



Bath & North East Somerset  
Core Strategy

Sustainability Appraisal Report  
Annex E: Appraisal of the Submission Core Strategy,  
Urban Extensions Commentary

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# 1 Commentary regarding urban extensions

## 1.1 Introduction and Background

This commentary has been prepared in order to reflect and consider the implications of changes in the policy approach from the Core Strategy Options Consultation Paper to the Core Strategy reflecting new evidence, consultation comments and responding to proposals to abolish the Regional Spatial Strategies.

Local planning authorities will still have to provide a five-year housing land supply, and that they will be responsible for establishing the right level of local housing provision in their area and identifying a long term supply of housing land in line with PPS3. Local authorities are empowered to derive their own local housing targets, as long as these are based on sound evidence of supply and demand, and this evidence will be tested at examination.

Policies contained within the draft South West Regional Spatial Strategy (RSS) set the level of growth that Bath and North East Somerset Council needed to plan for between 2006 and 2026 and also required new housing and economic development within the district to be focussed on the large urban areas (strategically significant cities) of Bath and Bristol with further development directed towards urban extensions. The main reason for this broad spatial strategy was to help reduce the need to travel, particularly by car, as these urban areas are the main centres for jobs, services and facilities and are locations best served by public transport. The level of growth that was proposed for Bath and North East Somerset by the draft South West RSS was around 15,500 new homes and circa 17,000 new jobs.

The Core Strategy Spatial Options Consultation (October 2009) presented two spatial strategy options for delivering this level of growth responding directly to the requirements of the draft RSS. These spatial strategy options included options for urban extensions to Bristol and Bath. These options were all appraised through the SA. These comments and the Council's response to them are summarised in the Core Strategy Options Consultation Report. A total of 2011 responses related to the Bath urban extension options and 1053 in relation to SE Bristol urban extension options. A brief summary of the comments made are summarised in the above report."

## 1.2 The potential positive and negative effects of the urban extensions from the assessment of spatial options (October 2009)

Through the appraisal of the Spatial Options Consultation document (October 2009) the SA appraised and compared the merits and disadvantages of 2 options for urban extensions to the South East of Bristol, at Whitchurch and at Hicks Gate which are adjoining the Bristol City Council administrative area and 2 options for urban extensions to Bath, at Twerton to the west of the city and on the Odd Down plateau to the south. The positive and negative effects of the South East Bristol urban extension options and the Bath urban extension options are presented within Annex C and are also summarised here for convenience.

### a) Potential Urban Extensions South East of Bristol

The urban extensions to the South East of Bristol would benefit from access to new and proposed facilities within south Bristol, such as the proposed new hospital at Hengrove and new academy (secondary) school in Brislington. However, access from the Whitchurch area

is dependent on securing a good public transport service into these areas and the city centre. Access to facilities in Keynsham from the Whitchurch may cause considerable traffic impact on the village of Queen Charlton.

The Hicks Gate area has good access to Bristol facilities and services due to good public transport accessibility however, the site is located near to peripheral land uses such as the Park and Ride and a retail park at Brislington. However, an urban extension at Hicks Gate could provide an 'anchor' for some of the surrounding peripheral land uses and create a sense of community in this area.

Both potential urban extensions could potentially provide a range of facilities and services although the Hicks Gate site would need to be developed comprehensively with land in the Bristol City administrative area in order to provide sufficient capacity.

Development at the Whitchurch location could increase traffic on the A37 which is already congested and the new residents could be affected by the existing congestion issues. There is uncertainty over the impact on noise and air quality from transport that could be associated with an urban extension at Whitchurch as the option is reliant on the South East Bristol transport package, which was still under development.

Both options would have the potential to deliver affordable housing.

Both options have the potential to contribute to the economy of Bristol. Stockwood, the area adjacent the Whitchurch in Bristol experiences out-commuting for employment and has a low level of jobs by ward and it is therefore important that new employment is provided in the urban extension to prevent increasing this problem. The market for commercial space in the Whitchurch area needs to be investigated further as the potential to provide certain types of jobs may be limited.

The Hicks Gate option could provide employment development, which could help to reduce the distances travelled by Keynsham residents for work.

The Whitchurch location could potentially result in the loss of Skylark habitat (priority species and Section 41 species). There are some nature conservation features within the Hicks Gate area, including a SNCI bordering the site and potentially important hedgerows on the site. An urban extension at Hicks Gate could improve the management of the SNCI.

The Whitchurch urban extension options would have impacts on the setting of Grade II\* Lyons Court Farm and the medieval field pattern at the edge of Whitchurch.

Development of the Hicks Gate option would reduce the gap between Keynsham and Bristol and compromise the greenbelt function that the area is currently providing. According to consultation responses, no significant archaeological potential has so far been identified at the Hicks Gate site. Listed Buildings and registered Park and Gardens on the site have the potential to form a key part of a green infrastructure network and the overall context of an urban extension, ensuring their integration and protection.

The Whitchurch option has the potential to impact the setting of the scheduled ancient monument Maes Knoll and the Chew Valley skyline, however, development proposals have been pulled back and reduced in scale in order to avoid areas with potential for these

impacts. An urban extension here would significantly affect the distinctiveness of Whitchurch village as a separate settlement. Some land parcels considered for development in the Whitchurch area could disrupt the green link and visual separation of Whitchurch and surrounding settlements.

### **b) Potential Urban Extensions to Bath**

The Twerton option could provide space for industrial and bulky retail uses relocated from the city centre as part of the spatial strategy for Bath. The Twerton option therefore provides good opportunities for contributing to the economic vitality of the city and performs well in relation to public transport accessibility. An air pollution mitigation strategy would be needed for this option, as it could increase traffic on roads where there are existing air quality issues. The Twerton Option is in the vicinity of an area of flood risk, however, development in these areas can be avoided. The Odd Down Plateau option is not located within an area of flood risk, although both options would need to provide SUDS.

The Odd Down Plateau option would also present opportunities for employment growth to the south of Bath and would provide access to employment in Odd Down and good access to the City Centre by public transport. The Odd Down Park and Ride facility is partially located within the site.

Both options present challenges in terms of visual and landscape impact, much of which will be difficult to mitigate. Both options could affect the distinctiveness of nearby villages, such as South Stoke and Newton St Loe. The Twerton option would have a major landscape impact as the location is highly visually prominent and would have a negative impact on the integrity of the setting of the Bath World Heritage Site. The Odd Down Plateau option may present landscape and visual effects which can be more effectively mitigated.

Both options present challenges for community cohesion between existing and new communities. The Twerton option may present the most challenging physical circumstances due to the separation of the site from the existing community and facilities of Twerton by the steep-sided Newton Brook valley.

None of the options detail the type of services and facilities that would be provided within each extension and whether these might differ and therefore there is uncertainty over whether each option could provide facilities for neighbouring areas or whether they would share any existing facilities. This could have an impact on community cohesion as well as access to services and facilities.

Both options have potential for negative effects on biodiversity. All sites are Greenfield and could result in the loss of habitats. The Odd Down Plateau option (and possibly also the Twerton option) has the potential to affect bats which are highly protected. The HRA screening assessment has identified the potential for effects on Natura sites with relation to each of the options considered. Further work will be carried out as part of the next stage of the HRA to examine the potential for these impacts in more detail and to identify appropriate mitigation strategies. The Twerton option would have a significant effect on the green belt and could affect habitats of the River Avon. All options have the potential to provide access to natural green space and contribute to green infrastructure for new residents.

The options are similar in their potential to promote walking and cycling. The Odd Down Plateau option appears to present the easiest walking and cycling topography on the site due to the flat topography but a steep descent into the town centre could discourage walking and cycling into the city. The Twerton option could be well served by public transport into the city centre, and via walking and cycling along the river corridor but its topography could discourage walking and cycling to access local facilities.

### **1.2.1 Factors common to all of the urban extension options**

All of the urban extension options would result in the development of Greenfield land and the loss of soil resources. They would all need to be designed with an integrated multifunctional green infrastructure network, which provide SUDS / surface water infiltration / rainwater interception, habitats and recreation functions.

Large scale developments such as urban extensions offer significant benefits over smaller scale developments in respect of local energy sources and district energy infrastructure, and as such offer greater sustainability benefits in this respect.

Another benefit of urban extensions is that they allow a comprehensive community to be created, which is well planned and with adequate infrastructure. When designed and planned well, urban extensions can provide benefits to surrounding neighbourhoods. A challenge to successful urban extensions is achieving cohesion between existing and new communities.

## **1.3 The Core Strategy District Spatial Strategy**

Bath and North East Somerset Council has commissioned studies relating to predicted population increase and economic growth and urban capacity in order to determine, at the district level, the level of growth that the Core Strategy needs to plan for. The evidence provided by these studies indicates that a lower level of growth than that proposed by the draft RSS is forecast and needs to be planned for by the Core Strategy. The findings of the urban capacity work indicate that the majority of new housing and economic development can be accommodated within Bath and the other key settlements within the district and urban extensions are not required. It is on this basis that the Publication Core Strategy Spatial Strategy and the subsequent Submission Core Strategy has been prepared.

In addition, in the choice of the preferred District Spatial Strategy has been informed by the results of the SA of the options containing urban extensions which identified a number of significant negative effects, plus a large number of objections received from stakeholders, including statutory consultees. Notably, English Heritage objected to the options for an urban extension to Bath urban extension options on the grounds of landscape, visual and impact on the Historic environment – specifically the impact on the World Heritage Site and its setting.

As a result of the revised evidence base, the results of the SA of urban extension options and the consultation comments received, BANES has chosen a District Spatial Strategy within the Submission Core Strategy Spatial Strategy which provides for 11,000 new homes and 8,700 to 10,000 jobs over the plan period. The District Spatial Strategy does not include urban extensions and involves mainly the redevelopment of brownfield land with some potential limited Greenfield development.

## **1.4 Summary of the potential positive and negative effects of the Core Strategy District Spatial Strategy**

The District Spatial Strategy (Policy DW1) has been appraised as part of the SA of the Publication Core Strategy and the subsequent Submission Core Strategy and the following information has been obtained from the appraisal.

A benefit of the District Spatial Strategy set out within the Core Strategy is the efficient use of land, by avoiding the development of large areas of Greenfield land. Existing green belt functions would be maintained. This strategy is also beneficial because of the opportunities it presents for walking and cycling access for the majority of new residents of the redeveloped sites through proximity to the facilities and services the city has to offer. If the MoD site at Ensleigh is vacated by the MoD and redeveloped new residents could be an exception to this as the site is located on the northern outskirts of the city.

The Newbridge and Riverside areas are identified within the Bath Spatial Strategy for Bath as a contingency for employment development, if supply for new 'town centre' employment generating uses cannot keep pace with demand. A cost of not planning for an urban extension at Bath is that, should demand for non-City Centre (e.g. industrial or bulky retail) employment uses increase during the plan period, land may not be available to accommodate new development. Rental prices for such facilities would increase in Bath and employers may locate elsewhere.

Due to the townscape constraints present in Bath, the delivery of low carbon and renewable energy generation as a part of the redevelopment of brownfield sites in the city may be difficult to realise. In addition, the size of some of the brownfield sites could potentially reduce options for decentralised community heat and power systems, although they could also present opportunities for the provision of heat and power to nearby facilities such as schools and leisure centres. The Submission Core Strategy policy for Bath encourages such opportunities to come forward.

Although the growth proposed in Bath is underpinned by the Bath Package of transport measures, the Bath Package was developed to address pre-Core Strategy issues and therefore the growth proposed in the city could exacerbate the existing poor air quality within much of the city. However, this would also potentially be the case for a spatial strategy which includes an urban extension.

The avoidance of urban extensions to Bristol in the District Spatial Strategy presents benefits of retaining Greenfield land, green belt functions of land and soil resources. It also avoids impacts on Queen Charlton and significant impacts on the distinctiveness and community cohesion in Whitchurch. The avoidance of both urban extensions also avoids the potential to increase traffic on the A37 and A4.

Although the Spatial Strategy proposes employment development in Keynsham, it does not provide any additional employment opportunities to the South East of Bristol which might have benefited residents of Keynsham and further reduced distances travelled for work. Not creating an urban extension in the Hicks Gate area would not improve this approach into Bristol or contribute to creating a sense of place or community for this area.

## 1.5 Comparison of the Core Strategy District Spatial Strategy with the Urban Extension Options

The options presented within the Core Strategy Spatial Options consultation document (October 2009) did not include an option with no urban extensions. As such, it is difficult to compare the potential positive and negative effects of the options considered in the Spatial Options document with the spatial strategy presented within the Publication Core Strategy and the subsequent Submission Core Strategy.

However, in order to ensure that the sustainability implications of a district Spatial Strategy which does not include urban extensions are fully understood, an exercise was undertaken to consider and compare (as far as possible) the effects of the options which included urban extensions appraised through SA in 2009 and the effects of the Publication Core Strategy District Spatial Strategy which was subject to SA along with the rest of the Publication Core Strategy in 2010. This was then checked for consistency with the policies within the Submission Core Strategy in 2011.

Table E.1 presents a comparison between the positive and negative effects of a strategy without urban extensions with the positive and negative effects of the urban extension options. The table includes conclusions relating to the overall effects of the Core Strategy District Spatial Strategy and identifies where the Core Strategy is mitigating any potential negative effects of the District Spatial Strategy.

In the appraisal of the urban extension options and the Core Strategy District Spatial Strategy it was found that a number of SA Objectives were most relevant to a spatial strategy. Table E.1 therefore includes only those relevant SA Objectives.

The appraisal matrices for the Core Strategy District Spatial Strategy and the Bath Strategy can be found in Annex D. The SA of the Core Strategy District Spatial Strategy has identified mainly potential positive residual effects following the incorporation of suggested mitigation and enhancement measures. The Core Strategy District Spatial Strategy has a potential major positive effect on the following SA Objectives:

- Objective 1: Improve accessibility to community facilities and local services;
- Objective 8: Enable local businesses to prosper;
- Objective 13: Protect and enhance the district's historic, environmental and cultural assets; and
- Objective 14: Encourage and protect habitats and biodiversity (taking account of climate change).

A potential minor negative effect remains in relation to SA Objective 15 (Reduce land, water, air, light, noise pollution) because, although the Core Strategy refers to measures to enable the programme of development set out in the spatial strategy and encourage, convenient and sustainable circulation and access within Bath, including the Bath Package, there is a risk that the existing baseline air pollution issue could still be exacerbated by development in Bath. Similarly, growth in Keynsham could also exacerbate the air quality issue on the High Street.

As a lower amount of housing growth is proposed less affordable housing could be delivered by this strategy compared to the previous options, however, the District Strategy is based on an evidence base predicting need and the Affordable Housing core policy aims to deliver a



greater rate of affordable housing delivery than has been delivered in the district over previous years.

The SA identified that, due to the townscape constraints present in Bath, the delivery of low carbon and renewable energy generation as a part of the redevelopment of brownfield sites in the city may be difficult to achieve. In addition, the size of some of the brownfield sites could potentially reduce options for decentralised community heat and power systems, although they could also present opportunities for the provision of heat and power to nearby facilities such as schools and leisure centres. The provision of decentralised community heat and power systems within urban extensions was identified as a specific positive effect.

The reduction of CO<sub>2</sub> emissions is addressed principally through core policies CP1 – CP4 within the Core Strategy. Policy CP4, in particular, provides the context for area based solutions in respect of district heating. Reference is also in the place based policies (including Bath) to the opportunities for district heating and other energy reduction measures, including the retrofitting of historic buildings with micro-renewables and energy efficiency measures.

<b>Table E1: Summary of Key Positive and Negative Effects of Spatial Options (October 2009) and the Core Strategy District Spatial Strategy</b>					
<b>SA Objectives</b>	<b>Spatial options October 2009 (including urban extensions)</b>		<b>District Spatial Strategy Publication Core Strategy 2010 and Submission Core Strategy 2011 (not including urban extensions)</b>		<b>Residual effects* of the District Spatial Strategy and measures which support the delivery of the Spatial Strategy included within the Core Strategy policies</b>
	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
SA 1: Improve accessibility to community facilities and local services	All the potential urban extensions could potentially provide a range of facilities and services, although the Hicks Gate site would need to be developed along with land in the Bristol City administrative area in order to provide sufficient capacity. Most of options proposed are located near to existing city centre bus routes. The urban extensions to the South East of Bristol would benefit from access to new and proposed facilities within south Bristol.	Access from the Whitchurch area is dependent on securing a good public transport service into the south of Bristol and the city centre. Access to facilities in Keynsham from the Whitchurch area may cause considerable impact on the village of Queen Charlton. The topography of the Twerton option could discourage walking and cycling to access local facilities. A steep descent into Bath from the Odd Down plateau option could discourage walking and cycling into the city.	Focusing development on urban areas presents opportunities for walking, cycling and public transport access for the majority of new residents of redeveloped urban brownfield sites through proximity to the facilities, services and employment the settlements have to offer.	New residents of a redeveloped MoD Endsleigh site to the north of Bath may not have good access to the city centre and local facilities because the site is located on the outskirts of the city. The need for a good public transport service to this site and access to local facilities has been highlighted within the SA.	Major positive.  Reference to the need for sustainable travel to the redeveloped MoD sites has been added to the Bath section. The Bath Package will help to enable the programme of development set out in the spatial strategy in conjunction with further measures to enable convenient and sustainable circulation and access within Bath. Improvements to other public transport, walking and cycling infrastructure and the implementation of 'Smarter Choices' for transport will be pursued e.g. through the development of travel plans for new and existing sites, expansion of car clubs and other appropriate measures.  The strategy for the Rural

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	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
					Areas will help increase access to local needs services and facilities through encouraging appropriate development.
SA 3: Meet identified needs for sufficient, high quality and affordable housing	The spatial strategy presented in the spatial options consultation document (October 2009) had the capacity to provide around 15,500 new homes within the district.	No specific issues identified.	The Core Strategy District Spatial Strategy provides for 11,000 new homes.	As a lower amount of housing growth is proposed less affordable housing could be delivered by this strategy compared to the previous options, however, the District Strategy is based on an evidence base predicting need.	Minor positive.  The Affordable Housing core policy aims to deliver a greater rate of affordable housing delivery than has been delivered in the district over previous years. The Housing Mix core policy aims to deliver a suitable mix of different housing types to accommodate a range of households.
SA 4: Promote stronger more vibrant and cohesive communities	Urban extensions allow a community to be created which is well planned and with adequate infrastructure. When designed and planned well, urban extensions can provide	There is uncertainty over whether each option could provide facilities for neighbouring areas or whether they would share any existing facilities. This could have an impact on cohesion with existing	By locating the majority of new housing and employment development close to the existing main settlements in the district, the spatial strategy should help to support strong, vibrant and cohesive communities.	No specific issues identified.	Minor positive.  The strategy for the Somer Valley seeks to ensure that any further residential development is only permitted if it brings economic benefits

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	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
	benefits to surrounding neighbourhoods. This was particularly identified as a benefit of the Odd Down plateau option to the south of Bath. An urban extension at Hicks Gate could provide an 'anchor' for some of the surrounding peripheral land uses and create a sense of community in this area.	communities as well as access to services and facilities for the new residents. The Whichchurch and both Bath urban extension options present challenges for community cohesion between existing and new communities. The Twerton option has the most challenging physical circumstances due to the separation of the site from the existing community and facilities of Twerton by the steep-sided Newton Brook valley.	Although it is a generalisation, the integration of new developments with existing communities through the redevelopment of relatively smaller urban brownfield sites is generally easier to integrate than new communities in urban extensions with nearby existing communities. The apparent imbalance between housing and jobs in the Somer Valley results from the high level of residential commitments.		(employment development).
SA 7: Ensure communities have access to a wide range of employment opportunities paid or unpaid	Both South East Bristol urban extension options have the potential to contribute to the economy of Bristol. Stockwood currently has out-commuting for employment and a low	The potential to provide certain types of jobs in the Whichchurch area may be limited due to the market for commercial uses in the area.	The spatial strategy refers to improving the quality of jobs as well as delivering growth in jobs numbers, without the need for expansion of settlements. The spatial strategy proposes the delivery of 7,500 new jobs based on a predicted	No specific issues identified.	Minor positive  The Vision and Strategic Objectives have been amended to refer to improving skills in Midsomer Norton/Radstock.

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	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
	<p>level of jobs by ward. therefore that the provision of additional new employment is important.</p> <p>The Hicks Gate option could provide employment, which could help to reduce the distances travelled by Keynsham residents for work.</p> <p>The Twerton option may provide space for industrial and bulky retail uses relocated from the city centre and therefore provides good opportunities for contributing to the economy of the city.</p> <p>The Odd Down Plateau option presents opportunities for employment growth to the south of Bath.</p>		<p>increase in GVA of 1.6% up to 2026. This prediction is based on evidence provided within the B&amp;NES Future Housing Growth Requirements to 2026: Stage 2 Report (Keith Woodhead, July 2010). The Newbridge and Riverside areas are identified within the Bath Spatial Strategy for Bath as a contingency for employment development, if supply for new 'town centre' employment generating uses cannot keep pace with demand.</p>		

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SA 11: Reduce the need and desire to travel by car	Urban extensions provide the opportunity to create neighbourhoods with facilities, services and employment which meet day to day needs.	Although day to day needs and some employment could be provided in urban extensions, some commuting into neighbouring areas is inevitable. Development at the Whitchurch location could increase traffic on the A37 which is already congested and the new residents could be affected by the existing congestion issues.	The spatial strategy is dependent on the Bath package and the Greater Bristol bus network coming forward. Focusing development on urban areas presents opportunities for walking, cycling and public transport access for the majority of new residents of redeveloped urban brownfield sites through proximity to the facilities, services and employment the settlements have to offer.	New residents of a redeveloped MoD Endsleigh site to the north of Bath may not have good access to the city centre and local facilities because the site is located on the outskirts of the city. The need for a good public transport service to this site and access to local facilities has been highlighted within the SA.	<p>Minor positive</p> <p>The place based sections of the Core Strategy identify transport infrastructure improvements needed to support the strategy with an emphasis on sustainable means of transport.</p> <p>Reference to the need for sustainable travel to the redeveloped MoD sites has been added to the Bath section. The Bath Package will help to enable the programme of development set out in the spatial strategy in conjunction with further measures to enable convenient and sustainable circulation and access within Bath. Improvements to other public transport, walking and cycling infrastructure and the implementation of 'Smarter</p>

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					Choices' for transport will be pursued e.g. through the development of travel plans for new and existing sites, expansion of car clubs and other appropriate measures.
SA 12: Protect and enhance local distinctiveness	A benefit of urban extensions is that they can be designed comprehensively with a distinctive character.	The Whitchurch option would significantly affect the distinctiveness of Whitchurch village as a separate settlement. Development of the Hicks Gate option would reduce the gap between Keynsham and Bristol and compromise the greenbelt function that the area is currently providing. Both Bath options present challenges in terms of landscape impact, some of which will be difficult to mitigate. Both options could affect the distinctiveness of nearby villages, such as South	By prioritising brownfield development over Greenfield development, the spatial strategy will encourage the regeneration of brownfield sites and reduce the need to develop Greenfield land. Existing green belt functions would be maintained. The spatial strategy avoids impacts on Queen Charlton and significant impacts on the distinctiveness and community cohesion in Whitchurch and avoids effects on the distinctiveness of villages such as South Stoke and Newton St Loe. A strategy with no urban extension to Bath avoids the	Not creating an urban extension in the Hicks Gate area would not improve this approach into Bristol or contribute to creating a sense of place or community for this area. The district strategy makes allowance for Greenfield development and therefore negative landscape effects could occur.	Major positive  The Environmental Quality core policy expects all development to enhance the distinctive qualities and character of the district through high quality design.

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	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
		Stoke and Newton St Loe. The Twerton option would have a major landscape impact as the location is highly visually prominent and would have a negative impact on the integrity of the setting of the Bath World Heritage Site. The Odd Down Plateau option may present landscape and visual effects which can be more effectively mitigated. The Twerton option would have a significant effect on the green belt.	potential significant negative impacts on the World Heritage site and its setting, and visual and landscape impacts which protects these important elements of the distinctiveness of Bath.		
SA 13: Protect and enhance the district's historic, environmental and cultural assets	Urban extensions can present opportunities for the integration of historic and cultural assets into green infrastructure ensuring their protection.	The Twerton option would have a negative impact on the integrity of the setting of the Bath World Heritage Site. The Whitchurch option would have impacts on the setting of Grade II* Lyons Court Farm and the medieval field pattern at	The district strategy prioritises the redevelopment of brownfield land in the main urban settlements over Greenfield land. This presents an opportunity to improve the setting of historic assets and conservation areas, as long	Development within Bath has the potential to affect the Bath World Heritage Site and townscape. The district strategy still makes allowance for Greenfield development and therefore suitable control of development will be required,	Major positive  The Environmental Quality core policy expects all development to enhance the distinctive qualities and character of the district through high quality design. Policies in the Bath section



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<b>SA Objectives</b>	<b>Spatial options October 2009 (including urban extensions)</b>		<b>District Spatial Strategy Publication Core Strategy 2010 and Submission Core Strategy 2011 (not including urban extensions)</b>		<b>Residual effects* of the District Spatial Strategy and measures which support the delivery of the Spatial Strategy included within the Core Strategy policies</b>
	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
		the edge of Whitchurch. The Whitchurch option has the potential to impact the setting of the scheduled ancient monument Maes Knoll and the Chew Valley skyline but impacts could potentially be avoided. According to consultation responses, no significant archaeological potential has so far been identified at the Hicks Gate site. The Odd Down Plateau option could potentially affect the Wansdyke ancient monument.	as the design of development is suitably controlled and encouraged to do so. Redevelopment proposed within Keynsham has the potential to regenerate the High Street. The avoidance of urban extensions in the spatial strategy should reduce the risk of adversely affecting historic sites on the edges of the main urban areas, such as the Wansdyke, and reduces the risk of adversely affecting the World Heritage Site in Bath.	through the core policies and the development management policies within the forthcoming Place Making DPD.	also include significant guidance on urban design/place making principles that development proposals within the city should adhere to, including a policy protecting the Bath World Heritage Site and its setting.
SA 14: Encourage and protect habitats and biodiversity (taking account of climate change)	An urban extension at Hicks Gate could improve the management of the SNCI. Urban extensions present the opportunity to be designed with an integrated	All sites are Greenfield and could result in the loss of habitats. The Whitchurch location could potentially result in the loss of Skylark habitat. There are some nature conservation features within the Hicks Gate area, including a	The spatial strategy focuses development in the main urban areas, prioritises brownfield development over Greenfield and does not propose any green belt urban extensions. The focus of new development mainly on brownfield land supports	The development of brownfield sites and Greenfield sites which the spatial strategy allows for could result in some adverse effects to habitats and species.	Major positive.  The Environmental Quality core policy seeks to protect and enhance biodiversity and ensure networks and restored/ created to facilitate migration through the built as well as natural environment.

<b>Table E1: Summary of Key Positive and Negative Effects of Spatial Options (October 2009) and the Core Strategy District Spatial Strategy</b>					
<b>SA Objectives</b>	<b>Spatial options October 2009 (including urban extensions)</b>		<b>District Spatial Strategy Publication Core Strategy 2010 and Submission Core Strategy 2011 (not including urban extensions)</b>		<b>Residual effects* of the District Spatial Strategy and measures which support the delivery of the Spatial Strategy included within the Core Strategy policies</b>
	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
	multifunctional green infrastructure network, which provide SUDS / surface water infiltration / rainwater interception, habitats and recreation functions.	SNCI bordering the site. The Odd Down Plateau option (and possibly also the Twerton option) has the potential to affect bats which are highly protected. The Twerton option could affect habitats of the River Avon.	the protection of biodiversity.		This also links with the Green infrastructure core policy which seeks to protect and enhance the network of multifunctional green infrastructure across the district, lining into surrounding areas.
SA 15: Reduce land, water, air, light, noise pollution	None	All of the urban extensions present the potential to introduce pollution in places which currently do not experience it. All of the options could contribute to increasing air pollution through increasing traffic generation.	The avoidance of urban extensions within the district strategy should avoid the risk of introducing light and noise pollution into areas which previously did not suffer from this type of pollution. By directing development into the existing areas, to brownfield sites, the spatial strategy will maximise opportunities for new residents to access work, education, facilities and service via walking, cycling and public transport.	Although the growth proposed in Bath in the Spatial Strategy Key Diagram is underpinned by the Bath package of transport measures, the growth proposed in Bath could exacerbate the existing poor air quality within much of the city. Similarly, growth in Keynsham could also exacerbate the air quality issue on the High Street.	Minor positive and minor negative  The place based sections identify transport infrastructure improvements needed to support the strategy with an emphasis on sustainable means of transport.
SA 17: Ensure	Large scale	None	No specific issues have been	Due to the townscape	Minor positive

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	<b>Positive effects</b>	<b>Negative effects</b>	<b>Positive effects</b>	<b>Negative effects</b>	
the development of sustainable and/or local energy sources and energy infrastructure	developments such as urban extensions offer significant benefits over smaller scale developments in respect of local energy sources and district energy infrastructure, and as such offer greater sustainability benefits in this respect.		identified.	constraints present in Bath, the delivery of low carbon and renewable energy generation as a part of the redevelopment of brownfield sites in the city may be difficult to achieve. In addition, the size of some of the brownfield sites could potentially reduce options for decentralised community heat and power systems, although they could also present opportunities for the provision of heat and power to nearby facilities such as schools and leisure centres.	The reduction of CO <sub>2</sub> emissions is addressed principally through core policies CP1 – CP4. Policy CP4, in particular, provides the context for area based solutions in respect of district heating. Reference is also in the place based policies (including Bath) to the opportunities for District-Heating and other energy reduction measures, including the retrofitting of historic buildings with micro-renewables and energy efficiency measures.
SA 19: Encourage careful and efficient use of natural resources	None	All of the urban extension options would result in the development of Greenfield land and the loss of soil resources. The growth proposed within the spatial options is likely to increase water	The preferred spatial strategy for Bath involves mainly the redevelopment of brownfield land with some potential limited Greenfield development. A benefit of this strategy is the efficient use of land, by avoiding the	The growth proposed within the Spatial Strategy is likely to increase water demand and use of natural resources in construction.	Minor positive. The Sustainable Construction policy, aimed at new build will expect applicants to use national methodologies Code for Sustainable Homes and BREEAM to demonstrate the sustainability credentials of

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		demand and use of natural resources in construction.	development of large areas of Greenfield land.		their scheme.  This policy also requires applicants to demonstrate that waste and recycling during construction and in operation have been addressed as well as the type, lifecycle and source of materials to be used.

\* Effects are over the short, medium and long term unless otherwise stated.