing and affordable housing.

(b) population; (c) human health;

Deprivation and Inequality

There is increasing diversity within local communities and identified pockets of deprivation amongst growing levels of affluence across the sub-region.

The English Indices of Multiple Deprivation identify the most deprived areas across the country. The following descriptions utilise 2010 IMD data (using the ‘Average of LSOA Scores’ measure).

**Bristol** is ranked 79 out of 326 English authorities. 16% of residents - 69,000 people - live in the most deprived areas in England, including 17,800 children and 10,500 older people. Bristol has 42 LSOAs in the most deprived 10% in. Of these 42 LSOAs, there are 26 in the most deprived 5% in England and 6 in the most deprived 1% in England.

**Bath and North East Somerset** is one of the least deprived authorities in the country, ranking 247 out of 326 English authorities. It is ranked 49 out of 56 unitary authorities. Despite these relatively low levels of deprivation, pockets of high deprivation remain within the area. Five areas are within the most deprived 20% of the country.

**North Somerset** is ranked as 224th out of 326 English authorities.

If not addressed, crime, deprivation and access to services are likely to remain problems. The patterns of deprivation are likely to follow existing trends and will respond to external pressures.
authorities. This relative affluence however, hides a number of deprived urban wards. North Somerset has the 7th largest range of inequality of all of the 326 authorities in England. It includes areas within both the most deprived 1% nationally, and the least deprived 1% nationally. 15 of the Lower Level Super Output Areas are within the most deprived 25% of areas nationally, all of these areas being in Weston-super-Mare.

**South Gloucestershire** is ranked as 273rd out of 326 authorities and levels of deprivation are low, but there are sub ward pockets of relatively high deprivation. South Gloucestershire’s most deprived areas are generally located within the urban wards of Staple Hill, Kings Chase, Patchway, Parkwall and Woodstock. Two LSOAs (in Staple Hill and Kings Chase) within the most deprived 20% of areas in England.

<table>
<thead>
<tr>
<th>(a) biodiversity; (b) population; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (k) cultural heritage; (l) landscape; Open Space</th>
<th>The plan area has a wealth and diversity of publically accessible open spaces - with the exception of Bristol city centre, which suffers from an under provision of open space according to locally adopted standards.</th>
<th>No strategic oversight could lead to inappropriate development, damaging the plan areas green infrastructure or in areas with no access to public green space.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Developme</td>
<td>The West of England Strategic Economic Plan (SEP) 2015-2030 was produced by the West of England Local Enterprise Partnership and identifies five priority sectors, four levers of growth and six priority locations. The SEP sets out:</td>
<td>Less co-ordinated approach to new employment and commercial infrastructure, leading to poor access to employment opportunities. Without intervention the pattern of skills levels and wages within the plan areas is likely to remain the same.</td>
</tr>
<tr>
<td>Economic Strategy: Including the Vision, our Story of Place and analysis of our evidence base</td>
<td>The patterns of deprivation are likely to follow existing trends and will respond to external pressures. Unemployment may remain the same, without intervention to improve skills levels and the diversity of employers in the area.</td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td></td>
</tr>
<tr>
<td>Growth Deal: Programme of interventions for the local growth fund and freedoms and flexibilities sought through the local growth deal negotiations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivering our Economic Plan: Levers of growth to deliver our economic strategy, delivery arrangements, governance, implementation plan and evaluation plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic activity in the sub-region is generally comparable to the South West and national levels of 80.8% and 77.9% respectively. <strong>Bristol</strong> sits at 74.5%, <strong>Bath</strong> 78.5%, <strong>North Somerset</strong> 80.7% and <strong>South Gloucestershire</strong> at 80.1%.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within <strong>Bristol</strong> the economic planning strategy is set out in Core Strategy BCS8 ‘Delivering a Thriving Economy’. This sets out that 220000m² of additional office space will be provided in the city centre, South Bristol and within designated centres. The policy also protects Primary Industrial and Warehousing (PIWA) areas for existing and future employment use. PIWAs are designated on the proposals map, the Site Allocations and Development Management Policies Plan, contains supporting policy DM18. Bristol also contains an Enterprise Zone, called Bristol Temple Quarter. The planning approach to this area is set out in the Bristol Central Area Plan, policy BCAP 35. The <strong>Bath and North East Somerset</strong> Core Strategy sets out the economic strategy promoting a net increase of 10,300 jobs. The planning approach for the Enterprise Area in Bath is set out in the Core Strategy, policy B2. <strong>North Somerset</strong>’s Core Strategy (Policy CS20) seeks to provide at least 10,100 additional employment opportunities 2006-2026. This is additional to the existing backlog of jobs in relation to...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
to past housing growth at Weston-super-Mare. The overall jobs target for North Somerset is therefore about 14,000 jobs.

South Gloucestershire’s Core Strategy seeks to maintain a supply of economic development land in accordance with the Plan’s strategy for development set out in Policy CS5. This land is distributed between the North and East Fringe of Bristol urban area, Yate & Chipping Sodbury, Thornbury, the Rural Area and Severnside.

(b) population; (c) human health;

<table>
<thead>
<tr>
<th>Town Centres</th>
<th>Bristol: 1 City Centre; 10 Town Centres and; 9 District centres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bath and North East Somerset: 1 City Centre; 3 Town Centres and; 1 District Centre</td>
</tr>
<tr>
<td></td>
<td>North Somerset: 1 City Centre; 3 Town Centres and; 4 District Centres</td>
</tr>
<tr>
<td></td>
<td>South Gloucestershire: 10 Town Centres and 2 District Centres</td>
</tr>
</tbody>
</table>

Without the plan, inappropriately located development may lead to restricted access to or an under supply of retail facilities.

(a) biodiversity; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (l) landscape;

<table>
<thead>
<tr>
<th>Biodiversity, Flora and Fauna</th>
<th>Within the West of England there are a number of internationally designated sites, important for habitats and species.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bristol: 1 RAMSAR</td>
</tr>
<tr>
<td></td>
<td>Bath and North East Somerset: 2 Special Areas of Conservation</td>
</tr>
<tr>
<td></td>
<td>North Somerset: 1 RAMSAR</td>
</tr>
</tbody>
</table>

The region’s biodiversity is at threat from development; human activities such as pollution, roads, disturbance, farming practices; loss of habitat; loss of food sources and a changing climate.

Climate change is likely to disadvantage some species through altering seasons, changing habitats, causing habitat fragmentation (e.g. through drought) and introducing new species which could compete with others for space or could prey on them. However, climate change may also benefit some species for the same reasons.

Lack of local protection could lead to potential degradation of valued habitats and nature conservation areas.

No strategic oversight could lead to inappropriate greenfield development, damaging the sub-region’s green infrastructure and loss of valuable habitats and species.
<table>
<thead>
<tr>
<th>Landscape</th>
<th>The West of England area has a rich and varied landscape. <strong>Bristol</strong> contains a range of urban landscape features, Prominent Green Hillsides, Gorges, Step Sided Valleys, Ridges, Severnside Rhines and Promontories <strong>Bath</strong> has a distinctive townscape in the way that buildings respond to the distinct topography. Many buildings and terraces follow contours, often overlooking open ground and panoramic views. There are 2 AONBs in the District – Mendip Hills and Cotswolds AONBs and two significant waterways: the River Avon and the Kennet and Avon Canal, along with Chew Valley and Blagdon Lakes are important landscape features and resources for recreational uses. <strong>North Somerset</strong> has a highly varied landscape. The North Somerset Landscape Character Assessment, adopted in 2005, indicates that the District contains sections of four National Character Areas: Bristol, Avon Valleys and Ridges, Severn and Avon Vales, Mendip Hills and Somerset Levels and Moors. <strong>South Gloucestershire</strong> has a predominantly rural and agricultural landscape, greatly influenced by large-scale scarp, ridges, vales, levels and estuary landforms, overlain by a variety of land cover, in places comprising unique natural or historic features. The landscapes of South Gloucestershire have many contrasts, ranging from the Cotswolds Area of Outstanding Natural Beauty to the urban landscape within the edge of Bristol.</th>
<th>Landscape character may be threatened by lack of appropriate management, inappropriate development and climate change. Without the plan, areas deemed to be of poor character will not be pro-actively improved, leading to a degradation in townscape quality.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(a)</strong> biodiversity; <strong>(d)</strong> fauna; <strong>(e)</strong> flora; <strong>(f)</strong> soil; <strong>(g)</strong> water; <strong>(h)</strong> air; <strong>(i)</strong> clmatic factors; <strong>(j)</strong> material assets; <strong>(k)</strong> cultural heritage; <strong>(l)</strong> landscape;</td>
<td></td>
<td>13 Local Nature Reserves 75 Local Geological Sites 204 Local Wildlife Sites</td>
</tr>
<tr>
<td>(a) biodiversity; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (l) landscape;</td>
<td><strong>Green Belt</strong></td>
<td>Large areas of B&amp;NES are Green Belt (61%), as are small areas of urban fringe within Bristol City. North Somerset’s Green Belt is defined in the 2007 Replacement Local Plan, which added land between Portishead and Royal Portbury Dock while deleting land at Court House Farm, Easton-in-Gordano/Portbury (for port uses) and at Bristol Airport (for airport uses). The Green Belt covers 15,490 ha (40% of North Somerset’s area). The area of Green Belt within South Gloucestershire was covers 23,026ha.</td>
</tr>
<tr>
<td>(a) biodiversity; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (l) landscape;</td>
<td><strong>GI</strong></td>
<td>Green Infrastructure (GI) is a ‘network of multi-functional greenspace, rural and urban, which is capable of delivering a wide range of environmental and quality of life benefits for local communities’ (NPPF). The protection and provision of Green Infrastructure (GI) is recognised as an important issue for the West of England. A West of England GI Framework has been produced. The purpose of the sub-regional framework is to identify: - a shared vision, objectives and principles for Green Infrastructure across the West of England; - Green Infrastructure of strategic importance, including Green Infrastructure areas and corridors, which may cross local authority boundaries; - the benefits delivered</td>
</tr>
<tr>
<td>(j) material assets; (k)cultural heritage (l) landscape;</td>
<td><strong>Cultural and Heritage Assets</strong></td>
<td>Bristol has a fine and historically rich built environment, including 33 conservation areas, over 90 historic parks and gardens, 4,137 listed buildings, including 9 listed buildings on the Heritage at Risk Register. Bath was designated a World Heritage site in 1987. There are 37 Conservation Areas, 11 Registered Historic Parks and Gardens, 84 SAMs and approximately 6,400 listed buildings and structures in</td>
</tr>
</tbody>
</table>
B&NES (of which 5,000 lie within the City of Bath). There are currently 17 Conservation Areas, 9 Scheduled Monuments, 4 buildings and 1 Designated Park and Garden on the Heritage at Risk Register 2010.

**North Somerset** has 36 Conservation Areas, 8 Registered Historic Parks and Gardens, 70 SAMs and 1,072 listed buildings and structures. There are currently 4 Conservation Areas, 2 Scheduled Monuments and 3 listed buildings on the Heritage at Risk Register.

**South Gloucestershire** has 2074 Listed Building entries of which 2% are Grade I, 6% are Grade II*, and 92% are Grade II, also over 1,470 locally listed buildings, 38 Scheduled monuments, 30 Conservation Areas, 8 registered parks and gardens and 1 battlefield.

<table>
<thead>
<tr>
<th>(c) human health; (g) water; (h) air; (i) climatic factors; (j) material assets;</th>
<th>CO2 Emissions, Renewable Energy and District Heating</th>
<th>Planning policy is currently the only tool for the delivery of renewable energy technology and sustainable design (e.g. SuDs) in new development. The Plan can provide further support in the long-term approach to climate change mitigation and adaption and setting aspirational energy efficiency targets for new development. Without the Plan therefore, development may be less ambitious in its energy performance, and planning gains are less likely to be delivered in a timely and coordinated manner.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each authority has pledged to reduce carbon dioxide emissions within their scope of influence and the sub-region has seen a decline in such emissions. There has also been an increase in energy generation from renewable technology, with approximately a 280Mw capacity from renewable sources in the plan area as of 2015. <strong>Bristol</strong> has experienced a 25% decrease in CO2 emissions to reach 1,777k tonnes in 2014. CO2 emissions from <strong>B&amp;NES</strong> have reached 1182 kt annually. <strong>North Somerset</strong> target to reduce the annual per capita emissions by 15% between 2010 and 2015. Figures are only available from 2005 to 2014 but the council had already achieved double this target and the per capita emissions have been reduced by 30%. <strong>South Gloucestershire</strong> has reduced CO2 emissions by approximately 30% from 2007 to a total of 1886k tonnes in 2014.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) human health; (g) water;</td>
<td>Flood Risk</td>
<td>Climate change is expected to increase flood risk, due to rising sea levels and increased rainfall.</td>
</tr>
</tbody>
</table>
(i) climatic factors;

are found throughout the sub-region. A number of detailed assessments including Strategic Flood Risk Assessments (SFRA) and strategies to manage flood risk from all sources have been prepared to support the preparation of Local Plans. An overall summary of this is presented in Appendix B.

A sustainable approach to drainage mitigates the impact of new development on flood risk and builds our resilience to flooding. It also provides opportunities to remove pollutants from urban runoff at source, and combines water management with green space with benefits for amenity, recreation and wildlife.

Some aspects of flood risk are cumulative, as development can reduce permeable area. The use of sustainable drainage systems (SuDS) is favoured as a way to minimise this risk. There are concerns that piecemeal development could fail to make the most suitable provision for flood risk management infrastructure.

Potential risks of inappropriately located development within flood zones.

| (g) water; (i) climatic factors; | Water | Wessex Water identifies in its Water Resources Management Plan (June 2010) two unused abstraction licenses at Newton Meadows and Monkton Combe that may be invested in, in the future. They are implementing sustainable reduction in abstractions in the Malmesbury area and on the Hampshire Avon, outside of this CAMS area but used to supply water into this catchment.

During a drought, in the upper reaches of the Bristol Avon flows can be increased by more than 30Ml/d using water taken from boreholes.

In Somerset some water must be released from reservoirs to compensate for the impact that dams have on flows.

Chew Valley Lake pumped storage- The use of Chew Valley Lake for storage of water from the River Avon near Saltford, for use when flows in the river are low in very dry periods.

Low volume appliances in new homes- Working with developers to provide water efficient appliances in new homes and, where applicable, providing appropriate subsidies.

With the expected improvements in the Building Regulations, the water efficiency of new dwellings is likely to improve over the next 5 years.
| (f) soil; Agricultural Land | Natural England provides further information on Agricultural Land Classification. The Agricultural Land Classification system classifies land into five grades, with Grade 3 subdivided into Sub-grades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a and is the land which is most flexible, productive and efficient in response to inputs and which can best deliver food and non-food crops for future generations. Natural England has a statutory role in advising local planning authorities about land quality issues. Currently, there are gaps in data where Grade 3 land has been identified, as such in many cases it is difficult to clearly distinguish between 3a and 3b land. | No strategic oversight could lead to inappropriate development, damaging the sub-region’s agricultural land supply. |
| (b) population; (h) air; (i) climatic factors; Transport | The current Joint Local Transport Plan (JLTP3) was published in 2011 and sets out the priorities for transport to 2026. In particular, the JLTP3 seeks to achieve a better connected, more balanced and more customer focused transport network. The four West of England authorities, in partnership with the Department for Transport and public transport operators, have invested £80 million to improve key bus corridors as part of the Greater Bristol Bus Network (GBBN) programme which was completed in 2012. **B&NES** There is no direct link to the motorway network in B&NES and Bath suffers particularly from the sub-region’s poor internal transport links and congestion is experienced through the area. High levels of out-commuting from Midsomer Norton and Radstock means that the link road south from Bath to Keynsham, Midsomer Norton and Radstock copes with high levels of commuter traffic. **Bristol** Cycle use in Bristol continues to grow, as do bus and train use, with an 82%, 34% and 58% | Increased traffic would exacerbate all of the existing problems outlined in the baseline data. The Plan facilitates the implementation of transport mitigation required to enable the level of strategic growth needed. Without the Plan, traffic congestion and air quality are likely to remain the same or will be worsen. |
increase respectively. However, road accidents continue to rise. Further to this, almost a fifth (19.3%) of Bristol residents walk to work.

**North Somerset**

Despite high car ownership levels, North Somerset contains pockets of deprivation and is reflected in car ownership levels with up to 49% having no access to a car in these areas. Accessibility by public transport, walking and cycling to services, facilities and employment in the rural areas is limited

Cycling trips have also continued to grow with Department for Transport figures showing a 52% increase in cycling on North Somerset roads between 2000 and 2013.

Bristol Airport is the largest airport serving the South West and South Wales, the ninth largest in the UK and the UK’s fifth largest outside London. During 2013, air transport movements increased by 8.8% to 55,640 Total aircraft movements increased by 6.7% to 65,299

**South Gloucestershire** has higher than average car ownership and usage. 86.9% of households have access to at least one car or van, compared to 74.2% nationally.

In 2016, the proportion of people who say they normally cycle to work (13.5%) increased marginally on the 2015 figure (13.3%). Bus journeys saw a 5.8% increase on the previous year and in 2015.
6. Reasonable alternatives and difficulties encountered

What the SEA Regulations state:

**Information for environmental reports (Schedule 2):**

8. An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.

Selecting alternatives

6.1 The ODPM guide and the Planning Practice Guidance state that to meet the requirement to justify the alternatives selected the report should outline:

- the main strategic options considered, how they were identified and the reasons for selecting the options;
- a comparison of the economic, social and environmental effects of the options and how economic, social and environmental issues were considered in choosing the preferred options; and
- other options considered, and why these were rejected.

6.2 The SA iterations mirrored those of the JSP. Iteration 1 (2015) identified a number of typologies – ‘urban intensification’, ‘urban extension’, ‘town expansion’, ‘other settlements / locations’, and ‘dispersed’ – and broad locations associated with each, based on a call for sites and other information on development potential. For Iteration 2 (2016), this range of options was refined, identifying for each of the settlements studied potential directions for expansion. Based on the findings, the options were then divided into those to be taken forward into the preferred strategy and those considered not to be reasonable alternatives beyond this stage. The latter are listed in Table 2 of the document *Towards the Emerging Spatial Strategy*, which identifies the reasons why they were filtered out.

6.3 For Iteration 3 (2017), the preferred strategy to be assessed consists of provision that is not specific to a known location and that which is included in the 12 SDLs. The former includes urban intensification and non-strategic growth (less than 500 dwellings). This provision is assessed through SA of the relevant JSP policies. Specific appraisal tables have been produced for each of the SDLs; their relationship to previous work is described in Table 4 below. Iteration 3 was a mix of old and revised locations and took into account the more precise requirements for development set out in the JSP wording.

Table 4: SDLs appraised in 2017

<table>
<thead>
<tr>
<th>Policy</th>
<th>SDL</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>North Keynsham</td>
<td>An expansion of Keynsham is proposed to the north, a location appraised in 2016.</td>
</tr>
<tr>
<td>7.2</td>
<td>Whitchurch</td>
<td>An expansion of Whitchurch is proposed to the south east of Bristol, a location appraised in 2016.</td>
</tr>
<tr>
<td>7.3</td>
<td>Land at Bath Road, Brislington</td>
<td>An expansion of Bristol is proposed to the east, a location appraised in 2016.</td>
</tr>
<tr>
<td>7.4</td>
<td>Backwell</td>
<td>An expansion of Backwell is proposed to the west, a location appraised in 2016.</td>
</tr>
<tr>
<td>7.5</td>
<td>Banwell Garden Village</td>
<td>Banwell Garden Village is proposed as freestanding development close to the existing village of Banwell. It was not appraised in the 2016 SA, which focused on the existing village.</td>
</tr>
<tr>
<td>7.6</td>
<td>Churchill Garden Village</td>
<td>Churchill Garden Village is proposed as freestanding development close to the existing village of Churchill. It was not appraised in the 2016 SA, which focused on the existing village.</td>
</tr>
<tr>
<td>7.7</td>
<td>Nailsea</td>
<td>An expansion of Nailsea is proposed to the west. This location was appraised in 2016 but for a less extensive form of development. Previous findings have been reviewed on the basis of the current proposals.</td>
</tr>
<tr>
<td>7.8</td>
<td>Buckover Garden Village</td>
<td>Buckover Garden Village provides an opportunity to deliver a new Garden Village in the West of England. The location was appraised in the 2016 SA.</td>
</tr>
<tr>
<td>7.9</td>
<td>Charfield</td>
<td>An expansion of Charfield is proposed to the North, West, South and East. The location was appraised in the 2016 SA.</td>
</tr>
<tr>
<td>7.10</td>
<td>Coalpit Heath</td>
<td>An expansion of Coalpit Heath is proposed to the West. The location was appraised in the 2016 SA.</td>
</tr>
<tr>
<td>7.11</td>
<td>Thornbury</td>
<td>An expansion of Thornbury is proposed to the East. The location was appraised in the 2016 SA.</td>
</tr>
<tr>
<td>7.12</td>
<td>Yate</td>
<td>An expansion of Yate is proposed to the North and West. The location was appraised in the 2016 SA.</td>
</tr>
</tbody>
</table>

6.4 Each SDL has been assessed as an individual location rather than for its contribution to a strategy. The *Issues and Options* document set out for discussion a number of possible spatial scenarios: protection of the Green Belt, concentration at the Bristol urban area, transport-focused, a more even spread, and a new settlement or limited number of new settlements. Arguments for and against each of these were presented. The spatial scenarios were not subject to SA, which would have required greater certainty about the locations to be included in each scenario. A brief comparison was done of Green Belt versus non-Green Belt locations. SA of alternative strategies becomes increasingly difficult as the number of possible locational combinations increases. It is also somewhat artificial where a preferred strategy combines elements of several theoretical possibilities in order to respond to a range of local constraints and opportunities.

**Undertaking the assessment**

6.5 The SA was undertaken internally by a team of specialist SA officers from the four councils, using readily available information, to ensure a consistent joint approach.

**Baseline data**

6.6 Some data gaps were identified in the Scoping Report. Where there are gaps in the baseline, this has made it difficult to predict the future evolution of the baseline characteristics without the JSP. There is no ‘noise map’ for the plan area and little other information is available relating to the noise baseline. Tranquillity maps produced by the Campaign to Protect Rural England are available but are now 10 years old. Effects on the noise environment, including exposure to existing noise, have therefore not been assessed.

6.7 Data on agricultural land quality is taken from the provisional Agricultural Land Classification maps, updated by reference to Natural England’s ALC Strategic Map, supplemented by detailed surveys where available. Where no detailed survey is known, the SA has identified the potential for agricultural land quality to be of a specified grade. The scale of the ALC maps is
such that there is scope for considerable local variation and so detailed survey would be needed for confirmation.

Proposal definition

6.8 The level of detail available for assessment increased through the stages of JSP preparation. This allowed scores to be refined from ‘uncertain’ to ‘positive’ or ‘negative’. In particular, the policy requirements for each SDL set out in the wording of the Publication Version have allowed more ‘++’ scores, on the basis that the proposal would not normally be permitted to proceed unless this mitigation or enhancement is included. Some uncertainties remain, mainly where viability / deliverability has yet to be tested.
7. Appraisal of effects

What the SEA Regulations state:

Information for environmental reports (Schedule 2):

6. The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as—
   (a) biodiversity;
   (b) population;
   (c) human health;
   (d) fauna;
   (e) flora;
   (f) soil;
   (g) water;
   (h) air;
   (i) climatic factors;
   (j) material assets;
   (k) cultural heritage, including architectural and archaeological heritage;
   (l) landscape; and
   (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l).

7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

Range of effects

7.1 The time frames used are as follows:

<table>
<thead>
<tr>
<th>Term</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short term</td>
<td>0-5 years (2016-2021)</td>
</tr>
<tr>
<td>Medium term</td>
<td>5-10 years (2021-2026)</td>
</tr>
<tr>
<td>Long term</td>
<td>10-20 years (2026-2036)</td>
</tr>
</tbody>
</table>

‘Long-term’ also includes effects extending or arising beyond the plan period. National policy is assumed to endure for the long-term. Some climate change effects will also be long-term.

At the SDLs, short-term effects are assumed to be neutral because of the lead-in times required to make a start on development. This does not mean that a start could not be made, only that it is considered unlikely.

7.2 All effects are assumed to be permanent, at least for the lifetime of the development, unless there is evidence that they are temporary.

7.3 Positive and negative effects have been defined according to the following scale:

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>no discernible effect</td>
</tr>
<tr>
<td>-</td>
<td>negative effect capable of mitigation</td>
</tr>
<tr>
<td>--</td>
<td>negative effect incapable of mitigation</td>
</tr>
<tr>
<td>+/-</td>
<td>mixed effect</td>
</tr>
<tr>
<td>+</td>
<td>positive effect capable of enhancement</td>
</tr>
<tr>
<td>++</td>
<td>positive effect incapable of enhancement</td>
</tr>
<tr>
<td>?</td>
<td>uncertain effect</td>
</tr>
</tbody>
</table>
Where necessary, these scores have been combined, for example ‘+/?’ where the scale of development could result in the effect described but there is some uncertainty over viability / deliverability.

7.4 Secondary, cumulative and synergistic effects are not identified in the appraisal tables. Given the limited detail available in a strategic plan such as the JSP, the likelihood of all these types of effect has been treated as uncertain.

7.5 In-principle cumulative effects are likely but difficult to quantify. The main cumulative effect is on climate change, where development in principle generates carbon emissions. Infrastructure capacity constraints can also arise as a result of incremental growth in demand but the JSP seeks developer contributions to address these. The JSP plan period overlaps with the adopted Core Strategies of the four councils and so part of the housing requirement will be met through developments that are committed but not yet built. These are therefore additions to the JSP baseline that have not been appraised as part of the JSP, though each Core Strategy was subject to its own SA prior to adoption. The JSP SA has been carried out with the benefit of local knowledge of where these sites are. However, some SDLs are new to large-scale development and in these cases there will be little or no cumulative impact from current housebuilding to be taken into account. The case for new transport infrastructure takes into account the current demand for travel and that generated by all new development over the JSP period, from whatever source. Cumulative effects on biodiversity are in part addressed through the Habitats Regulations Assessment, which looks at cumulative effects on particularly sensitive receptors, including the most important protected habitats. Cumulative effects on flood risk are of concern in some areas and the use of sustainable drainage systems to limit or reduce risk is therefore an important mitigation. Cumulative effects on school rolls are uncertain because reliable projections at primary school level cannot be made more than five years ahead.

7.6 Cumulative and synergistic effects may also arise in conjunction with the plans and programmes of other bodies, outside the planning system. However, work undertaken by, for example, public utilities, is often directed towards meeting needs arising from development and where such bodies are statutory consultees within the planning system there are procedures in place for co-operation.

7.7 The 21 sustainability objectives used cover the full range of issues from (a) to (l). There are inter-relationships between the various issues studied (issue (m)) and therefore overlap between some of the sustainability objectives used. These should be clear from a reading of the appraisal tables.

Mitigation

7.8 The final column of each appraisal table sets out any potential to mitigate the negative effects identified. In some cases, this will be through further detail to be made available through Local Plans or planning applications. The SDLs are of such a scale that it is to be expected that they will provide significant new infrastructure to meet the needs arising from development, which could also benefit existing residents and/or their environment.

Appraisal tables

7.9 The appraisal tables for: Vision; Policies; Strategic Development Locations (SDLs) are set out as Appendix D.
8. Monitoring

What the SEA Regulations state:

<table>
<thead>
<tr>
<th>Monitoring of implementation of plans and programmes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.—(1) The responsible authority shall monitor the significant environmental effects of the implementation of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action.</td>
</tr>
<tr>
<td>(2) The responsible authority’s monitoring arrangements may comprise or include arrangements established otherwise than for the express purpose of complying with paragraph (1).</td>
</tr>
</tbody>
</table>

Information for environmental reports (Schedule 2):

9. A description of the measures envisaged concerning monitoring in accordance with regulation 17.

8.1 The monitoring of the JSP will help to:
- monitor the significant effects of the plan;
- track whether the plan has had any unforeseen effects;
- ensure that action can be taken to reduce / offset the significant adverse effects of the plan; and
- provide baseline data for the next SA and to provide a picture of how those factors assessed by the environmental / sustainability criteria are evolving.

8.2 A summary of the proposed approach to monitoring for each objective is in Appendix C. The requirements of the SEA Regulations focus on monitoring the effects of the plan. This equates to both the plan’s significant effects and also unforeseen effects. It may be difficult to implement monitoring mechanisms for unexpected effects, or to attribute such effects to the implementation of the JSP when they occur. Due to this difficulty, a number of more general monitoring indicators (contextual indicators) have been suggested, linked to the SA objectives. These will be appended to the final SA produced with the submission Plan.

8.3 Monitoring forms part of the councils’ Authority Monitoring Reports. It will allow them to identify whether the recommended mitigation measures from the SA have been effective and develop further mitigation proposals that may be required where unforeseen adverse effects are identified. In some cases monitoring may identify the need for a policy to be amended or deleted, which could trigger a review of the JSP, or for further policy guidance to be developed (for example a Supplementary Planning Document).
### 9. Next Steps

What the SEA Regulations state:

<table>
<thead>
<tr>
<th><strong>Restriction on adoption or submission of plans, programmes and modifications</strong></th>
</tr>
</thead>
</table>
| **8.**—(2) A plan or programme for which an environmental assessment is required by any provision of this Part shall not be adopted or submitted to the legislative procedure for the purpose of its adoption before—  
(a) if it is a plan or programme co-financed by the European Community, the environmental assessment has been carried out as mentioned in regulation 7;  
(b) in any other case, the requirements of paragraph (3) below, and such requirements of Part 3 as apply in relation to the plan or programme, have been met. |
| **(3) The requirements of this paragraph are that account shall be taken of—**  
(a) the environmental report for the plan or programme;  
(b) opinions expressed in response to the invitation referred to in regulation 13(2)(d);  
(c) opinions expressed in response to action taken by the responsible authority in accordance with regulation 13(4); and  
(d) the outcome of any consultations under regulation 14(4). |

<table>
<thead>
<tr>
<th><strong>Information as to adoption of plan or programme</strong></th>
</tr>
</thead>
</table>
| **16.**—(1) As soon as reasonably practicable after the adoption of a plan or programme for which an environmental assessment has been carried out under these Regulations, the responsible authority shall—  
(a) make a copy of the plan or programme and its accompanying environmental report available at its principal office for inspection by the public at all reasonable times and free of charge; and  
(b) take such steps as it considers appropriate to bring to the attention of the public—  
(i) the title of the plan or programme;  
(ii) the date on which it was adopted;  
(iii) the address (which may include a website) at which a copy of it and of its accompanying environmental report, and of a statement containing the particulars specified in paragraph (4), may be viewed or from which a copy may be obtained;  
(iv) the times at which inspection may be made; and  
(v) that inspection may be made free of charge. |
| **(2) As soon as reasonably practicable after the adoption of a plan or programme—**  
(a) the responsible authority shall inform—  
(i) the consultation bodies;  
(ii) the persons who, in relation to the plan or programme, were public consultees for the purposes of regulation 13; and  
(iii) where the responsible authority is not the Secretary of State, the Secretary of State; and  
(b) the Secretary of State shall inform the Member State with which consultations in relation to the plan or programme have taken place under regulation 14(4), of the matters referred to in paragraph (3). |
| **(3) The matters are—**  
(a) that the plan or programme has been adopted;  
(b) the date on which it was adopted; and  
(c) the address (which may include a website) at which a copy of—  
(i) the plan or programme, as adopted,  
(ii) its accompanying environmental report, and  
(iii) a statement containing the particulars specified in paragraph (4), may be viewed, or from which a copy may be obtained. |
| **(4) The particulars referred to in paragraphs (1)(b)(iii) and (3)(c)(iii) are—**  
(a) how environmental considerations have been integrated into the plan or programme;  
(b) how the environmental report has been taken into account;  
(c) how opinions expressed in response to—  
(i) the invitation referred to in regulation 13(2)(d);  
(ii) action taken by the responsible authority in accordance with regulation 13(4), have been taken into account; |
(d) how the results of any consultations entered into under regulation 14(4) have been taken into account;
(e) the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and
(f) the measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme.

9.1 If any significant issues arise through consultation leading to amendments to the JSP, then further consultation would be required. If changes made to the JSP are significant, they would also need to be subject to SA.

9.2 Once the plan is adopted, a Sustainability Appraisal Adoption Statement will need to be published in accordance with SEA Reg. 16(4). This legal requirement relates to environmental considerations but it would be good practice to consider sustainability considerations generally and an Adoption Statement is also a requirement of the Local Plan Regulations (Town and Country Planning (Local Planning) (England) Regulations 2012, Reg. 26.