



# Sustainability Appraisal (SA) of the Stroud District Local Plan



**SA Report Addendum**

February 2015

REVISION SCHEDULE					
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## INTRODUCTION

## 1 BACKGROUND

1.1.1 The Stroud District Local Plan is at an advanced stage of preparation, having been submitted to Government for Examination in December 2013. The Local Plan, once adopted, will present a spatial strategy for the District up to 2031. It will determine the distribution of various kinds of development around the District and will provide a policy framework that will ultimately provide the basis for a wide range of planning decisions in the future.

1.1.2 Following his initial review of the submitted Local Plan and the associated evidence and representations, the Government appointed Planning Inspector decided to conduct the Examination of the Plan in two stages. The focus of Stage 1 is strategic issues, whilst Stage 2 will focus on more detailed matters.

1.1.1 Hearing sessions for Stage 1 of the Examination were held on 1-3 April 2014. Subsequent to the hearings, on 2<sup>nd</sup> June 2014, the Inspector issued 'Initial Conclusions' to the Council identifying the need for 'significant further work' before Stage 1 of the Examination could be continued. Specifically, the Inspector reached the conclusion that:<sup>1</sup>

*"Significant further work is necessary to ensure that a soundly based objective assessment of housing and employment requirements has been undertaken, having regard to the assessments already undertaken for the JCS area of the wider strategic housing market area and the relationship with the economic strategy for Stroud and the wider area. Further work is also needed to complete all the outstanding technical evidence to ensure that the strategy, including specific site allocations, is fully justified and soundly based, particularly relating to flood risk, waste water, highways and traffic; this will also involve amendments to the Strategic Infrastructure Delivery Plan. Finally, the detailed amendments to the wording of some of the policies and associated text sought by other prescribed bodies (such as English Heritage, Natural England, Environment Agency and Highways Agency) need to be agreed and finalised... **Once the housing and employment requirements have been re-assessed... the Council might need to consider alternative or additional strategic site allocations.**"*  
[emphasis added]

1.1.2 Subsequently, further work was undertaken in relation to an objective assessment of requirements / needs and the Council went through a process of testing alternative approaches to meeting that need, i.e. alternative 'Growth Scenarios'. As part of this, the alternative Growth Scenarios were subjected to SA, and findings published in an Interim SA Report (Dec 2014) –

[http://www.stroud.gov.uk/docs/planning/planning\\_strategy.asp#s=sectioncontent2&p=lp,BASE\\_evidencebaseadditions](http://www.stroud.gov.uk/docs/planning/planning_strategy.asp#s=sectioncontent2&p=lp,BASE_evidencebaseadditions)

1.1.3 In light of the additional evidence base and discussions with prescribed bodies undertaken during summer 2014 and the alternatives appraisal work undertaken in late 2014, the Council has determined that there is a need to modify the submitted Local Plan, and hence is publishing Proposed Changes (including possible Main Modifications) for consultation at the current time.

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<sup>1</sup> The Inspector's initial conclusions are available at: [www.stroud.gov.uk/docs/localplan/localplanexamination.asp](http://www.stroud.gov.uk/docs/localplan/localplanexamination.asp)



## 2 THIS SA REPORT ADDENDUM

2.1.1 The Local Plan is being developed alongside a process of **Sustainability Appraisal (SA)**, a legally required process that aims to ensure that the significant effects of an emerging draft plan (and alternatives) are systematically considered and communicated. It is a requirement that SA is undertaken in-line with the procedures prescribed by the Environmental Assessment of Plans and Programmes Regulations (the 'SEA Regulations') 2004.

2.1.2 The aim of **this SA Report Addendum** is essentially to present information on the Proposed Changes (including possible Main Modifications) and alternatives. In order to achieve this aim, this SA Report Addendum sets out to answer four questions:

1. What's the scope of the SA?
  - i.e. what are the parameters of the appraisal?
2. What has plan-making / SA involved up to this point?
  - i.e. how has appraisal of alternative Growth Scenarios fed-in to the establishment of Proposed Changes for consultation?
3. What are the SA findings at this stage?
  - i.e. in relation to the Proposed Changes.
4. What happens next?

**N.B.** This report is known as an SA Report 'Addendum' on the basis that it is an Addendum to the SA Report published/submitted in 2013. Whilst the focus of this report is around explaining the 'story' of proposed change-making, and presenting an appraisal of Proposed Changes, there is a need to bear in mind that Proposed Changes will (if carried forward) be implemented alongside the rest of the submitted Local Plan, i.e. that part which is not the focus of Proposed Changes. Hence there is some need to need to read this SA Report Addendum alongside the 2013 SA Report (although efforts are made within this SA Report Addendum to minimise the need to cross-reference).

## PART 1: WHAT'S THE SCOPE OF THE SA?

### 3 INTRODUCTION

3.1.1 The aim of this part of the report is to introduce the reader to the SA ‘scope’, i.e. the sustainability topics and objectives that have been a focus of appraisal (i.e. appraisal of alternatives, the Draft Plan and most recently Proposed Changes). Chapter 4 provides an overview of the SA scope, in the knowledge that further details can be found within the 2013 SA Report. Chapter 5 then presents a review of sources of evidence that have come to light recently, and which influence our understanding of the SA scope.

### 4 OVERVIEW OF THE SA SCOPE

4.1.1 The broad scope of SA work, with respect to the Stroud District Local Plan, is introduced within the SA Report submitted alongside the Draft Local Plan in late 2013. Essentially, the scope is reflected in a list of sustainability topics and objectives, which collectively provide a methodological ‘framework’ for appraisal. The discussion within the SA Report explains that the scope was established following review of the sustainability ‘context’ and ‘baseline’, as well as consultation. The SA framework from the 2013 SA Report is shown below – see **Table 4.1**.

**Table 4.1:** Sustainability topics / objectives (the SA ‘framework’) established through scoping

Topic	Objectives
Air	<ul style="list-style-type: none"> <li>Ensure that air quality continues to improve.</li> </ul>
Biodiversity	<ul style="list-style-type: none"> <li>Create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.</li> </ul>
Climate change mitigation	<ul style="list-style-type: none"> <li>Implement energy efficiency through building design to maximise the re-use of land and buildings, recycle building materials and use renewable sources of energy.</li> <li>Implement strategies that help mitigate global warming and adapt to unavoidable climate change within the District.</li> </ul>
Community & wellbeing	<ul style="list-style-type: none"> <li>Meet the challenge of a growing and ageing population.</li> <li>Encourage social inclusion, equity, the promotion of equality and a respect for diversity.</li> <li>Maintain and improve the community’s health with accessible healthcare for residents.</li> <li>Increase levels of physical activity, especially among the young.</li> <li>Reduce crime and anti-social behaviour.</li> <li>Provide access to the countryside and appropriate land for leisure and recreation use.</li> </ul>
Economy & employment	<ul style="list-style-type: none"> <li>Support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.</li> <li>Develop the local economy within its environmental limits.</li> <li>Maintain and enhance employment opportunities, to meet both current and future needs.</li> </ul>
Housing	<ul style="list-style-type: none"> <li>Provide affordable and decent housing to meet local needs.</li> </ul>
Landscape & heritage	<ul style="list-style-type: none"> <li>Reinforce local distinctiveness, local environmental quality and amenity through the conservation and enhancement of the built and cultural heritage.</li> <li>Conserve and enhance landscapes and townscapes.</li> </ul>
Soil	<ul style="list-style-type: none"> <li>Protect and enhance soil quality.</li> </ul>
Transport & accessibility	<ul style="list-style-type: none"> <li>Promote traffic reduction and encourage more sustainable alternative forms of transport.</li> <li>Restore, manage and promote the canal towpaths as part of the transport infrastructure.</li> </ul>
Waste	<ul style="list-style-type: none"> <li>Minimise the amount of waste produced, maximise the amount that is reused or recycled, and seek to recover energy from the largest proportion of the residual material.</li> </ul>
Water (inc. flood risk)	<ul style="list-style-type: none"> <li>Maintain and enhance the quality and quantity of ground and surface waters.</li> <li>Manage and reduce the risk of flooding in new and existing development.</li> </ul>



## 5 SCOPING UPDATE

5.1.1 The scope of recent SA work has also been influenced by evidence-gathering work undertaken by the Council in late 2014; and representations received from key stakeholder organisations in 2014/15. As such, it is appropriate to present a brief review here, with a view to ensuring that the SA scope is up-to-date.

### 5.2 Scoping update 1: SDC Evidence-base studies

5.2.1 The outcome of the Council's evidence-gathering work in 2014 is presented across a series of reports available on the Council's website (see links below). Key messages are summarised here.

[Assessing the Housing Requirements of Stroud, Forest of Dean and Cotswold; and Note on Care Home Places<sup>2</sup>](#)

5.2.2 This assessment (October 2014) aims to provide an evidence base on which the three councils (Stroud, Forest of Dean and Cotswold) can determine their objectively assessed needs (OAN) for housing<sup>3</sup>. The approach taken is consistent with the housing requirements assessment carried out for the Cheltenham, Gloucester and Tewkesbury Joint Core Strategy (JCS). The assessment report highlights a number of uncertainties involved in predicting future housing need, noting that housing need is particularly sensitive to econometric inputs, including economic growth forecasts for specific sectors. For the Stroud District, the housing need between 2006 and 2031 (i.e. the period of the Stroud Local Plan) is assessed as being 11,200 dwellings.

5.2.3 An additional 'Note of Care Home Places'<sup>4</sup> states that this figure of 11,200 dwellings does not include a requirement for future care home bed spaces. It is suggested that Stroud will need 950 extra care home bed spaces by 2031.

[Gloucestershire Strategic Housing Market Assessment \(SHMA\) Update<sup>5</sup>](#)

5.2.4 In 2013 a SHMA was produced for Gloucestershire as a whole. In December 2014 an update paper was produced to take account of the new OAN figures in identifying the housing mix requirements for each authority.

[Five Year Land Supply Update<sup>6</sup>](#)

5.2.5 This technical document provides an update on the extent to which the Stroud District Council can fulfil the requirement to identify and maintain a five-year supply of deliverable land for housing. The update shows that based on current housing needs projections, an adequate supply of land is available for the next five years (2014 to 2019).

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<sup>2</sup> Figure taken from the 'objectively assessed need (OAN) with extra homes for jobs' category (page 12).

<sup>3</sup> NM Strategic Solutions Ltd (2014) The Objectively Assessed Housing Needs of Stroud, Forest of Dean and Cotswold [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/OANs\\_Stroud\\_Cotswold\\_and\\_Forest\\_of\\_Deal\\_with\\_appendices.pdf](http://www.stroud.gov.uk/info/plan_strat/OANs_Stroud_Cotswold_and_Forest_of_Deal_with_appendices.pdf) (accessed 01/2015).

<sup>4</sup> Stroud District Council (2014) Note on Care Home Places' [online] available at:

[http://www.stroud.gov.uk/info/plan\\_strat/1\\_Note\\_on\\_care\\_home\\_places.pdf](http://www.stroud.gov.uk/info/plan_strat/1_Note_on_care_home_places.pdf) (accessed 01/2015).

<sup>5</sup> Gloucestershire Local Authorities (2014) SHMA Update Paper: Impact of new Objectively Assessed Need figures [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/ev14/PS\\_E13.pdf](http://www.stroud.gov.uk/info/plan_strat/ev14/PS_E13.pdf) (accessed 01/2015)

<sup>6</sup> Stroud District Council (2014) Housing Land Supply Assessment Update at 31 October 2014 [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/3\\_FINAL\\_Six\\_Month\\_Update\\_Report.pdf](http://www.stroud.gov.uk/info/plan_strat/3_FINAL_Six_Month_Update_Report.pdf) (access 01/2015).

### Stroud Employment Assessment<sup>7</sup>

- 5.2.6 This report was prepared specifically to address comments and concerns raised on an earlier February 2013 assessment. Since publication of the February 2013 report, further planning practice guidance (PPG) was produced by Government, which also precipitated a review of the 2013 assessment. The review has also considered the relationship with the wider economic strategy for Gloucestershire, including the latest Strategic Economic Plan (SEP). The review notes that three different forecasting methods exist, considering 1) historic land take up; 2) employment based; and 3) alternative labour supply methods. The results vary between methods and scenarios but the review ultimately concludes that sufficient employment land supply is currently allocated and there is “no immediate need to allocate further land”. The review recommends that the availability of employment land be reviewed every five years.

### Employment Land Availability<sup>8</sup>

- 5.2.7 Between April 2013 and March 2014, Stroud District Council undertook an Employment Land Availability Survey to monitor the supply of employment land in the district. The survey found that, as of March 2014, Stroud District has a net provision of employment land of approximately 116.3ha and a net provision of land for B-class uses of approximately 82ha.

### Growth Scenarios Paper<sup>9</sup>

- 5.2.8 The ‘Growth Scenarios Discussion Papers’ present material considered by Stroud District Council’s Planning Reviews in July and October 2014. These reviews were undertaken to address the Inspector’s recommendation that the council do further work to assess the need for housing in the district over the plan period. The review involved testing of seven new alternative scenarios, with three options (Options A to C) not performing well and the four remaining options (Options D to G) performing similarly at delivering growth in accordance with the Local Plan’s development strategy. This review, along with other technical studies undertaken in 2014 was used to inform the selection of alternative Growth Scenarios to be taken forward for further more detailed assessment (see discussion in Part 2 of this Report).

### Interim Sustainability Appraisal Report<sup>10</sup>

- 5.2.9 An interim SA report was produced in December 2014 to present the findings on the appraisal of alternative growth scenarios. An earlier version of this document had also been made available to the Council in September 2014. Again, this further alternative growth scenarios work was in response to the comments of the Inspector on the Stroud Local Plan submitted for examination in December 2013. The appraisal of alternative Growth Scenarios presented within the 2014 Interim SA Report is reproduced in Part 2 of this SA Report Addendum.

<sup>7</sup> BE Group (2014) Employment Assessment Review - Stroud District Council [online] available at:

[http://www.stroud.gov.uk/info/plan\\_strat/4\\_Employment\\_Assessment\\_Review\\_November\\_2014.pdf](http://www.stroud.gov.uk/info/plan_strat/4_Employment_Assessment_Review_November_2014.pdf) (accessed 01/2015).

<sup>8</sup> Stroud District Council (2014) Employment Land Availability in Stroud District at 01 April 2014 [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/5\\_ELA\\_2014.pdf](http://www.stroud.gov.uk/info/plan_strat/5_ELA_2014.pdf) (accessed 01/2015).

<sup>9</sup> Stroud District Council (2014) Stroud District Local Plan: Growth Scenarios Discussion Papers [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/6\\_Growth\\_scenarios\\_paper.pdf](http://www.stroud.gov.uk/info/plan_strat/6_Growth_scenarios_paper.pdf) (accessed 01/2015).

<sup>10</sup> URS (2014) Sustainability Appraisal (SA) of the Stroud District Local Plan - Interim SA Report [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/7.pdf](http://www.stroud.gov.uk/info/plan_strat/7.pdf) (accessed 01/2015).

### HRA Analysis of Housing Options<sup>11</sup>

- 5.2.10 A Habitat Regulations Assessment (HRA)<sup>12</sup> report was produced in September 2014 to present the findings of the HRA of housing options. Again, this HRA work was in response to the comments of the Inspector on the draft Stroud Local Plan originally submitted for examination in December 2013. In HRA terms, Options A, D and B were found to perform best. This HRA Report was essentially the equivalent of the 2014 Interim SA Report.

### Habitat Regulations Assessment<sup>13</sup>

- 5.2.11 A Habitat Regulations Assessment (HRA) report was produced in November 2014 to present the findings of the HRA of the emerging preferred approach, i.e. the preferred approach to delivering 11,200 homes over the plan period. The HRA concluded that, with the inclusion of proposed amendments, the Stroud Local Plan will not lead to an adverse effect on the integrity of any European sites (either alone or in combination with other plans or projects).

### Role and Function of Settlements Study<sup>14</sup>

- 5.2.12 The Stroud District Settlement Role and Function Study was published in December 2014. The study identifies 57 settlements within the district, grouped into five tiers. The study considers the top three tiers (the largest 32 settlements) which are considered to be the most 'sustainable'. It contains a profile of the settlements, identifying their main roles, how they function now and how this might change in the future focusing on four key topic areas of population and housing, employment, travel to work and access to services and facilities, and retail and community facilities/services. The study is an evidence base to support the identification of distribution strategies.

### Transport Assessment<sup>15</sup>

- 5.2.13 This Local Plan Junction Capacity Assessment was prepared in December 2014 following on from the draft Transport Impact Assessment (TIA) prepared in April 2014. The purpose of the TIA was to estimate the impact of the traffic generated by major developments within the emerging Stroud Local Plan. The Capacity Assessment report was commissioned to consider capacity at additional junctions to inform the infrastructure delivery plan to support the district's growth strategy.

### Infrastructure Delivery Plan Refresh<sup>16</sup>

- 5.2.14 The Infrastructure Delivery Plan (IDP) was refreshed in December 2014 to take into account the emerging preferred approach. The IDP considered four types of infrastructure: regionally critical infrastructure; critical infrastructure; essential infrastructure; and desirable infrastructure. The first three categories are seen as critical to enabling the district's growth aspirations to be realised.

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<sup>11</sup> URS (2014) Stroud Local Plan - HRA Analysis of Housing Options [online] available at:

[http://www.stroud.gov.uk/info/plan\\_strat/8\\_HRA\\_Housing\\_Options\\_Analysis.pdf](http://www.stroud.gov.uk/info/plan_strat/8_HRA_Housing_Options_Analysis.pdf) (accessed 01/2015).

<sup>12</sup> Habitat Regulations Assessment is a statutory process associated with the Conservation of Habitats and Species Regulations 2010 (as amended) whereby the potential effects of a development plan upon Natura 2000 sites (also known as European sites) is evaluated.

<sup>13</sup> URS (2014) Stroud Local Plan Habitat Regulations Assessment - Mid examination version [online] available at:

[http://www.stroud.gov.uk/info/plan\\_strat/9\\_Habitat\\_Regulations\\_Assessment\\_Nov\\_2014.pdf](http://www.stroud.gov.uk/info/plan_strat/9_Habitat_Regulations_Assessment_Nov_2014.pdf) (accessed 01/2015).

<sup>14</sup> Stroud District Council (2014) Stroud District Settlement Role and Function Study [online] available at:

[http://www.stroud.gov.uk/info/plan\\_strat/10\\_Settlement\\_Role\\_Function\\_study\\_December2014.pdf](http://www.stroud.gov.uk/info/plan_strat/10_Settlement_Role_Function_study_December2014.pdf) (accessed 01/2015).

<sup>15</sup> Atkins (2014) Stroud Local Plan Capacity Assessment Final Report [online] available at:

[http://www.stroud.gov.uk/info/plan\\_strat/11\\_FINAL\\_Transport\\_Assessment.pdf?bcsi\\_scan\\_AB11CAA0E2721250=0&bcsi\\_scan\\_filename=11\\_FINAL\\_Transport\\_Assessment.pdf](http://www.stroud.gov.uk/info/plan_strat/11_FINAL_Transport_Assessment.pdf?bcsi_scan_AB11CAA0E2721250=0&bcsi_scan_filename=11_FINAL_Transport_Assessment.pdf) (accessed 01/2015).

<sup>16</sup> Arup (2014) Infrastructure Delivery Plan Refresh Version (Dec 2014) – Revised Growth Scenario [online] available at:

[http://www.stroud.gov.uk/info/plan\\_strat/12\\_FINAL\\_IDP\\_Refresh\\_Jan\\_2015.pdf?bcsi\\_scan\\_AB11CAA0E2721250=0&bcsi\\_scan\\_filename=12\\_FINAL\\_IDP\\_Refresh\\_Jan\\_2015.pdf](http://www.stroud.gov.uk/info/plan_strat/12_FINAL_IDP_Refresh_Jan_2015.pdf?bcsi_scan_AB11CAA0E2721250=0&bcsi_scan_filename=12_FINAL_IDP_Refresh_Jan_2015.pdf) (accessed 01/2015).

### SFRA 2 Addendum Report<sup>17</sup>

- 5.2.15 This addendum was produced in November 2014 specifically to assess flood risk to Site SA5 at Sharpness which has been identified for future development. It was an addendum to the existing Stroud Level 2 Strategic Flood Risk Assessment (SFRA). The addendum concluded that approximately 70% of the site is located within Flood Zone 1 (low risk), with the remaining 30% located in Flood Zones 2 and 3.<sup>18</sup> It is recommended that the Sequential Approach is applied to the site, with development directed towards the least risk part of the site in Flood Zone 1, with further measures taken through the layout and form of the development to manage flood risks. More specific recommendations around avoiding residential uses at basement level and avoiding/reducing impervious areas such as car parking are also made.

### Flood Risk Sequential Test Update<sup>19</sup>

- 5.2.16 The Flood Risk Sequential Test - Assessment of Proposed Development Sites - document was first produced in December 2013, with subsequent updates in April 2014 and again in November 2014. The Flood Risk Sequential Test considers flood risk associated with proposed development sites within the district, with a view to demonstrating that flood risk is being avoided where possible. It is concluded that, despite flood risk at some locations, the proposed approach to growth can occur in a safe and sustainable manner.

## 5.3 Scoping update 2: Representations made by key organisations

- 5.3.1 It is also important to give consideration to messages received from key stakeholder organisations in 2014/15, i.e. representations made on the proposed submission version of the plan, and representations made post submission (see [www.stroud.gov.uk/docs/lp/library.asp](http://www.stroud.gov.uk/docs/lp/library.asp))

### Environment Agency

- 5.3.2 The Environment Agency (EA) made soundness objections to the draft Plan at pre-submission stage but these have now been resolved between the EA and Stroud District Council and the EA confirmed on 13 January 2015 that all their objections had been addressed, i.e. they are broadly satisfied with the emerging approach.

### English Heritage

- 5.3.3 English Heritage raised ten separate points in relation to the plan as published / submitted; however, all of these issues have since been resolved, including through commitments to modify the plan. Issues related to: reflecting, through policy, the centrality of heritage to 'place-making'; glossary definitions; reflecting NPPF text (e.g. through reference protection vs. enhancement); reference to undesignated assets; wording around the level of justification required in order to harm a heritage asset; the need for a heritage strategy to support the Local Plan; planning for heritage assets 'at risk'; and monitoring.

### Highways Agency

- 5.3.4 A statement of common ground (SOCG) between the Highways Agency (HA) and the Council was produced on 12 December 2014. This has resolved outstanding objections made at pre-submission stage, principally relating to the lack of traffic impact evidence to support the spatial strategy and strategic allocations. The results of the Local Plan Junction Capacity Assessment have satisfied the Highways Agency that the impacts can be satisfactorily mitigated by measures to be identified in the Infrastructure Delivery Plan.

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<sup>17</sup> CH2M Hill (2014) Stroud L2 SFRA Addendum Report Site SA5 at Sharpness [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/13\\_Stroud\\_L2\\_SFRA\\_Update\\_Site\\_SA5\\_FINAL\\_REPORT\\_APPENDICES.pdf](http://www.stroud.gov.uk/info/plan_strat/13_Stroud_L2_SFRA_Update_Site_SA5_FINAL_REPORT_APPENDICES.pdf) (accessed 01/2015).

<sup>18</sup> When using the latest Environment Agency Flood Map for Planning (Rivers and Sea).

<sup>19</sup> Stroud District Council (2014) Flood Risk Sequential Test - Assessment of Proposed Development Sites [online] available at: [http://www.stroud.gov.uk/info/plan\\_strat/14\\_Flood\\_Risk\\_Sequential\\_Test\\_Update\\_Nov\\_2014.pdf?bcsi\\_scan\\_E956BCBE8ADBC89F=0&bcsi\\_scan\\_filename=14\\_Flood\\_Risk\\_Sequential\\_Test\\_Update\\_Nov\\_2014.pdf](http://www.stroud.gov.uk/info/plan_strat/14_Flood_Risk_Sequential_Test_Update_Nov_2014.pdf?bcsi_scan_E956BCBE8ADBC89F=0&bcsi_scan_filename=14_Flood_Risk_Sequential_Test_Update_Nov_2014.pdf) (accessed 01/2015).

#### Home Builders Federation

- 5.3.5 The Home Builders Federation (HBF) made a representation to the hearing examination in April 2014 on two matters. Both matters related to identifying housing need, with the HBF suggesting Stroud District Council had not adequately engaged and cooperated with neighbouring local planning authorities (LPAs)<sup>20</sup> in-line with the Duty to Cooperate; and the second related to methodological errors with the SHMAA used as the evidence base for the Local Plan at that time. The first matter was resolved by the Inspector determining that the Council had satisfied the Duty to Cooperate. The second matter has since been a focus of additional work by the Council.

#### Local Enterprise Partnership (LEP)

- 5.3.6 The Gloucestershire Local Enterprise Partnership (known as 'GFirst LEP') is responsible for promoting business and economic development in Gloucestershire. In March 2014 the LEP published a Strategic Economic Plan (SEP) for Growing Gloucestershire.<sup>21</sup> In light of the SEP, the LEP has questioned whether the Plan fully recognises the M5 as a growth corridor and is making the most of opportunities to deliver high quality employment land around junctions 12 and 13 in particular. However, recent correspondence with LEP, and dialogue as part of the latest Employment Assessment, has identified their support for the Local Plan.

#### Natural England

- 5.3.7 The most recent SOCG between Natural England (NE) and the Council was produced on 12 December 2014. NE's main area of concern has been the potential effects of the Local Plan on Rodborough Common Special Area of Conservation (SAC) and the Severn Estuary Special Area of Conservation, Special Protection Area and Ramsar site. In the latest SOCG, NE advised that they are content that the updated HRA has provided a robust assessment of the likely effects of the draft local plan on European Sites. On this basis, they advise that from their perspective the emerging approach is sound.

<sup>20</sup> Neighbouring LPAs are Gloucester City Council, Cheltenham Borough Council, Tewkesbury Borough Council, Gloucestershire County Council, Forest of Dean District Council, Cotswold District Council and South Gloucestershire District Council.

<sup>21</sup> GFirst LEP (2014) Strategic Economic Plan for Growing Gloucestershire [online] available at: [http://www.gfirstlep.com/doc\\_get.aspx?DocID=168](http://www.gfirstlep.com/doc_get.aspx?DocID=168) (accessed 01/2015).

## **PART 2: WHAT HAS PLAN-MAKING / SA INVOLVED UP TO THIS POINT?**



## 6 INTRODUCTION

- 6.1.1 The Local Plan-making / SA process has been ongoing since 2009, as explained within 'Part 2' (*What has the Plan-Making Process Involved up to this Point?*) of the 2013 SA Report. At the current time, however, there is no need to recap that entire 'story'.
- 6.1.2 Post submission, the focus of plan-making has been on 'modification-making' in relation to one specific (and fundamental) plan issue - namely the growth strategy - and so **the aim** of this part of the report is to explain this aspect of the plan-making story. Specifically, **the aim** is to explain the process of developing and appraising alternative Growth Scenarios, and how this then fed into the development of Proposed Changes (including possible Main Modifications).
- 6.1.3 This information is presented in-light of clear regulatory requirements, namely the requirement for the SA Report to present 1) appraisal findings for 'reasonable alternatives' and 2) 'an outline of the reasons for selecting the alternatives dealt with'.
- 6.1.4 This part of the report is structured as follows:
- Chapter 5 – Explains the background to the consideration of alternative Growth Scenarios post submission, i.e. in 2014
  - Chapter 6 – Explains the process of developing alternative Growth Scenarios, with a view to demonstrating the 'reasonableness' of those eventually established
  - Chapter 7 – Presents appraisal findings in relation to the alternatives Growth Scenarios.
  - Chapter 8 – Explains the Council's reasons for developing the Proposed Changes in-light of the appraisal of alternative Growth Scenarios.

N.B. The information presented in Chapter 7 - 9 was previously presented within the **2014 Interim SA Report**.

## 7 BACKGROUND TO THE CONSIDERATION OF ALTERNATIVE GROWTH SCENARIOS

### 7.1 Introduction

7.1.1 Plan-making / SA work has been underway since 2009, with numerous plan-making steps undertaken between this time and the point of plan submission in late 2013. The aim of this chapter is to explain this aspect of the plan-making / SA ‘story’, as it sets the context to more recent plan-making / SA work, i.e. that which has occurred post submission.

### 7.2 Initial alternatives appraisal and development of a preferred strategy (2009–2012)

7.2.1 The Council has been testing alternative Growth Scenarios since **2009**, when an ‘*Alternative Strategies for shaping the future of Stroud District*’ consultation document was published for consultation. An interim SA Report was published alongside, which presented an appraisal of the seven alternative strategies under consideration. The appraisal concluded that:<sup>22</sup>

*“In sustainability terms there are both benefits and disbenefits to the approaches of concentrating and dispersing development. The most favourable approach for the District will therefore be determined by [an informed trade-off between competing objectives]. It may be that a combined approach such as Strategy E which has elements of both a concentrating and dispersing approach would be most favourable. Strategy D [a focus on the Stroud Valley] performs strongly against SA Objectives as it brings benefits associated with regeneration.”*

7.2.2 The alternative broad spatial strategies were also assessed in terms of how they might perform from the point of view of CO<sub>2</sub> emissions and renewable energy generation potential. The three strategies which proposed levels of concentrated growth were found to provide the best opportunity to reduce emissions.<sup>23</sup>

7.2.3 Subsequent to the consultation, further work was undertaken to understand more about the merits of possible locations for growth. Findings of this work were presented in a ‘*Pros and Cons of Potential Locations for Strategic Growth*’ paper in October, **2011**. The document included a ‘Pros and Cons comparison’, which brought together the emerging results of a number of pieces of work. Three interrelated conclusions emerged from this analysis:

1. A ‘hybrid’ approach, concentrating development at a few locations and including canal corridor regeneration presented the most sustainable option for meeting development needs spatially across the district.

2. Development should be focussed at four ‘preferred’ locations:

- Stroud Valleys (various sites) 600 -1,000 homes (and target 1,200-2000 jobs)
- North East of Cam 750 – 1,250 homes (and target 1,500-2,500 jobs)
- West of Stonehouse 1000-1,500 homes (and target 2,000-3,000 jobs)
- Hunts Grove extension 500 – 750 homes

3. The exact distribution of the agreed levels of housing and employment growth (aspiration of two new jobs for every new home built) should be subject to further consultation.

7.2.4 Armed with this ‘bottom-up’ understanding - in addition to the ‘top-down’ understanding achieved via consultation-on and appraisal of the seven alternative broad spatial strategies - the Council was able publish a ‘Preferred Strategy’ for consultation in **2012** – see Box 7.1. A second Interim SA Report was published alongside that presented a high-level appraisal of the preferred strategy alongside an appraisal of the seven alternative strategies. The preferred strategy was found to perform well, with the appraisal highlighting the benefits associated with striking a balance between concentration and dispersal.

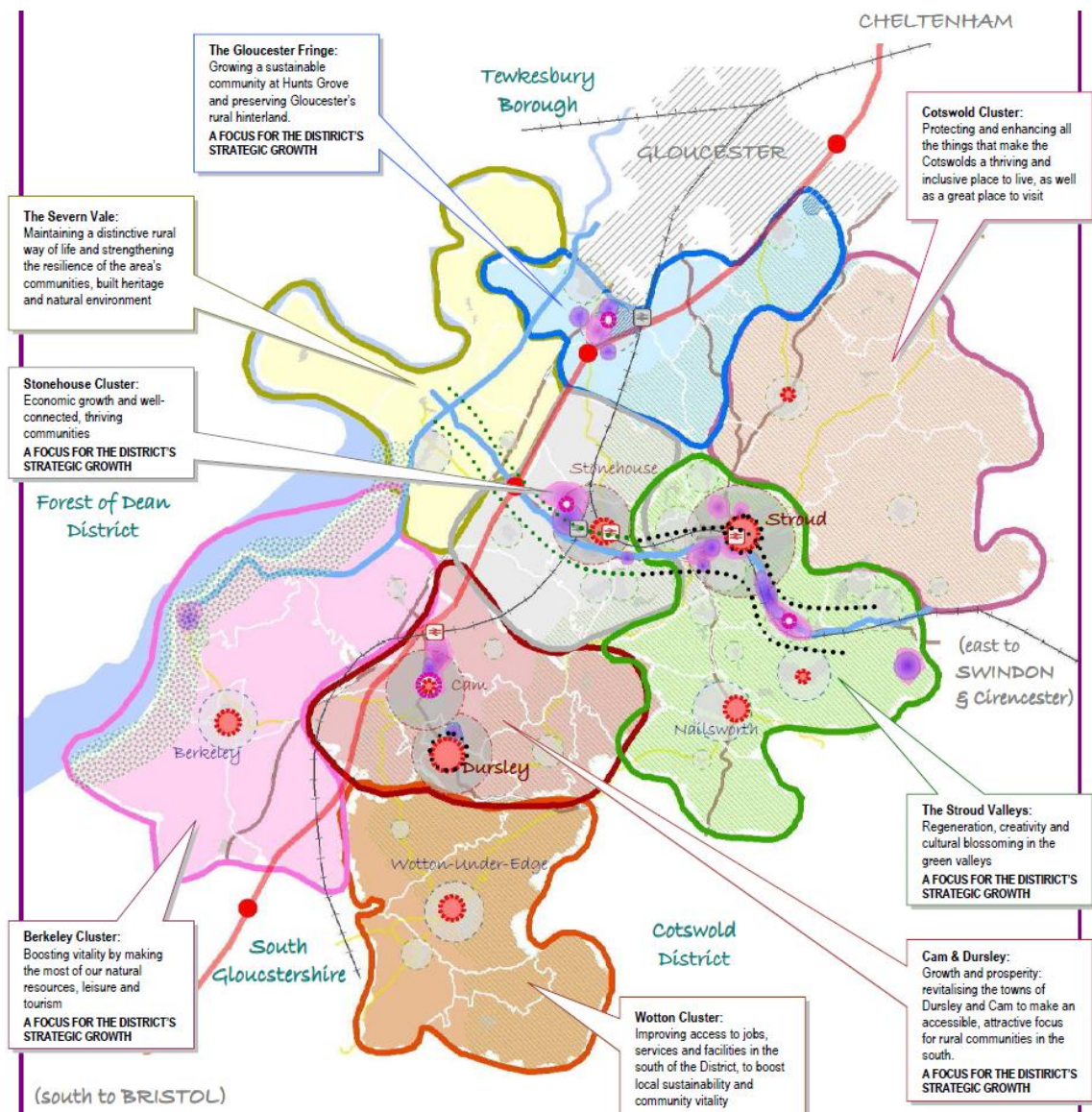
<sup>22</sup> The Interim SA Report is available at: [http://www.stroud.gov.uk/info/plan\\_strat/Alt\\_Strat\\_sustainability\\_appraisal.pdf](http://www.stroud.gov.uk/info/plan_strat/Alt_Strat_sustainability_appraisal.pdf)

<sup>23</sup> The Carbon Footprint Study (Amec, 2011) is available at: [http://www.stroud.gov.uk/info/localplan/carbon\\_footprinting\\_study.pdf](http://www.stroud.gov.uk/info/localplan/carbon_footprinting_study.pdf)

**Box 7.1: Overview of the preferred broad spatial strategy as it stood in February 2012**

The figure below is an extract from the 'Key Diagram' presented in the Council's February 2012 'Preferred Strategy' consultation document. The main things to note are the small pink 'blobs', which represent the locations for strategic growth proposed at this time. These are located –

- On the Gloucester fringe;
- To the west of Stonehouse;
- Around Stroud and along the Stroud Valleys;
- To the north of Cam;
- In the 'Berkley Cluster' area, specifically at Sharpness



### 7.3 Refining the preferred spatial strategy in the build-up to submission (2013)

7.3.1 Subsequent to the 2012 consultation new evidence came to light that identified the possibility of the Local Plan needing to deliver a higher growth quantum than was thought to be the case in 2012, at the time of the 'Preferred Strategy' consultation. As such, the Council set about giving further consideration to site options and alternative scenarios. The alternatives that were the focus of appraisal in early 2013 (and were presented for consultation in the SA Report published alongside the draft Local Plan in September 2013) are presented in **Table 7.1**. Appraisal findings in relation to the 2013 alternatives remain relevant at the current time, and hence are presented (in summary form) within **Appendix 1** of this report.

**Table 7.1: Alternative Growth Scenarios appraised in early 2013**

	9,500 dwellings to 2031			11,500 dwellings to 2031	
	West of S'house only	No west of Stonehouse	Development at all locations	Development at all locations	West of S'house only
Residual requirement <sup>24</sup>	2400	2400	2400	4400	4400
Hunts Grove extension	-	500	500	750	-
North East Cam	-	500	500	750	-
Sharpness	-	250	250	250	-
Stroud Valleys	-	300	300	300	-
West of Stonehouse	1550	-	750	1500	3550
Council house programme	100	100	100	100	100
Windfall	750	750	-	750	750
<b>TOTAL</b>	<b>2400</b>	<b>2400</b>	<b>2400</b>	<b>4400</b>	<b>4400</b>

7.3.2 Appraisal of these alternatives fed-into the development of a preferred approach in June 2013, which was presented for consideration by Stroud District Council's Environment Committee on 8th July 2013 and by the Strategy and Resources Committee on 10th July 2013. The preferred approach as it stood at that time is presented in **Table 7.2**.

**Table 7.2: The preferred approach as it stood in June 2013**

<b>Strategic Sites</b>	
Hunts Grove Extension	500
North East Cam	500
Sharpness	250
Stroud Valleys	300
<b>Non-site specific allowance</b>	
Council housing programme	150
Windfall	750
<b>Total</b>	<b>At least 2,450</b>
Reserve site (if needed): West of Stonehouse	Up to 1,500

<sup>24</sup>Residual requirement equals the number of homes that must be delivered in the plan period minus the number of homes that are already committed, e.g. have planning permission. The residual requirement minus the number of homes that it is assumed will come forward as windfall sites minus the number of homes that will be delivered through the Council house programme equals the number of homes for which land must be allocated by the plan.

7.3.3 The two committees identified a series of changes to the preferred approach, which they considered should be made a condition of Council approval. The changes recommended by each Committee were then subject to consideration by Council on 25th July 2013. Council agreed the following:

- 1) To reduce the quantity of housing at '**North east of Cam**' from 500 to 450 dwellings
- 2) To increase the quantity of housing at **Sharpness Docks** from 250 to 300 dwellings
- 3) To delete any reference to a reserve site at **West of Stonehouse**

7.3.4 The preferred approach that was then published for consultation within the 'Pre-submission' version of the plan, and subsequently submitted to the Secretary of State for Examination, can be seen in **Table 7.3**.

**Table 7.3:** *The preferred approach published / submitted*

<b>Strategic Sites</b>	
Hunts Grove Extension	500
North East Cam	450
Sharpness	300
Stroud Valleys	300
<b>Non-site specific allowance</b>	
Council housing programme	150
Windfall	750
<b>Total</b>	<b>At least 2,450</b>

7.3.5 At Examination hearings in April 2014 the Inspector (appointed by the Secretary of State to oversee the Examination) queried the overall housing and employment requirements, in-light of representations received and the evidence-base to hand. As such, the Council set about undertaking further evidence gathering work and used this as the basis for developing a new set of alternative Growth Scenarios.



## 8 ESTABLISHING ALTERNATIVE GROWTH SCENARIOS

### 8.1 Introduction

8.1.1 In-light of a letter published by the Inspector in June 2014 setting out his initial conclusions in relation to the examination of the plan, the Council set about establishing alternative Growth Scenarios for testing / appraisal. The process essentially involved: 1) considering alternative growth quantum (i.e. levels of housing/employment growth); 2) considering alternative spatial approaches; and the 3) drawing on (1) and (2) to establish a range of ('reasonable') alternative Growth Scenarios for appraisal.

### 8.2 Step 1 (Growth quantum)

8.2.1 The Inspector states in his initial conclusions that further work to establish objectively assessed housing need (OAHN) might result in an updated figure that is similar to the submitted Plan (9,500 homes over the plan period) or a higher or lower figure. However, the Inspector does hint that updated work to establish OAHN would likely lead to the identification of a higher figure, stating that: "*SDC is proposing the minimum level of housing provision and continuing past trends, without significantly boosting housing supply, as required by [para 33 of] the NPPF*". The Inspector refers to the 'What Homes Where' toolkit as a "*useful starting point and baseline figure*." For Stroud, this toolkit identifies potential targets of 10,560 or 11,600 dwellings as a starting point.<sup>25</sup>

8.2.2 In order to establish a robust OAHN figure the Council commissioned a bespoke study in summer 2014. The findings indicate that **10,400** new homes (2006-31) represents OAHN based upon meeting demographic needs.<sup>26</sup> However, once economic growth objectives are factored-in then there is a need to deliver **11,200** homes. A feature of the current population profile of Stroud is a deficit in younger (working age and future working age) groups compared with the JCS authorities<sup>27</sup> or England as a whole.

8.2.3 In conclusion:

- The Council recognised the need to test the **11,200** figure, i.e. reflect this figure in one or more of the Growth Scenarios that are subjected to detailed appraisal. Meeting OAHN need is, of course, a priority objective.
- The Council felt it also appropriate ('reasonable') to test a slightly **lower growth option**, i.e. figure below OAHN, which assumes that the housing shortfall will be met in neighbouring authorities. Stroud is a constrained authority and environmental objectives are high on the agenda; however, it is not clear to what extent, or indeed whether, Stroud is more constrained than other authorities locally. The Council felt it appropriate to test a figure in the region of **10,500** homes. This figure would still meet demographic needs, and is significantly above the figure of 9,500, which was 'preferred' in 2013.
- The Council recognised the need to test a **high growth option**, given uncertainties around economic forecasts. The Council felt that a high growth option would involve in the region of **13,200** homes.
  - There is no evidence at the current time that an even higher figure is deliverable sustainably, i.e. is a 'reasonable option'. Testing a growth option above 13,200 would necessitate the Council changing the broad spatial strategy that has been broadly established since 2010. To do so would necessitate the Council withdrawing the Local Plan from Examination and 'going back to the drawing board'.

<sup>25</sup> The Inspector's initial conclusions are available at: [www.stroud.gov.uk/docs/localplan/localplanexamination.asp](http://www.stroud.gov.uk/docs/localplan/localplanexamination.asp)

<sup>26</sup> The 'demographic need' figure of 10,400 reflects an assumption that the population of Stroud will increase by 16,700 people over the plan period due to births/deaths and immigration, and also a series of assumptions regarding the 'household formation rate'. Most notably, there is an assumption that people in the 25-35 age group will be more likely to want to form households (i.e. less likely to live at home with parents or in shared houses) than has been the case since 2007, i.e. the household formation rate for this age group will move back towards pre-recession levels.

<sup>27</sup> The 'Joint Core Strategy (JCS) authorities' are Gloucester, Cheltenham and Tewksbury.



### 8.3 Step 2 (the spatial approach to growth)

#### Background

- 8.3.1 Delivering a figure higher than 9,500 will necessitate allocation of land additional to that allocated within the submitted version of the Plan (or higher density development, something that is considered an unreasonable option).
- 8.3.2 In light of the Inspector's Initial Conclusions, when considering any further land for housing, there is a need to ensure that *"any amendments to the Plan and its underlying strategy do not result in a fundamentally different spatial approach or strategy or result in substantial modifications which result in a significantly different plan."* The Inspector is clear that changing the broad spatial strategy would necessitate withdrawing the plan from Examination.<sup>28</sup>
- 8.3.3 The spatial strategy is set out in a number of places in the submitted Local Plan. The key elements are:
- *"It is based on concentrated development, focussed on a small number of strategic growth areas, within or adjacent to larger settlements (where there is best access to services, facilities, jobs and infrastructure), rather than dispersed development within smaller settlements"* (para. 2.10);
  - *"The strategy... is to concentrate most development at a series of strategic locations, where housing, jobs and necessary infrastructure can be coordinated and delivered together in a timely manner"* (para. 2.70);
  - *"The strategic sites are located at the principal settlements within and adjoining the District and/or within the key employment property market areas: south of Gloucester, M5/A38 corridor, Stroud Valleys."* (para. 2.71).
- 8.3.4 To reiterate, it was established that all site options considered for inclusion within alternative Growth Scenarios must be in-line with the spatial strategy as set out within the submitted Local Plan.

#### Site options in-line with submitted spatial approach

- 8.3.5 There was a need to think carefully about which site options are in-line with the preferred broad spatial strategy as set out in the submitted plan. In doing so, it was helpful to revisit the analysis presented within the October 2011 'Pros and Cons of Potential Locations' consultation document, and the February 2012 'Preferred Strategy' consultation document.
- 8.3.6 The October 2011 consultation document began by identifying ten areas of search, and preferred / alternative sites within each – see **Table 8.1**.

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<sup>28</sup> The Interim SA Report is available at: [http://www.stroud.gov.uk/info/plan\\_strat/Alt\\_Strat\\_sustainability\\_appraisal.pdf](http://www.stroud.gov.uk/info/plan_strat/Alt_Strat_sustainability_appraisal.pdf)

**Table 8.1: Preferred and alternative sites identified in the 2011 consultation document<sup>29</sup>**

Broad location	Areas of search	Preferred sites	Alternative sites
South of Gloucester	Hardwicke	Hunts Grove, Hardwicke	Hardwicke village
	Whaddon	-	Whaddon
	Upton St Leonards	-	Upton St Leonards & Brockworth
M5 Catchment	A419 Corridor	West of Stonehouse Eastington	-
	A38	-	Whitminster
Cam & Dursley	Cam & Dursley	Cam	-
Sharpness	Sharpness and Newtown	-	Sharpness and Newtown
Stroud Valleys	A419/River Frome/Canal Corridor	Central Stroud / Wallbridge / Cheapside Lodgemore / Fromehall / Dudbridge London Road, Thrupp Brimscombe Port / Brimscombe Mills	Knapp Lane West of Stroud
	A46/Nailsworth Valley	-	A46 / Nailsworth valley
	Edge of Settlement	-	North and east of Stroud Rodborough

8.3.7 Three further points are important to note from the October 2011 consultation document:

- As a result of the detailed analysis, the document concludes by suggesting that within the A419 Corridor West of Stonehouse is preferable, as a location for growth, to **Eastington**.
- The conclusions of the 2011 document introduce the former airfield at **Aston Down** as a location peripheral to the Stroud Valleys broad location that could potentially compensate for any employment losses from redeveloped valley-bottom sites.
- Whilst Stroud Valley '**Edge of Settlement**' sites were not preferred (i.e. were assigned 'alternative' status), the document concludes that: *"To achieve the highest possible housing numbers in the valleys might involve developing some of the alternative locations as well"*. Elsewhere in the document (page 33) the door is left open to the idea of Edge of Settlement sites supplementing the preferred (Valley Bottom) locations, with two options identified: 1) Edge of Settlement development as a genuine alternative to the strategic focus in the valleys (up to 700 homes); or 2) 100-300 homes on one or two sites, as a supplement to valley-bottom sites if sufficient capacity cannot be found at the preferred locations.
- Similarly, whilst the Stroud Valley '**West of Stroud**' sites were assigned 'alternative' status, the document concludes that there may be a need to bring these into the mix. Specifically, the conclusion is that: *"Up to 100 homes might be accommodated on alternative valley-bottom sites to the west of Stroud (Ryeford), although this may be a location better suited to*

<sup>29</sup> The 2011 'Pros and Cons' document is at: [www.consultation.stroud.gov.uk/planning-strategy/http-consultation-stroud-gov-uk-planning\\_strategy/supporting\\_documents/sites%20and%20locations\\_pros%20and%20cons%20comparison%20FINAL%20201011.pdf](http://www.consultation.stroud.gov.uk/planning-strategy/http-consultation-stroud-gov-uk-planning_strategy/supporting_documents/sites%20and%20locations_pros%20and%20cons%20comparison%20FINAL%20201011.pdf)

*employment growth.*” The **A46/Nailsworth Valley** was also identified as alternative location within the Stroud Valleys where “*up to 50 homes might be accommodated*”.

- 8.3.8 Subsequent to the October 2011 consultation further discussion with landowners of the ‘alternative’ site at **Sharpness** led to a conclusion that it should be a preferred location for growth, albeit only a location for modest growth, i.e. intensification of employment plus 200-250 homes. The conclusion was reached that some modestly scaled residential and leisure based mixed use development could help to cross subsidise the enhancement and development of employment premises here, but this location is too remote from services and transport infrastructure to be suited to large scale housing growth.<sup>30</sup>
- 8.3.9 The outcome of the October 2011 consultation, and subsequent further work, was the publication of a Preferred Strategy for consultation in February 2012 – see Box 5.1, above.
- 8.3.10 In light of the above discussion, **Table 8.2** lists those sites that fed into the consideration of alternative Growth Scenarios in 2014. The list is made up of:
- Sites that comprised the Preferred Strategy in 2012, and
  - Eastington which appeared in the 2011 Pros and Cons document as an alternative preferred location for growth within the A419 corridor (part of the M5 Catchment).

**Table 8.2:** Sites able to feed into the identification of alternative Growth Scenarios at the current time

Broad location	Sites
South of Gloucester	Hunts Grove, Hardwicke
Stroud Valleys	Stroud valleys: (i) Central Stroud / Wallbridge / Cheapside (ii) Lodgemore / Fromehall / Dudbridge (iii) London Road, Thrupp (iv) Brimscombe Port / Brimscombe Mills and the following alternatives (if required): (v) Edge of Stroud (vi) Valley bottom Nailsworth valley (vii) West of Stroud (Ryeford) (viii) Aston Down
Cam & Dursley	North East Cam
M5 Catchment	West of Stonehouse Eastington
Sharpness and Newtown	Sharpness Docks

- 8.3.11 Site / growth options that were screened-out, i.e. established as being *not* in contention for inclusion within spatial strategy alternatives in 2014 (but which continue to be actively promoted by land-owners / developers), include large scale developments at Whaddon and Sharpness/Newtown. These options are not considered to be in accordance with the submitted strategy, having been rejected at the development of the preferred strategy stage in 2011/12. If the Council sought to include these site options within the plan then the Inspector would likely require the Council to withdraw its current plan. Withdrawing the plan at this late stage would involve substantial delay to the Local Plan, with the consequent risk of further speculative development undermining the principle of plan led growth.

<sup>30</sup> This conclusion was presented in the 2012 Preferred Strategy consultation document.

## 8.4 Step 3 (Establishing alternative Growth Scenarios)

8.4.1 Given the need to test alternative growth quanta, and not test approaches that would involve modifying the broad spatial strategy, the following alternative Growth Scenarios were identified:

- **Scenario A** – Using the existing Plan allocations but increasing their capacities and/or extending them, reflecting views expressed recently through representations on the plan;
- **Scenario B** – Maximising growth at the principal town, drawing on greenfield peripheral locations identified in 2011 but not subsequently taken forward;
- **Scenarios C and D** – Growth in the M5 catchment area, drawing on two locations (Eastington and West of Stonehouse) identified in 2011 but not subsequently taken forward;
- **Scenarios E, F and G** - Composite scenarios, combining elements of Scenarios A, B and C to achieve higher growth levels to a maximum of 13,200.

8.4.2 The alternative Growth Scenarios are explained in detail in **Table 8.3** and **Table 8.4**. Further points to note regarding the alternatives are as follows:

- Current commitments (i.e. completed dwellings for the period 2006 to 2014 and sites with planning permission at 1 April 2014) total approximately 7,300 dwellings. Other ‘givens’ (i.e. figures that are constant across the alternatives) are the windfall allowance figure, which the Inspector stated “seems reasonable”, and the Council’s agreed council housing programme.<sup>31</sup>
- The alternatives reflect the need to consider extended sites at ‘North East Cam’ and ‘Hunts Grove’, i.e. larger schemes at these sites than was the case in the submitted plan. As such, it was recognised that there was a need to ensure that the extension areas had been subjected to the same level of analysis as all other areas under consideration. The SA Report submitted alongside the Local Plan in 2013 explains how all ‘**site options**’ were subjected to criteria-based (GIS) analysis; however, no analysis was had been undertaken for the area covered by the extension to Hunts Grove. As such, there was a need to update the analysis prior to finalising the alternative Growth Scenarios. The updated analysis of site options is presented in **Appendix II**.

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<sup>31</sup> The Inspector’s initial conclusions are available at: [www.stroud.gov.uk/docs/localplan/localplanexamination.asp](http://www.stroud.gov.uk/docs/localplan/localplanexamination.asp)

Table 8.3: Alternative Growth Scenarios

Scenario			Low	Low	Low	Medium	Medium-High	High	High
Potential sites	Preferred Strategy 2012	Submitted Local Plan 2013	Option A: <b>EXTEND EXISTING SITES</b> Increase/extend existing sites	Option B: <b>STROUD FOCUS</b> Existing sites + additional valley + edge of Stroud + Aston Down	Option C: <b>M5 CATCHMENT: EASTINGTON FOCUS</b> Existing sites + North of Eastington	Option D: <b>ALTERNATIVE M5 CATCHMENT: STONEHOUSE FOCUS</b> Existing sites + West of Stonehouse	Option E: <b>EXTEND EXISTING SITES + STONEHOUSE</b> Increase/extend existing sites + West of Stonehouse	Option F: <b>EXTENDED GROWTH AT PREFERRED STRATEGY AREAS</b> Increase/extend existing sites + additional valley + edge of Stroud + Aston Down + West of Stonehouse	Option G: <b>+ EXTENDED GROWTH AT M5 CATCHMENT</b> Increase/extend existing sites + additional valley + edge of Stroud + Aston Down + West of Stonehouse + Eastington
<b>Existing commitments 2006-2014</b>		7,050	7300	7300	7300	7300	7300	7300	7300
<b>Hunts Grove</b>	500-750	500	750	500 -750	500 - 750	500 - 750	750	750	750
<b>North East Cam</b>	200-500	450	750	450 - 750	450 - 750	450 - 750	750	750	750
<b>Sharpness</b>	200-250	300	300	300	300	300	300	300	300
<b>Stroud Valleys</b>	300-800	300	550* *Additional valley	1150* *Additional valley / Edge of Stroud / Aston Down	400	400	550* *Additional valley	1150* *Additional valley / Edge of Stroud / Aston Down	1150* *Additional valley / Edge of Stroud / Aston Down
<b>North of Eastington</b>					700				700
<b>West of Stonehouse</b>	1000-1500					1350	1350	1350	1350
<b>Council housing</b>		150	150	150	150	150	150	150	150
<b>Windfall</b>		750	750	750	750	750	750	750	750
<b>Total</b>		9500	10550	10600 - 11150	10550 - 11100	11200 - 11750	11900	12500	13200

**Table 8.4: Breakdown of the approach to growth at Stroud Valleys under each Growth Scenario**

Scenario			Low	Low	Low	Medium	Medium-High	High	High
Potential sites	Preferred Strategy 2012	Submission Local Plan 2013	Option A: <b>EXTEND EXISTING SITES</b> Increase/extend existing sites	Option B: <b>STROUD FOCUS</b> Existing sites + additional valley + edge of Stroud + Aston Down	Option C: <b>M5 CATCHMENT: EASTINGTON FOCUS</b> Existing sites + North of Eastington	Option D: <b>ALTERNATIVE M5 CATCHMENT: STONEHOUSE FOCUS</b> Existing sites + West of Stonehouse	Option E: <b>EXTEND EXISTING SITES + STONEHOUSE</b> Increase/extend existing sites + West of Stonehouse	Option F: <b>EXTENDED GROWTH AT PREFERRED STRATEGY AREAS</b> Increase/extend existing sites + edge of Stroud + Aston Down + West of Stonehouse	Option G: <b>+ EXTENDED GROWTH AT M5 CATCHMENT</b> Increase/extend existing sites + edge of Stroud + Aston Down + West of Stonehouse + Eastington
<b>Stroud valley bottoms</b>	300-800	300 30 Cheapside 50 Ham Mills 40 B'combe Mill 100 B'combe Port 50 Wim'ley Mills 30 Dockyard Works	400 30 Cheapside 100 Ham Mills 40 B'combe Mill 100 B'combe Port 100 Wim'ley Mills 30 Dockyard Works	400 30 Cheapside 100 Ham Mills 40 B'combe Mill 100 B'combe Port 100 Wim'ley Mills 30 Dockyard Works	400 30 Cheapside 100 Ham Mills 40 B'combe Mill 100 B'combe Port 100 Wim'ley Mills 30 Dockyard Works	400 30 Cheapside 100 Ham Mills 40 B'combe Mill 100 B'combe Port 100 Wim'ley Mills 30 Dockyard Works	400 30 Cheapside 100 Ham Mills 40 B'combe Mill 100 B'combe Port 100 Wim'ley Mills 30 Dockyard Works	400 30 Cheapside 100 Ham Mills 40 B'combe Mill 100 B'combe Port 100 Wim'ley Mills 30 Dockyard Works	400 30 Cheapside 100 Ham Mills 40 B'combe Mill 100 B'combe Port 100 Wim'ley Mills 30 Dockyard Works
<b>Additional valley bottoms</b>	200-700?	-	150 120 Dudbridge 30 Dudbridge Hill	150 120 Dudbridge 30 Dudbridge Hill			150 120 Dudbridge 30 Dudbridge Hill	150 120 Dudbridge 30 Dudbridge Hill	150 120 Dudbridge 30 Dudbridge Hill
<b>Edge of Stroud</b>	100-300	-		400 100 Grange Fields 200 Callowell Farm 50 Kilminster Farm 50 Wade Farm				400 100 Grange Fields 200 Callowell Farm 50 Kilminster Farm 50 Wade Farm	400 100 Grange Fields 200 Callowell Farm 50 Kilminster Farm 50 Wade Farm
<b>Nailsworth valley</b>	Up to 50	-	-	-	-	-	-	-	-
<b>West Stroud - Ryeford</b>	Up to 100	-	-	-	-	-	-	-	-
<b>Aston Down</b>	100-200	-		200				200	200
<b>Total</b>	<b>300-800</b>	<b>300</b>	<b>550</b>	<b>1150</b>	<b>400</b>	<b>400</b>	<b>550</b>	<b>1150</b>	<b>1150</b>



## 9 APPRAISING ALTERNATIVE GROWTH SCENARIOS

### 9.1 Introduction

9.1.1 This chapter presents summary appraisal findings in relation to the alternative Growth Scenarios that were a focus of plan-making in late 2014, i.e. in the build-up to preparing Proposed Changes (including potential Main Modifications). *Detailed* appraisal findings are presented in **Appendix III** at the end of this document.

### 9.2 Appraisal methodology

9.2.1 For each Growth Scenario, the appraisal identifies / evaluates 'likely significant effects' on the baseline, drawing on the sustainability topics / objectives identified through scoping (see Part 1) as a methodological framework. To reiterate, the sustainability topics are as follows:

- Air
- Biodiversity
- Climate change mitigation
- Community & wellbeing
- Economy & employment
- Housing
- Landscape & heritage
- Soil
- Transport & accessibility
- Waste
- Water (inc. flood risk)

9.2.2 **Red shading** is used to indicate significant negative effects, whilst **green shading** is used to indicate significant positive effects. Every effort is made to predict effects accurately; however, this is inherently challenging given the high level nature of the scenarios. The ability to predict effects accurately is also limited by understanding of the baseline (now and in the future under a 'no plan' scenario). In light of this, there is a need to make considerable assumptions regarding how the scenarios will be implemented 'on the ground' and what the effect on particular receptors will be. Where there is a need to rely on assumptions, this is made explicit in the appraisal text. In many instances, given reasonable assumptions, it is not possible to predict likely significant effects, but it is possible to comment on the relative merits of the alternatives in more general terms and to indicate a **rank of preference**. This is helpful, as it enables a distinction to be made between the alternatives even where it is not possible to distinguish between them in terms of 'significant effects'.

9.2.3 Effects are predicted taking into account the criteria presented within Regulations.<sup>32</sup> So, for example, account is taken of the duration, frequency and reversibility of effects. Cumulative effects are also considered (i.e. where the effects of the plan may combine with the effects of other planned or on-going activity that is outside the control of the Stroud Local Plan).

#### Key assumptions

9.2.4 Considerable assumptions are made regarding what can be achieved through development in terms of the delivery of infrastructure and 'planning gain' more generally. There is a general assumption made that large schemes will lead to funds being made available to mitigate many of the impacts associated with growth, deliver services / facilities that benefit residents and also deliver infrastructure that brings environmental benefits. In practice, there can be considerable uncertainty until detailed investigation is completed.

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<sup>32</sup> Schedule 1 of the Environmental Assessment of Plans and Programmes Regulations 2004

### 9.3 Summary appraisal findings

9.3.1 **Table 9.1** presents summary appraisal findings in relation to the alternative Growth Scenarios that were the focus of plan-making in late 2014. To reiterate, within each row (i.e. for each sustainable topic) the columns to the right hand side seek to both categorise the performance of each scenario in terms of 'significant effects' (using **red** / **green** shading) and also rank the alternatives in order of preference.

**Table 9.1: Alternative Growth Scenarios 2014: Summary appraisal findings**

Topic	Scenario A 10,550 by increasing capacities and/or extending existing preferred allocations	Scenario B 10,600 – 11,150 by maximising growth at Stroud	Scenario C 10,550 – 11,100 to include Eastington	Scenario D 11,200 – 11,750 to include West of Stonehouse	Scenario E 11,900 by extending existing sites + West of Stonehouse	Scenario F 12,500 by increasing/extending existing sites + additional valley + edge of Stroud + Aston Down + West of Stonehouse	Scenario G 13,200 by increasing/extending existing sites + additional valley + edge of Stroud + Aston Down + West of Stonehouse + Eastington
Air	4	★1	2	3	5	5	7
Biodiversity	4	4	6	★1	2	2	6
Climate change mitigation	6	7	4	★1	3	4	2
Community and wellbeing	5	6	6	2	★1	3	3
Economy and employment	7	6	5	4	3	★1	★1
Housing	7	6	5	4	3	2	★1
Landscape / heritage	3	5	4	★1	2	6	7
Soil	★1	2	3	3	5	5	5
Transport and accessibility	2	2	2	2	2	★1	2
Waste	N/a	N/a	N/a	N/a	N/a	N/a	N/a
Water (inc. flood risk)	4	3	2	★1	4	4	4

#### Summary discussion

- Air quality is not a major consideration. There could be negative effects as a result of high growth on the Gloucester Fringe (given that there is an Air Quality Management Area located in Gloucester), along the A38/M5 corridor (given the location of one of the AQMAs in Gloucester) or very high growth in the vicinity of Stroud, but any effect is unlikely to be significant.

- There are notable issues in relation to biodiversity, although it is likely that any scenario could be delivered without 'significant' negative effects. Scenarios that are appraised as performing best are those that would *not* involve additional growth in the Stroud Valleys (given proximity to Rodborough Common), would *not* involve development North of Eastington (given proximity to the River Frome corridor) and *would* involve development at West of Stonehouse (a relatively unconstrained location). Another issue is the potential for recreational impacts to the Severn Estuary Special Protection Area. This is a subject that is the topic of ongoing investigation, as discussed within a separate Habitats Regulations Assessment (HRA) Report.
- The scores for 'climate change mitigation' primarily reflect the degree to which each scenario would focus growth, i.e. involve development of large sites. Development of large sites can lead to economies of scale and hence delivery of low carbon heat/power infrastructure can become viable, as can ambitious approaches to sustainable design and construction.
- In terms of 'communities and wellbeing' the appraisal suggests that scenarios perform well where growth would be concentrated at existing first tier settlements. Scenario E is predicted to result in 'significant' positive effects, given that the baseline situation is one whereby a lack of intervention leads to issues around access to services and facilities for an ageing population in the district. It is assumed that a 700 home scheme at North of Eastington would not perform well, although in practice there might be potential to build in measures that ensure good access to services and facilities for new and existing residents. On this basis significant negative effects are not predicted for any scenario.
- High growth scenarios are assumed to perform well in-light of sub-regional economic growth objectives that have been identified by the Gloucestershire Local Enterprise Partnership (LEP). The LEP has also identified the need to support delivery of new employment land in close proximity to M5 junctions, and this is reflected in the ranking assigned to the scenarios. It is suggested that the best performing (high growth) scenarios would lead to significant positive effects, whilst the worst performing (low growth) scenario would lead to significant negative effects; however, there is some uncertainty given that economic forecasting work is ongoing.
- The appraisal under the 'housing' topic is driven primarily by a consideration of the degree to which each scenario is in-line with the findings of the recent Objective Assessed Housing Need Study, although there are possibly some other considerations besides relating to where within the district housing is focused (and hence the degree to which housing need associated with particular towns is met).
- Development of sites on the northern edge of Stroud is an important consideration from a 'landscape' perspective given the potential to impact upon the Area of Outstanding Natural Beauty (AONB). Of the four scenarios that would not involve development on the edge of Stroud, (D) and (E) are best performing on the basis that a large scheme would come forward at West of Stonehouse, a location with a 'medium-low' rating assigned by the Landscape Sensitivity Appraisal (although development would impact upon a number of listed buildings). (D) performs slightly better than (E) on the basis that a smaller scheme might be progressed at North East Cam (assigned a 'medium' sensitivity rating).
- The discussion under the 'soil' heading relates to some less fundamental considerations. The proportion of growth directed to brownfield land is an issue; however it is important to bear in mind that a low growth approach focused on brownfield land does not necessarily perform well given that unmet housing needs would be met elsewhere (i.e. in a neighbouring district) and might well involve greenfield development. It is also noted that a high growth approach at North of Cam would likely necessitate extending the site footprint to the north, which would mean it intersects an area of higher grade agricultural land.
- Major assumptions are made under the 'transport and accessibility' heading regarding the infrastructure capacity upgrades that would be delivered alongside development of large sites, although it is noted that in practice there can be little certainty at this stage. The highways agency has voiced concerns over the capacity issues at M5 junctions 12 and 13 that might arise as a result of certain Growth Scenarios (if it is the case that commuting by car is prevalent). Additional housing development in the Stroud Valleys is assumed to be a positive, although Aston Down is an exception.
- Flood risk is the primary 'water' related issue that need be a focus of the appraisal. Flood risk concerns were voiced by the Environment Agency in 2013 in relation to the preferred approach, although concerns were subsequently resolved (though thorough application of the 'Sequential Test'). Under some of the scenarios sites would be developed for housing that are in flood risk zones and have not passed the Sequential Test – most notably land at Dudbridge – and so it is appropriate to conclude at this stage that these scenarios could lead to significant negative effects, i.e. it is appropriate to apply caution.

## 10 DEVELOPING PROPOSED CHANGES

### 10.1 Introduction

10.1.1 The aim of this Chapter is to explain the Council's reasons for selecting / developing the preferred approach, as set out the within the schedule of Proposed Changes, in-light of the appraisal of alternative Growth Scenarios (and other sources of evidence).

### 10.2 The Council's reasons for developing the Proposed Changes

#### Background

10.2.1 When considering whether any further land for housing may be required, the Inspector stated that it was important that *"any amendments to the Plan and its underlying strategy do not result in a fundamentally different spatial approach or strategy or result in substantial modifications which result in a significantly different plan"* (para. 55). If the Council wishes to take an alternative course of action *"withdrawal may be the most appropriate course of action"* (para. 55).

10.2.2 This leaves the Council with relatively little room for manoeuvre. To avoid the risk that any changes to the Plan result in a fundamentally different plan, any consideration of reasonable site alternatives at this stage in the process should be based on sites which were considered positively in the context of the preferred strategy established during 2011/2012, which were based on the results of technical appraisal and were subject to public consultation. Introducing a new site at this stage which has not been through assessment in the context of the preferred strategy and has not been subject to public consultation through the plan process, would risk the Inspector concluding that the plan is fundamentally different.

#### Alternative Growth Scenarios

10.2.3 Seven alternative growth scenarios were identified, with a view to undertaking further testing and identifying the best performing scenario. Potential site options were grouped according to their relationship to the preferred locations identified in the Preferred Strategy (February 2012) document.

10.2.4 The scenarios were tested against sustainability appraisal criteria and were also assessed against Habitat Regulation Assessment (HRA) criteria. Also, the scenarios were tested to establish those that are most in accordance with the Local Plan's development strategy, with criteria covering: the extent to which growth would be concentrated at the first tier settlements; the size of urban extensions; and the ability to deliver jobs and provide access to public transport services.

10.2.5 The evidence suggests that Growth Scenario D performs better than other scenarios at delivering housing needs in the most sustainable way and in a way that accords with the Local Plan development strategy.

10.2.6 A final wider assessment has looked at planned housing distribution across the District and at the extent to which this reflects and promotes the relative role and function of existing settlements within the District. This analysis has identified that whilst 63% of the housing supply in the submitted Local Plan is identified at the first tier settlements of Cam, Dursley, Stonehouse and Stroud and south of Gloucester, only 3% is identified for Stonehouse, compared with 9% at Cam, 9% at Dursley and 16% at Stroud.

## West of Stonehouse

- 10.2.7 Stonehouse is one of the most sustainable settlements in the District, for example it has the best employment density (ratio of local jobs to working residents) in the District and more people resident in the town work within the town compared with any other settlement. Stonehouse contains the third largest economically active population, and a good range of strategic and local facilities and services. The town also benefits from good transport links within the M5 corridor and a mainline station. On this basis, there is a case for additional housing required to be delivered at Stonehouse. The effect would be to ensure a good balance between planned housing supply and the role of settlements within the District.
- 10.2.8 Growth Scenario D involves the allocation of an additional mixed use allocation at West of Stonehouse. This site was recommended by the Council as a strategic mixed use allocation in the Preferred Strategy consultation document (Spring 2012) and was recommended as a reserve site by officers in July 2013. Although the site was taken out of the submitted plan, the site was assessed as part of the published Sustainability Appraisal (December 2013) and Infrastructure Delivery Plan (July 2013) which underpin the current draft Local Plan.
- 10.2.9 The site is fully in accordance with the development strategy as it involves a planned mixed use urban extension to one of the District's main settlements; it will deliver employment and housing (including over 400 affordable houses) together; and will bring forward significant infrastructure to support the development including a local centre, primary school, open space and community facilities. Whilst it is recognised that the current transport links between the site and the town centre are not ideal, there are opportunities through the allocation to improve these links. The site performs better than other strategic options and performed well in the Carbon Footprint Study (September 2011), in the Preferred Strategy Sustainability Appraisal (2012) and in the Sustainability Appraisal of alternative options published with the submitted plan (December 2013).
- 10.2.10 The additional allocation at Stonehouse will actually provide a better balanced housing distribution for the plan period, ensuring that Stonehouse, a first tier settlement, contributes 15% of the planned housing provision for the plan period, rather than the 3% contained within the submitted plan.

**Table 10.1: Percentage of total planned housing supply 2006-2031**

Location	Submitted Plan	Proposed Changes
Cam	9%	8%
Dursley	9%	7%
Stonehouse	3%	15%
Stroud town	16%	14%
South of Gloucester	26%	22%
Rest of District	37%	34%

10.2.11 A draft policy for a mixed use development West of Stonehouse has been prepared, taking into account policy and infrastructure requirements identified in the supporting technical studies. To ensure a high quality designed development, the draft policy stipulates that the design vision and form and design of the main perimeter elevations will be submitted to and agreed by the Council before reserved matters applications can be considered. This will ensure that design quality is maintained throughout the build out of the development. Furthermore: developers will be required to ensure that the 10 ha of employment land is provided in parallel with housing delivery; over 400 affordable homes will be provided to meet local needs; the development will provide for improvements to transport links with Stonehouse town centre and contributions to a new Stonehouse railway station; a range of community benefits will be provided in parallel with housing delivery including new primary school, local centre including shopping and community building / sports pavilion, contribution to local community services and extensive publicly accessible natural greenspace; and landscaped buffer areas will be put in place to protect the separate identify of Nupend and Nastend.

#### Other locations

10.2.12 A comprehensive review of site opportunities within the **Stroud Valleys** was also undertaken to maximise the amount of housing that could be realistically achieved from brownfield land, whilst reflecting site constraints and issues of deliverability. Analysis identified the opportunity to increase the housing allocation within the Stroud Valleys from 300 dwellings to 450 dwellings by increasing the housing capacity at Ham Mills and Wimberley Mills, to reflect recent active promotion of these sites by site owners through the planning process; and by increasing the housing capacity at Brimscombe Port, to reflect the latest market testing and revised viability testing of the site.

10.2.13 Growth Scenario D also involved exploring opportunities to extend housing allocations at **Hunts Grove** to increase capacity from 500 to 750 dwellings and at **North East Cam** to increase capacity from 450 to 750 dwellings. Whilst land is available in these locations to achieve increased housing capacities, these extensions are not required to deliver 11,200 dwellings under this Growth Scenario. Should additional housing numbers be required over and above 11,200 dwellings, these remain options for further consideration.

10.2.14 Growth Scenario D involves retaining the existing housing allocation at **Sharpness**. This is fully supported by the Canals and River Trust which is currently preparing detailed proposals to deliver the Local Plan allocation.

10.2.15 It is also proposed that a new draft policy is included within the Local Plan supporting the **Berkeley Centre** as a B1-B8 employment and educational resource, supporting the SEP GREEN Skills Project.

#### Development management policy

10.2.16 Discussions have been ongoing since July 2014 with statutory bodies, including the Environment Agency, the Highways Agency, Natural England and English Heritage to overcome outstanding objections to the content of the Local Plan and to discuss potential changes. Statements of common ground have been agreed with these bodies. Recommended changes to the Local Plan to meet their comments include more detailed policy wording to prevent flood risk and improve the wastewater and sewerage network, to avoid adverse impacts on wildlife sites and to support the transport network.



## **PART 3: WHAT ARE THE SA FINDINGS AT THIS STAGE?**

**11 INTRODUCTION**

11.1.1 This ‘Part’ of the SA Report presents appraisal findings in relation to the Proposed Changes that are currently out to consultation.

**12 APPRAISAL OF THE PROPOSED CHANGES**

**12.1 Methodology**

12.1.1 The appraisal identifies and evaluates ‘likely significant effects’ of the Proposed Changes on the baseline, drawing on the sustainability topics / objectives identified through scoping (see Part 1) as a methodological framework. To reiterate, the sustainability topics are as follows:

- Air
- Biodiversity
- Climate change mitigation
- Community & wellbeing
- Economy & employment
- Housing
- Landscape & heritage
- Soil
- Transport & accessibility
- Waste
- Water (inc. flood risk)

12.1.2 The focus of the appraisal is on ‘the Proposed Changes’ (given that it is the Proposed Changes that are currently the focus of consultation); however, explicit consideration is also given to the effects of ‘the Local Plan as modified’ (i.e. the cumulative effects of the Proposed Changes and the rest of the Local Plan),.

12.1.3 Every effort is made to predict effects accurately; however, this is inherently challenging given the high level nature of the policy approaches under consideration, and understanding of the baseline.<sup>33</sup> Given uncertainties there is inevitably a need to make assumptions, e.g. in relation to plan implementation and aspects of the baseline that might be impacted.

12.1.4 Assumptions are made cautiously, and explained within the text. The aim is to strike a balance between comprehensiveness and conciseness/accessibility to the non-specialist. In many instances, given reasonable assumptions, it is not possible to predict significant effects, but it is possible to comment on merits (or otherwise) of the draft AAP in more general terms.

12.1.5 It is important to note that effects are predicted taking account of the criteria presented within Schedule 1 of the SEA Regulations.<sup>34</sup> So, for example, account is taken of the probability, duration, frequency and reversibility of effects as far as possible. Cumulative effects are also considered, i.e. the potential for the AAP to impact an aspect of the baseline when implemented alongside other plans, programmes and projects. These effect ‘characteristics’ are described within the appraisal as appropriate.

<sup>33</sup> The implication being that it is difficult, if not impossible, to identify a ‘cause-effect relationship’ with any certainty.

<sup>34</sup> Environmental Assessment of Plans and Programmes Regulations 2004

## 12.2 Air

12.2.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*“Significant negative effects on the air quality baseline are unlikely given that baseline conditions are currently non-problematic. It is inevitably the case that growth at the scale proposed could have some localised impacts in terms of traffic congestion; however, in general the spatial strategy (dispersed concentration with a focus on areas where there is the potential for public transport and walking/cycling infrastructure improvements) will mitigate this as will the policy measures that will be put in place.”*

12.2.2 The main determinant of effects relates to the spatial growth strategy, although development management policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at ‘valley bottom’ sites within the Stroud Valleys (450 homes rather than 300).

12.2.3 The West of Stonehouse scheme could potentially have implications for air quality, given that additional traffic would be expected along the M5/A38 corridor in the direction of Gloucester, and it is the case that one of the three designated AQMAs is located adjacent to the A38, at Priory Road on the northwest fringe of Gloucester. However, significant negative effects are uncertain, given the absence of evidence from traffic / air quality modelling.

12.2.4 With regards to additional growth in the Stroud Valleys, there could be additional traffic that leads to a deterioration in air quality (and additional traffic generated as a result of the West of Stonehouse scheme could also contribute); however, the air quality baseline is currently relatively high, i.e. there is no designated AQMA. Significant negative effects are unlikely.

12.2.5 With regards to new and altered development management (DM) policy, the Proposed Changes seek to ensure an added emphasis on supporting a ‘modal shift’ from private car use to walking, cycling and use of public transport (see detailed discussion below, under the ‘Climate change’ and ‘Transport’ headings). This will have notable, but not significant positive implications for air quality.

12.2.6 **In conclusion**, although there are some notable implications, the Proposed Changes are **unlikely to lead to significant negative effects** on air quality, either alone or in combination with the rest of the Local Plan as submitted.

## 12.3 Biodiversity

12.3.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*In-light of the findings of Habitats Regulations Assessment (HRA) it is possible to conclude that significant negative effects on biodiversity are unlikely. The HRA focused on impacts to the internationally important sites at Rodborough Common, along the Severn Estuary and at the Cotswold Beechwoods SAC (which is located on the edge of the District away from areas that are a focus of growth). Through this SA it has also been possible to examine the potential for effects to national important sites (i.e. Sites of Special Scientific Interest) and locally important sites (i.e. Key Wildlife Sites). Effects are unlikely on the basis that allocated sites are generally some distance away; nor is there reason to believe that sites in-combination will lead to an impact on any biodiversity site.*

*It is also important to consider ‘biodiversity in the wider landscape’ and the potential for the wider landscape to support ‘connectivity’ between key sites. In this respect the Plan performs well on basis that it sets clear requirements for the maintenance and enhancement of ‘green infrastructure’. If it is the case that delivery of green infrastructure is well managed - i.e. delivered in a targeted fashion in-line with strategic objectives – it may be that there can be a significant positive effect on biodiversity at the District-scale in the long-term as a result of the Plan.*

*The importance of maintaining and enhancing the provision of ‘ecosystem services’ is referenced in relation to open space; however, the concept of ecosystem services is not set to have a prominent role as a metric when determining planning applications. This is understandable given that the concept is an emerging one.*

- 12.3.2 The main determinant of effects relates to the spatial growth strategy, although DM policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at ‘valley bottom’ sites within the Stroud Valleys (450 homes rather than 300).
- 12.3.3 West of Stonehouse is understood to be relatively unconstrained in terms of strategic biodiversity considerations, although it is noted that the site does intersect the edge of the Severn Vale Priority Landscape, and is also c.4.5km from the Severn Estuary SPA. A major development should lead to the potential to design-in green infrastructure, delivering habitats that support or enhance the functioning of the district-wide ecological network, which is a positive; and it is important to bear in mind that alternative locations for schemes of this scale in the sub-region (that are as unconstrained) are likely to be few and far between. On this basis, it is suggested that development West of Stonehouse would lead to positive effects on the biodiversity baseline.
- 12.3.4 Within the Stroud Valleys it is understood that Suitable Alternative Natural Greenspace (SANG) and other mitigation measures (e.g. investment in visitor management) will be required to avoid unsustainable increases in visitor pressure at Rodborough Common Special Area of Conservation (SAC), which is located to the south of Stroud, along with Selsey Common SSSI. This matter has been a focus of detailed Habitats Regulations Assessment (HRA) work, and the conclusion of ‘no likely significant effects’ has been reached, taking into account the fact that additional mitigatory policy will be put in place (see discussion below). It is also the case that brownfield Valley bottom sites may have some ecological value, i.e. may contribute to the role of the valleys as ecological corridors; however, this is somewhat uncertain and it is unlikely that the Proposed Changes would lead to notable effects.
- 12.3.5 With regards to proposed changes to DM policy:
- The National Trust Management Plan for Rodborough Common is listed as a ‘key project’ that will be taken into account through planning applications in the Stroud Valleys.
  - At Sharpness there will now be a need for any proposed schemes to demonstrate compliance with rigorous policy designed to ensure no significant effects to the Severn Estuary SAC/SPA/Ramsar site. For example:
    - *Development must be laid out and designed in order to avoid adverse effects... and new residential units will be located such that the Sharpness Ship Canal separates them from the SAC/SPA/Ramsar site thus avoiding urban pressures such as fly tipping and cat predation.*
    - *B Class employment will be located wholly to the south of the Estate to maximise its separation from the SAC/SPA/Ramsar site given the potential of this type of development to result in noise and other disturbance.*
    - *The ‘island site’ at the north-west of the estate... must be delivered in such a way as to ensure that the hotel is adequately screened from the SPA/Ramsar site and that no direct access is possible onto the foreshore from the island.*
    - *Intertidal works for the marina will only take place between early April and late August.*
    - *Planning applications for Sharpness Docks must include a visitor survey of the Severn Estuary SAC/SPA/Ramsar site within the vicinity of Sharpness Docks in order to inform an evaluation of what increase in recreational pressure would result, define management interventions required to ensure no adverse effect and form a basis for future monitoring; A non-breeding bird survey and an analysis of*

*construction and operational noise, with a view to achieving certain specified aims and ultimately avoiding effects to bird populations; Details of potential mitigation measures, such as identifying and securing bird refuge areas; Careful lighting design, both with regard to security lighting during construction and permanent lighting during occupation, to ensure no increase in illumination of the SAC/SPA/Ramsar site; and Landscaping to create appropriate visual and noise buffers between the development and the SPA/Ramsar site.*

- 12.3.6 Policy ES6 (Providing for biodiversity and geodiversity) has also been strengthened in a number of ways. For example, the following statement has been strengthened: *"The District will have a number of undesignated sites which may still have rare species or valuable habitats. Where a site is indicated to have such an interest, the applicant should observe the precautionary principle and the Council will seek to ensure that the intrinsic value of the site for biodiversity and any community interest is enhanced or at least maintained. Where an impact cannot be avoided or mitigated (including post development management and monitoring), compensatory measures will be sought. The Council may, in exceptional circumstances, allow for biodiversity offsets, to prevent net loss of biodiversity at the District scale. "*
- 12.3.7 Also, it is noted that text committing the Council to future monitoring work (in conjunction with partner organisations) has been strengthened, with a view to ensuring that future project specific HRA work is well informed. More generally, text has been added to guide future future project specific HRA work.
- 12.3.8 For example, the following statements are made:
- "The Council will work with neighbouring Severn Estuary authorities to monitor visitor activities and potential disturbance in the Severn Estuary SPA, which may have implications for future environmental management strategies... Work currently being undertaken is likely to identify a core recreational catchment zone around the Severn Estuary SAC/SPA/Ramsar site in which development proposals that involve a net increase in housing may be required to contribute to the funding of mitigation measures. Due to its scale and relative proximity to the SPA/SAC/Ramsar site the West of Stonehouse development has been specifically identified as requiring application-level HRA, although it should be possible to provide avoidance and mitigation measures. "*
- "... The identified Rodborough SAC impacts result from the proposed growth over the Plan period. In this context a small number of visitors from a particular settlement for example will still make an overall contribution to the identified impacts in the HRA. Development proposals within this core catchment zone will be required to contribute to mitigation measures. The Council commits to working with partners to deliver improvements to Rodborough Common SAC through the delivery of measures including...*
- ... A Supplementary Planning Document (SPD) will be prepared to provide clarity for developers. Where instead of a bespoke solution, provision is made for contributions to be paid and pooled towards implementing the Avoidance and Mitigation Strategy upon which Natural England has been consulted), the District Council will not require an Appropriate Assessment of the planning application. The SPD will be subject to regular monitoring and review to at least coincide with the Local Plan Review."*
- 12.3.9 Finally, it is noted that new Policy SA2 (West of Stonehouse) is set to require a number of measures that should help to ensure that biodiversity impacts are avoided, and opportunities realised. Specifically, there is reference to: an extensive landscape framework; accessible structural natural greenspace; 'a structural landscaping buffer incorporating existing hedgerows and trees'; long term management and maintenance of open spaces to deliver local biodiversity targets (with supporting policy referencing orchards, Great-crested Newts and Barn Owls); a restored watercourse corridor that enhances biodiversity. There is also reference to measures that might be taken as part of the emerging impact avoidance strategy for the Severn Estuary SPA and Special Area of Conservation (SAC).

- 12.3.10 **In conclusion**, the decision to bring forward a large scheme at West of Stonehouse and a higher level of growth at several Stroud Valley sites does have implications for biodiversity, but these have been investigated in detail and the conclusion can be reached that significant negative effects are unlikely. Given the DM policy that is set to be put in place, it may be that development at West of Stonehouse leads to positive effects on the baseline (given that the baseline situation is one whereby piecemeal development at sensitive locations would be likely). It is not thought that the effect of the additional development supported by the Proposed Changes will result in the Stroud Local Plan having a significant negative effect on biodiversity.

## 12.4 Climate change mitigation

- 12.4.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*The discussion under this heading has focused on 1) the degree to which the Plan supports the delivery of low carbon energy infrastructure (in particular, district heating networks) and 2) sustainable construction (i.e. buildings built to high standards of the 'Code for Sustainable Homes' or similar).*

*With regards (1), the concentrated growth strategy should mean that it is possible to design-in district heating schemes; however, there can be little confidence that this will actually happen in practice (given viability considerations). It is noted that the decision taken in July 2013 to allocate 450 homes at 'North east of Cam' rather than 500 homes does have negative implications in terms of the potential to design-in low carbon energy infrastructure (as 500 homes is understood to be a 'threshold' level).*

*With regards (2), it seems that the Plan is set to establish an appropriate policy approach, albeit one that recognises that landscape/townscape/community considerations can sometimes be used as a reason to block measures that might be optimal from a purely climate change mitigation perspective.*

*Overall, the positive measures described under this heading are not sufficient to warrant a 'significant positive effects' conclusion. This is particularly the case given the nature of the 'climate change mitigation baseline' – i.e. it is a global problem – and the fact that an overriding climate change mitigation consideration relates to the degree to which the Plan will support reduced car dependency / car travel (a matter that is discussed further below).*

*It is recommended that appropriate wording is added to the SA policies (or, at least, the SA Policies for sites where viability is less likely to be a concern) with a view to encouraging delivery of low carbon energy infrastructure / district heating networks (in-line with the findings of the Stroud Carbon Footprinting Study).*

- 12.4.2 The main determinant of effects relates to the spatial growth strategy, although DM policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at 'valley bottom' sites within the Stroud Valleys (450 homes rather than 300).

- 12.4.3 The proposed West of Stonehouse scheme is potentially 'a positive' from a climate change mitigation perspective given that there will be economies of scale that increase development viability and the likelihood of climate change mitigation measures being designed-in. A 1,350 mixed use (residential, employment and community uses) scheme will lead to good potential to deliver an optimal district heating scheme - i.e. one that is powered by biomass fuelled combined heat and power (CHP). Also, the fact that employment development and a local centre will be delivered on-site, in addition to new homes, means that there will be some degree of 'self-containment', i.e. per capita need to travel will be relatively low and there will be good opportunities to make some journeys by foot. There is also good potential to access Stroud Town Centre by walking/cycling and public transport.



- 12.4.4 With regards to the proposed higher growth approach in the Stroud Valleys, there is little reason to believe that there will be greater potential to design-in more ambitious energy solutions; however, the sites in question do benefit from relative proximity to Stroud Town Centre.
- 12.4.5 In terms of DM policy, the requirement around Sustainable Construction and Design (Policy ES1) have been strengthened, with the policy now stating that: *“Sustainable design and construction will be integral to new development in Stroud District.”* All planning applications should include evidence that energy efficiency will be ‘maximised’ and renewable and low carbon energy is integrated (through preparation of an energy strategy). There is also a new requirement for all proposals to be accompanied by a Stroud District Sustainable Construction Checklist; and a new commitment to produce an SPD to support implementation of Government low carbon development targets, once these come into force.
- 12.4.6 Also, a number do relate to encouraging a modal shift away from reliance on the private car / towards walking, cycling and use of public transport. Notably, Core Policy (CP) 5 is now set to require that development schemes: *“Be readily accessible by bus, bicycle and foot to shopping and employment opportunities, key services and community facilities. This will contribute towards the provision of new sustainable transport infrastructure to serve the area and seek to minimise the number and distance of single purpose journeys by private cars.”*
- 12.4.7 Finally, it is noted that new Policy SA2 (West of Stonehouse) is set to require a number of measures that should help to per capita carbon emissions are minimised. Specifically:
- Opportunities to improve transport connectivity with Stonehouse town centre for pedestrians, cyclists, public transport and private car;
  - Cycle and pedestrian routes through the development connecting Nastend and Nupend with the town centre, Stroudwater Industrial Estate and Oldends Lane and footpath links from the development to the surrounding rural network, including improvements to the canal towpath;
  - Contributions towards bus services to improve bus frequencies and quality and to connect the development with the town centre;
  - Contributions towards the provision of a new railway station at Stonehouse; and
  - Phasing arrangements to ensure that employment land is developed and completed in parallel with housing land completions and community and retail provision is made in a timely manner.
- 12.4.8 **In conclusion**, the decision to bring forward a large scheme at West of Stonehouse is a significant ‘positive’ from a climate change mitigation perspective, on the assumption that a scheme of this size will enable ambitious ‘energy solutions’ to be designed-in. It is also apparent that a focus of the Proposed Changes is the strengthening of development management policy aimed at encouraging walking, cycling and use of public transport. The effect of the Proposed Changes will be to strengthen the performance of the Local Plan as a whole, although that is not to say that there will be ‘significant effects’ on the baseline.

## 12.5 Community & wellbeing

- 12.5.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*The dispersed concentration strategy will mean that high quality new developments come forward and existing residents also experience the benefits of growth (e.g. as a result of improved access to community infrastructure); and hence the Plan will result in a situation ‘better than the baseline’. However, a higher growth approach is feasible and would likely result in greater benefits, potentially leading to particular community and wellbeing needs being addressed / particular opportunities being realised. It is noted that the decision taken in July 2013 to reduce the quantum of growth directed to North east of Cam (500 to 450) and increase the quantum of growth at Sharpness Docks (250 – 300) [will have implications in terms of the potential to support sustainable communities at these locations].*



*The approach to core and delivery policies is appropriate and will go some way to ensuring that the needs of communities and particular groups within the population are recognised and addressed.*

- 12.5.2 The main determinant of effects relates to the spatial growth strategy, although development management policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at 'valley bottom' sites within the Stroud Valleys (450 homes rather than 300).
- 12.5.3 The proposed West of Stonehouse scheme performs well on the basis that a large mixed-use scheme will enable some degree of 'self-containment', thereby enabling every day needs can be met very locally to some extent (including by walking/cycling), and supporting the establishment of a cohesive, inclusive new community. The site also has good access to the main settlement of Stroud (i.e. existing services and facilities), and there will also be good potential to reach other higher order towns by public transport.
- 12.5.4 In the Stroud Valleys, the decision to deliver an additional 150 new homes across three sites will have positive implications for the achievement of community related objectives. These are accessible locations, and it is assumed that delivery of additional homes will equate to more intensive uses of the sites, and so support objectives around regeneration of the canal corridor and supporting the functioning of Town Centre.
- 12.5.5 In terms of district-wide DM policy, the Proposed Changes do not include any changes to policy that will directly impact on 'communities and well-being; however, it is noted that a new paragraph of supporting text has been added to clarify that the Council will expect planning proposals to address any relevant potential air safety and or aerodrome operation issues in the vicinity of the airfields that operate locally.
- 12.5.6 Finally, it is noted that new Policy SA2 (West of Stonehouse) is set to require a number of measures that should help to ensure development of a sustainable community:
- at least 405 (30%) affordable dwellings, unless viability testing indicates otherwise
  - A local centre incorporating local retail and community uses to meet the needs of the development
  - A two form entry primary school and contributions to secondary school provision
  - Contributions to local community services
  - Accessible structural natural greenspace, allotments and formal public outdoor playing space including sports pavilion/community building
  - Opportunities to improve transport connectivity with Stonehouse town centre for pedestrians, cyclists, public transport and private car
  - Cycle and pedestrian routes through the development connecting Nastend and Nupend with the town centre, Stroudwater Industrial Estate and Oldends Lane and footpath links from the development to the surrounding rural network, including improvements to the canal towpath
  - Traffic calming measures within the development and locality as approved by the Highways Authority
  - Contributions towards bus services to improve bus frequencies and quality and to connect the development with the town centre
  - Contributions towards the provision of a new railway station at Stonehouse
  - Phasing arrangements to ensure that employment land is developed and completed in parallel with housing land completions and community and retail provision is made in a timely manner.

12.5.7 The supporting text also establishes that “*Options for additional healthcare provision will be investigated.*” This is an important consideration, given health-care issues associated with an ageing population locally.

12.5.8 **In conclusion**, the decision to bring forward a large scheme at West of Stonehouse is a significant ‘positive’ from a communities perspective, and it is the case that development management policy is set to be put in place to ensure that opportunities are realised. The effect of the Proposed Changes should be to ensure that the Local Plan leads to **significant positive effects** on the communities and wellbeing baseline.

## 12.6 Economy & employment

12.6.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*The preferred spatial strategy is geared towards achieving targeted employment growth and regeneration and hence should result in significant positive effects in terms of the objectives to “Support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth” and “Develop the local economy within its environmental limits”. The core and delivery policies will help to ensure opportunities for employment growth and regeneration are fully realised. They will also support the achievement of other economic objectives including through supporting the rural economy, town centre ‘functionality’ and tourism.*

12.6.2 The main determinant of effects relates to the spatial growth strategy, although development management policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at ‘valley bottom’ sites within the Stroud Valleys (450 homes rather than 300).

12.6.3 A large mixed-use scheme at West of Stonehouse performs well in terms of supporting priority economic growth objectives around the M5 corridor. The scheme will ensure that skilled workers are attracted to the M5 corridor, and it is the case that a mixed-use scheme will help to ensure that the employment land allocation is viable, and hence built-out. It is understood that 2,000 people will be employed at the West of Stonehouse site by 2031.

12.6.4 With regards to the Stroud Valleys sites, it is understood that the decision to deliver more new homes (150 additional homes across three sites) will not be at the expense of employment floorspace; however, there is some uncertainty in this respect. There is a need to make better employment use of Valley Bottom sites in Stroud.

12.6.5 It is also case that the Proposed Changes reflect the decision to take a different approach at the former Berkeley Power Station site. There is support for a major project to develop a GREEN Skills Centre to provide a training centre for STEM skills related to the renewable energy, engineering and nuclear sectors has been promoted by the Gloucestershire gFirst LEP. Proposals for continued B1-B8 uses on the site or that develop the Skills Centre and education uses will be supported. Alternative uses will not be permitted in the site.

12.6.6 Proposed changes to DM policy are unlikely to have a notable effect in terms of the economy and employment objectives. There are some notable additions to supporting text, however, which indicate that the Local Plan is being prepared with a clear understanding of sub-regional economic objectives, and the role of Stroud. In particular:

- *“For example, the Gfirst LEP Strategic Economic Plan (SEP) (2014) identifies that there are major opportunities for future economic growth along the M5/A38 corridor which is the property market focus for sub-regional industrial and modern office demand.”*
- *“If local planning authorities in the housing market area can demonstrate through their local plan process that there are unmet development and infrastructure needs that could be met more sustainably through provision in Stroud District, these will be considered, including through an early review of this Local Plan, commencing five years from adoption, or December 2019, whichever is the sooner.”*

- 12.6.7 **In conclusion**, the decision to bring forward a large, mixed-use scheme at West of Stonehouse is a significant 'positive' from a perspective of wishing to support sub-regional economic growth objectives. **Significant positive effects** were predicted for the Local Plan as submitted, and the Proposed Changes will lead to a plan that is better performing still.

## 12.7 Housing

- 12.7.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*"It is assumed that the growth quantum is appropriate given objectively assessed housing needs arising locally, but at the same time it is recognised that this point may be up for discussion. The figure of at least 9,500 was arrived at subsequent to consultant reports documented in a Strategic Housing Market Assessment (SHMA), which identified an 'objectively assessed need' of between 9,350 and 10,500 dwellings, with a recommended figure of 9,500 dwellings.*

*The spatial strategy is appropriate from a perspective of wishing to address needs where they arise within the District (including within the rural area) whilst at the same time concentrating development so that delivery of a high proportion of affordable housing is 'viable'. The policy approach to ensuring that specific housing needs (e.g. the needs of Gypsies and Travellers) are addressed is appropriate, and it is recognised that the policy approach to affordable housing requirements is 'a step in the right direction'. Overall, the Plan should result in significant positive effects in terms of the objective to "Provide affordable and decent housing to meet local needs", although this conclusion is somewhat uncertain.*

*The Plan commits to an early review of the Local Plan if evidence comes to light that objectively assessed housing needs will not be met / there will be a housing shortfall; however, an alternative approach would be to include West of Stonehouse in the Plan as a reserve site that would be allocated if needs be. This approach could have the benefit of preventing delay in housing delivery and hence - from a 'housing' perspective - is recommended."*

- 12.7.2 The main determinant of effects relates to the spatial growth strategy, although development management policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at 'valley bottom' sites within the Stroud Valleys (450 homes rather than 300).
- 12.7.3 A size of the scheme proposed at West of Stonehouse should help to ensure that there is the potential to deliver (viably) a good proportion of affordable homes. New Policy SA2 (West of Stonehouse) is set to require: "... at least 405 (30%) affordable dwellings, unless viability testing indicates otherwise."
- 12.7.4 With regards to the decision to deliver more homes at the three Stroud Valleys sites, there are potentially some positive implications for 'housing' objectives. In addition to the simple fact that additional homes will be delivered in a location (Stroud) where there is understood to be housing need, it is possible that increased density schemes will mean that delivery of affordable housing is more likely to become a reality (given increased development viability). It is also worth noting that there will be a greater focus on smaller dwellings (i.e. flats), but it is unclear whether this is a positive or negative, given the breakdown of housing need locally.
- 12.7.5 Proposed changes to DM policy are unlikely to have a notable effect in terms of housing objectives. There are some notable additions to supporting text, however, which indicate that the Local Plan is being prepared with a clear understanding of sub-regional housing objectives, and the role of Stroud. In particular: *"If local planning authorities in the housing market area can demonstrate through their local plan process that there are unmet development and infrastructure needs that could be met more sustainably through provision in Stroud District, these will be considered, including through an early review of this Local Plan, commencing five years from adoption, or December 2019, whichever is the sooner."*

12.7.6 **In conclusion**, the decision to bring forward a large scheme at West of Stonehouse is a significant 'positive' from a perspective of wishing to support sub-regional ('housing market area') housing objectives. **Significant positive effects** were predicted for the Local Plan as submitted, and the Proposed Changes will lead to a plan that is better performing still.

## 12.8 Landscape & heritage

12.8.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*"Given a baseline situation whereby development would come forward at a significant scale in a less well planned way there should be significant positive effects in terms of the objective to "Conserve and enhance landscapes and townscapes." That said, it is recognised that there will obviously be detrimental impacts to landscape at a local level as a result of greenfield development (for example at North East Cam). The core and delivery policies will help to ensure that the negative effects of development are avoided or mitigated and opportunities for landscape enhancement are realised (most of which will relate to conservation of the historic environment)... It is worthwhile noting the decision taken in July 2013 to reduce the quantum of growth at North east of Cam (500 to 450) and increase the quantum of growth at Sharpness Docks (250 – 300). This decision has positive implications from a 'landscape and cultural heritage' perspective. "*

*There is greater certainty in the conclusion that the Plan will result in significant positive effects in terms of the objective to "Reinforce local distinctiveness, local environmental quality and amenity through the conservation and enhancement of the built and cultural heritage". This reflects the fact that growth locations are directed to: two areas where there is an opportunity to make better use of underused / undervalued heritage assets (at Stroud Valleys and Sharpness); and other locations that are relatively unconstrained.*

12.8.2 The main determinant of effects relates to the spatial growth strategy, although development management policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at 'valley bottom' sites within the Stroud Valleys (450 homes rather than 300).

12.8.3 West of Stonehouse is understood to be relatively unconstrained in terms of landscape and heritage considerations, although it is noted that the site does intersect the edge of the Severn Vale Priority Landscape. There will be good potential to address landscape and heritage issues through the masterplanning / planning application process, in-line with new Policy SA2 which is set to require 'accessible structural natural greenspace' and 'a structural landscaping buffer around Nastend and to the east of Nupend incorporating existing hedgerows and trees'. It is also noted that the supporting text refers to: *"a high quality sustainable and distinctive mixed use development accommodated in a series of interlinked neighbourhoods within an extensive landscape framework."* The supporting text also states that:

*"The design vision and form and design of the main perimeter elevations will be submitted to and agreed by the Council before reserved matters applications can be considered. Subsequent applications will be required to demonstrate how they conform to the design vision and masterplan. This will ensure that design quality is maintained through the build out of the development."*

12.8.4 Within the Stroud Valleys there are important heritage considerations; however, it is not thought that the proposal to increase the density of housing at three of the allocated sites will lead to significant implications.

12.8.5 With regards to DM policy, there are some instances of Proposed Changes looking to increase the stringency of requirements around landscape and heritage:

- A reference to 'the historic environment and any heritage assets' is added to Policy CP4, so that it is now set to require developments to: *"create a place with a locally-inspired or distinctive character – whether historic, traditional or contemporary – using appropriate*

*materials, textures and colours, locally-distinctive architectural styles, working with the site topography, orientation and landscape features; as well as protecting or enhancing local biodiversity, the historic environment and any heritage assets); ....”*

- A reference to the potential for proposals outside identified settlement development limits to potentially be appropriate where the development would represent ‘enabling development to maintain a heritage asset of acknowledged importance’.

12.8.6 Also, a new commitment is made within supporting text to produce a Heritage Strategy to supplement the Local Plan. The aim of the strategy will be to positively address the issues and pressures that are facing heritage assets, and it will set out a programme for the appraisal and management of conservation areas and the monitoring of any heritage assets “at risk”.

12.8.7 Several other small changes are made to supporting text with a view to ensuring a positive and proactive approach is taken to heritage conservation. For example, Paragraph 6.60 is modified so as to read: *“Development proposals that involve any harm to or loss of a heritage asset would require clear and convincing justification, in accordance with the NPPF. A development proposal will not be permitted where substantial harm to an existing or potential heritage asset is likely to occur, unless there are substantial public benefits.”*

12.8.8 **In conclusion**, the decision to bring forward a large scheme at West of Stonehouse might be thought of a ‘positive’ from a landscape and heritage perspective, given that this is a relatively unconstrained location; however, there is some uncertainty in this respect. More generally, it is clear that development management policy in relation to heritage is set to be strengthened, and so the effect of Proposed Changes will be to reaffirm the **significant positive effects** predicted in relation to the Local Plan as submitted.

## 12.9 Soil

12.9.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*“Given a baseline situation whereby development would come forward at a significant scale in a less well planned way there should be significant positive effects in terms of the objective to “Protect and enhance soil quality.” It appears that the Plan seeks to make best use of brownfield land by supporting an ambitious growth strategy for the Stroud Valleys. The Plan also avoids greenfield development on the best quality agricultural land and may also support remediation of contaminated land at Sharpness. It is worthwhile noting the decision taken in July 2013 to reduce the quantum of growth at North east of Cam (500 to 450) and increase the quantum of growth at Sharpness Docks (250 – 300). This decision has positive implications from a ‘soil’ perspective.”*

12.9.2 The main determinant of effects relates to the spatial growth strategy, although DM policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at ‘valley bottom’ sites within the Stroud Valleys (450 homes rather than 300).

12.9.3 The Proposed Changes will have mixed effects. The large West of Stonehouse site comprises ‘greenfield’ land that might otherwise be put to agricultural use; however, the other effect of the Proposed Changes is to intensify the use of three brownfield sites in the Stroud Valleys.

12.9.4 **In conclusion**, the mixed effects of the Proposed Changes mean that it is no longer appropriate to conclude that the Local Plan will lead to significant positive effects.



## 12.10 Transport & accessibility

12.10.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*“Car dependency / per capita distance travelled by private car within Stroud will inevitably remain somewhat high compared to the national average given that Stroud is a rural district. However, the Plan is likely to result in an improvement on the baseline. Residents within new communities will have ‘services and facilities’ located nearby and the opportunity to make good use of ‘sustainable travel’ infrastructure (albeit most will also have good access to the major road network). Residents of existing communities will also benefit. As such, significant positive effects are predicted in terms of the sustainability objective to “Promote traffic reduction and encourage more sustainable alternative forms of transport”. Benefits in this respect are also important from a climate change mitigation perspective.*

*It is worthwhile noting the decision taken in July 2013 to reduce the quantum of growth at North east of Cam (500 to 450) and increase the quantum of growth at Sharpness Docks (250 – 300). This decision possibly has negative implications from a ‘transport and accessibility’ perspective. At North east of Cam a lower growth quantum could potentially reduce the potential to: secure funding for improvements to Cam and Dursley railway station; and bring forward employment development locally alongside housing. Regarding Sharpness – the decision to increase the growth quantum is not ideal on the basis that this is a less accessible location.”*

12.10.2 The main determinant of effects relates to the spatial growth strategy, although development management policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at ‘valley bottom’ sites within the Stroud Valleys (450 homes rather than 300).

12.10.3 As has been discussed above (under the ‘climate change mitigation’ heading), the West of Stonehouse scheme will lead to good potential for some degree of ‘modal shift’ away from the private car, and toward walking/cycling and use of public transport; and it is noted that development will lead to the potential to reopen the Stonehouse (Bristol line) railway station. Concerns have been raised by the Highways Agency and others around the capacity of the road network and capacity at key junctions, however, some issues have been resolved over recent months. In particular, the Highways Agency’s concerns have been resolved through work on a Junction Capacity Assessment, which has identified that major mitigation measures are not required.

12.10.4 The Council has also sought to respond to the concerns of the Highways Agency through the addition of a requirement that development on the Gloucester Fringe must not “have a significant detrimental impact on the safe and efficient operation of Junction 12 of the M5.”

12.10.5 In terms of district-wide DM policy, a number of Proposed Changes do relate to encouraging a modal shift away from reliance on the private car / towards walking, cycling and use of public transport. Notably, Core Policy (CP) 5 is now set to require that development schemes: *“Be readily accessible by bus, bicycle and foot to shopping and employment opportunities, key services and community facilities. This will contribute towards the provision of new sustainable transport infrastructure to serve the area and seek to minimise the number and distance of single purpose journeys by private cars.”*

12.10.6 Finally, it is noted that new Policy SA2 (West of Stonehouse) is set to require a number of measures that should help to encourage walking/cycling and use of public transport. Specifically:

- Opportunities to improve transport connectivity with Stonehouse town centre for pedestrians, cyclists, public transport and private car;

- Cycle and pedestrian routes through the development connecting Nastend and Nupend with the town centre, Stroudwater Industrial Estate and Oldends Lane and footpath links from the development to the surrounding rural network, including improvements to the canal towpath;
- Contributions towards bus services to improve bus frequencies and quality and to connect the development with the town centre;
- Contributions towards the provision of a new railway station at Stonehouse; and
- Phasing arrangements to ensure that employment land is developed and completed in parallel with housing land completions and community and retail provision is made in a timely manner.

12.10.7 **In conclusion**, the Proposed Changes perform well, given that growth will be directed to 'accessible' locations and a large scheme at West of Stonehouse will lead to funding being made available for infrastructure upgrades. **Significant positive effects** were predicted for the Local Plan as submitted, and the Proposed Changes will lead to a plan that is better performing still.

## 12.11 Waste

12.11.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*“The core / delivery policies within the Plan should have the effect of ensuring that the design of dwellings affords space for recycling and composting of waste. There is also a helpful policy reference to industrial symbiosis. However, significant effects on the waste management baseline are unlikely.”*

12.11.2 The spatial growth strategy has little, if any implications for the achievement of waste management objectives. In terms of DM policy, the policy approach to Sustainable Construction and Design (Policy ES1) is revisited through Proposed Changes, and one of the additions is a reference to: *“Efficiency in materials use, including the type, life cycle and source of materials to be used”*.

12.11.3 **In conclusion**, the Proposed Changes include only a minor focus on waste reduction / management, and although 'a positive' it is not the case that the Proposed Changes enable a conclusion of significant positive effects in relation to the plan as a whole.

## 12.12 Water (inc. flood risk)

12.12.1 The 2013 SA Report concluded the following in relation to the Local Plan as submitted:

*“In relation to the key matter of flood risk, it is not possible to conclude that the decision to allocate Sharpness as a location for growth will lead to significant negative effects, although there is a degree of uncertainty given long-term (climate change related) considerations.*

*The proposed growth quantum / spatial strategy does not give rise to any other major concerns in terms of water related issues. Detailed and locally specific policy measures are set to be put in place that will ensure that any negative effects associated with development are avoided or mitigated. The policy approach should mean that opportunities (e.g. reducing per capita water footprint) are realised to some extent, but it is not clear that significant positive effects will result.*

*It is worthwhile noting the decision taken in July 2013 to reduce the quantum of growth at North east of Cam (500 to 450) and increase the quantum of growth at Sharpness Docks (250 – 300). On balance, this decision possibly has negative implications from a flood risk perspective (although it is recognised that it should be possible to locate development away from identified flood risk zones).”*



- 12.12.2 The main determinant of effects relates to the spatial growth strategy, although development management policy also has a bearing. With regards to the spatial strategy, the Proposed Changes primarily seek to allocate additional land for a major new mixed-use scheme (1,350 homes, 10ha of employment and a local centre), and increase the scale of growth at ‘valley bottom’ sites within the Stroud Valleys (450 homes rather than 300).
- 12.12.3 Ham Mills, Brimscombe Mill and Wimberley Mills (all of which are the focus of additional housing under the Proposed Changes) are affected by flood risk, but pass the sequential test on the basis that the theoretical housing capacity of the sites has been reduced to a level that enables space for Sustainable Drainage Systems (SuDS) and other flood risk mitigation measures. The Proposed Changes also set out to ensure that policy is in place to guide flood risk mitigation measures at each of these sites, and other sites. Notably:
- For Land at Dudbridge, policy will state: *“The site is significantly constrained by functional floodplain and any redevelopment should not result in any net loss of flood storage. Safe and emergency access considerations are paramount and will need to be fully resolved.”*
  - For Ham Mills, policy will state: *“No development should take place in Flood Zones 3a and 3b at the south eastern end of the site. This area will act as a natural buffer to the river.”*
  - For Brimscombe Mill, policy will state: *“The site should not be developed until the adjoining Cotswold Canal has been reinstated from Brimscombe Port to the Ocean Bridge or until a site specific Flood Risk Assessment demonstrates that the site can be safely developed with more vulnerable development being located in Flood Zone 1 and without increasing flood risk on or off site.”*
  - For Brimscombe Port, policy will state: *“The site should not be developed until the adjoining Cotswold Canal has been reinstated from Brimscombe Port to Ocean Bridge.”*
  - For Wimberley Mills and Dockyard Works, policy will state: *“It is essential that development at Wimberley Mills de-culverts the River Frome to take the site out of the floodplain. Development at Dockyard Works is expected to be phased after the Wimberley development has been completed and to include de-culverting of the Toadsmoor Stream on-site and reinstatement and maintenance of the adjacent Canal channel off site. These measures are to enable development by reducing flood risk and improving river corridor functioning.”*
  - For Land at Quedgeley East, policy will state: *“The development must help to reduce the flood risk to the adjacent M5 Motorway by providing floodplain storage on site and keeping the floodplain and flow paths as open space.”* Furthermore, supporting text states: *“The plans must demonstrate appropriate flood resilience measures including safe access and escape routes in the event of a flood.”*
  - For the Gloucester Fringe, policy will state: *“No built development will be located in Flood Zones 2, 3a and 3b. The Council will also seek opportunities to reduce the overall level of flood risk in the area through the layout, use and form of the development which improves flood storage capacity.”*
  - For Sharpness, policy will now require *“a sequential approach to site layout and flood risk, with more vulnerable development will be located within Flood Zone 1”* and also *“safe access and egress during flood events.”*
  - For the South of Severn Distribution Park (Bekeley Cluster), policy now states: *“It must also be ensured that safe access and egress to the site can be achieved for the 1 in 200 year climate change scenario.”*
  - For the Stroud Valley sites, policy will now require: *“Improvements and restoration of the river corridor for biodiversity and flood risk enhancements.”*
- 12.12.4 Also, a number of proposed changes to DM policy address will lead to benefits in terms of water resources and water quality, through the setting of enhanced requirements around water infrastructure. Notably:

- 12.12.5 For North East Cam, policy will now require: *"Adequate and timely infrastructure to tackle wastewater and surface water attenuation generated by that development in agreement with the relevant water company including any other constraints referred in the Stroud Infrastructure Delivery Plan."*
- 12.12.6 The following is proposed as additional supporting text: *"In the case of hydropower schemes, a Water Framework Directive Compliance Assessment [will be required] and evidence of discussions with the Environment Agency on requirements of the Environmental Permitting Regulations."*
- 12.12.7 Policy ES4 will now state the following order or priority, with regards to dealing with surface water run-off: 1) discharge into the ground (infiltration); 2) discharge to a surface water body; 3) discharge to a surface water sewer, highway drain, or another drainage system; 4) discharge to a combined sewer
- 12.12.8 Finally, it is noted that new Policy SA2 (West of Stonehouse) is set to require a number of measures that should help to ensure that flood risk and water resource/quality impacts are avoided, and opportunities realised. Specifically:
- The acceptable management, maintenance and disposal of surface water including sustainable urban drainage systems (SuDs)
  - Restored watercourse corridor that enhances biodiversity and water quality and improves flood storage and flow routes
  - Adequate and timely infrastructure to tackle wastewater generated by development in agreement with the relevant water companies.
- 12.12.9 **In conclusion**, it is clear that flood risk and water issues are a major focus of Proposed Changes, and that the effect of the Proposed Changes will be to improve the performance of the Local Plan significantly.

## **PART 4: WHAT ARE THE NEXT STEPS (INCLUDING MONITORING)?**

## 14 INTRODUCTION

- 14.1.1 The aim of this part of the report is to explain the steps that will be taken up to the point of plan adoption, and also to present ‘measures envisaged concerning monitoring’.

## 15 PLAN FINALISATION

- 15.1.1 Subsequent to the current consultation, the anticipated timetable is as follows –

- April – Council publishes results of consultation
- w/c 11 May– Resumed Stage 1 Hearings (2-4 days)
- 28/29 May, 2-5 June and 9-12 June – Stage 2 Hearings (10 days)
- June/July – Consultation on Main Modifications (including OAHN changes)
- November – Inspector’s report
- December/January – Council adopts Local Plan

## 16 MONITORING

- 16.1.1 At the time of Adoption a ‘Statement’ will be published that sets out (amongst other things) *‘the measures decided concerning monitoring’*. At the current stage there is a need to present ‘a description of the measures envisaged concerning monitoring’ only.

- 16.1.2 The submission Plan document includes a monitoring framework that is set to be used to assess the performance of the Local Plan over its course up to 2031. The Council state that it will *“provide the key mechanism for ensuring that Council’s vision and the spatial objectives and policies stemming from it are successfully delivered.”* The intention is to publish regular monitoring reports. At the current time, the Council produces annual reports covering: housing land availability; housing land supply; and employment land availability.

- 16.1.3 Many of the proposed monitoring indicators within the submission monitoring framework are appropriate from an SA perspective, i.e. are appropriate given the effects and uncertainties highlighted through appraisal of the plan. Table 19.1 of the submitted SA Report highlights a number of indicators that are supported from an SA perspective. The submitted SA Report also made the following recommendations around monitoring -

- The Council propose to monitor ‘Percentage of granted planning permissions within areas of biodiversity value’ and ‘areas of net biodiversity gain’. Monitoring of biodiversity is important (the appraisal concludes that negative effects are unlikely, but this conclusion is somewhat uncertain). It is **recommended** that these broad monitoring indicators are developed further so that they are specific and measurable.
- The Council propose to monitor ‘Percentage of development approved in areas where there is a need to take account of landscape character’. Again, given that the predicted effects of the Plan are somewhat uncertain it is **recommended** that this broad monitoring indicator is developed further so that it is specific and measurable.
- The Council propose to ‘calculate carbon emissions in the District against a baseline and monitor changes to assess achievement against any targets’. It is **recommended** that there should be a particular focus on emissions from transport and emissions savings as a result of decentralised renewable / low carbon energy generation.

- 16.1.4 The Proposed Changes commit to enhanced monitoring measures in relation to biodiversity (primarily in relation to impacts to European designated sites), and it is also noted that the commitment to produce a heritage strategy will mean enhanced opportunities for monitoring. The appraisal of Proposed Changes presented in Part 3 of this SA Report Addendum does not have any particular implications for monitoring. As such, the three monitoring recommendations listed above still stand.

## APPENDIX I: SUMMARY OF THE 2013 ALTERNATIVE GROWTH SCENARIOS APPRAISAL

### Introduction

As discussed in Chapter 8, the SA Report published / submitted alongside the Stroud Local Plan in 2013 presented an appraisal of alternative Growth Scenarios (as well as an explanation of why the preferred approach was developed subsequent to, and in-light of the appraisal).

It is appropriate to represent summary appraisal findings at the current time, as findings remain to some extent relevant. Appraisal findings are presented in the table below. A discussion of the methodological approach taken can be found in Chapter 9, above (which presents the appraisal of the 2014 Growth Scenarios).

### Alternative Growth Scenarios 2013

	9,500 dwellings to 2031			11,500 dwellings to 2031	
	West of S'house only	No west of Stonehouse	Development at all locations	Development at all locations	West of S'house only
Residual requirement <sup>35</sup>	2400	2400	2400	4400	4400
Hunts Grove extension	-	500	500	750	-
North East Cam	-	500	500	750	-
Sharpness	-	250	250	250	-
Stroud Valleys	-	300	300	300	-
West of Stonehouse	1550	-	750	1500	3550
Council house programme	100	100	100	100	100
Windfall	750	750	-	750	750
<b>TOTAL</b>	<b>2400</b>	<b>2400</b>	<b>2400</b>	<b>4400</b>	<b>4400</b>

### Appraisal findings (2013)

The summary appraisal table from the 2013 SA Report is presented on the following page. To reiterate, within each row (i.e. for each sustainable topic) the columns to the right hand side seek to both categorise the performance of each option in terms of 'significant effects' (using red / green shading) and also rank the alternatives in order of preference.

<sup>35</sup>Residual requirement equals the number of homes that must be delivered in the plan period minus the number of homes that are already committed, e.g. have planning permission. The residual requirement minus the number of homes that it is assumed will come forward as windfall sites minus the number of homes that will be delivered through the Council house programme equals the number of homes for which land must be allocated within the plan.

## Summary appraisal findings: Alternative Growth Scenarios 2013

Sustainability topic	Scenario 1 9,500 homes / West of S'house only	Scenario 2 9,500 homes / No west of Stonehouse	Scenario 3 9,500 homes / All locations	Scenario 4 11,500 homes / All locations	Scenario 5 11,500 homes / West of S'house only
Air	★1	3	3	4	★1
Biodiversity	★1	3	3	3	★1
Climate change mitigation	2	5	4	3	★1
Community & wellbeing	5	2	2	★1	4
Economy & employment	5	3	2	★1	4
Housing	5	3	3	★1	2
Landscape & heritage	★1	★1	★1	4	4
Soil	4	★1	★1	3	5
Transport & accessibility	5	2	2	★1	4
Waste	-	-	-	-	-
Water (inc. flood risk)	★1	2	2	2	★1

**Discussion**

- Option 1** – is a lower growth option that would involve concentrating development at West of Stonehouse. For this reason it performs well in terms of biodiversity issues/objectives. It is suggested that Option 1 also performs well – equally well as Option 5 – in terms of climate change mitigation given the potential to design-in high quality low carbon infrastructure in the form of a district heating network. Option 1 performs poorly in terms of socio-economic considerations given that ‘overconcentration’ would result in missed opportunities locally for housing growth to meet locally arising housing needs, support economic growth / regeneration and enhance access to community services and facilities. Option 1 also performs poorly in terms of ‘soil’ (along with Options 4 and 5) given that housing growth would be delivered on greenfield land / no growth would be focused at brownfield land in the Valleys.
- Options 2 and 3** – are somewhat ‘middle-ground’ options, i.e. options that avoid the need to ‘trade-off’ between competing sustainability objectives (to an extent).
- Option 4** – performs well in terms of a range of socio-economic objectives on the basis that it is a higher growth option that would result in concentrated development at several locations around the district adjacent to existing settlements therefore ensuring the ‘benefits of growth’ (see discussion under Option 1) are spread across the District.
- Option 5** – performs well in terms of biodiversity and climate change mitigation (see discussion above, under Option 1); however, concentrating development at West of Stonehouse would lead to missed opportunities in terms of socio-economic considerations.



## APPENDIX II: UPDATE TO THE SITE OPTIONS APPRAISAL

### Introduction

Chapter 8 of this report explains how appraisal of site options fed into the identification of Growth Scenarios. This appendix presents appraisal findings in relation to site options in isolation.

The information presented below is an update to the site options appraisal presented in Appendix III of the 2013 SA Report.

There is a need to update appraisal findings on three counts:

- 1) One new site option is now 'in the mix' that was not previously appraised in 2013
  - In actual fact, the new site option is an extension to an existing site option. Specifically, there is now a need to consider a parcel of land that is a southern extension of the proposed Hunts Grove site.
- 2) Some flaws in the 2013 analysis have been identified. Specifically, it has been identified that for a small number of criteria (five out of a total of 29)<sup>36</sup> there was a bias against site options located near to the border of Stroud and a neighbouring authority. This is because the criteria considered proximity to various community facilities, but the analysis only took account of proximity to community facilities in Stroud District. The five criteria in question have been removed from the analysis.
- 3) The 'model' used to calculate bus times between site options and various facilities (doctors, post office etc.) has been refined and has been re-run drawing on more up-to-date data.

**Table A** presents the appraisal criteria that have been used for the purposes of site options appraisal. More about the background to these criteria / the reasons for selecting these criteria can be read in Appendix III of the 2013 SA Report.

*Table A: Site appraisal criteria with performance categories<sup>37</sup>*

Biodiversity		
1	Distance to a site designated as being of European importance? <sup>38</sup>	R = <1km A = 1km – 2km G = >2km
2	Distance to a site designated as being of national importance? <sup>39</sup>	R = <400m A = 400 – 800m G = >800m
3	Distance to a site designated as being of local importance? <sup>40</sup>	R = Intersects or is within 25m A = 25m – 400m G = >400m
Community and wellbeing		
4	Bus time to a Major Town?	R = >30 mins A = 15 – 30mins G = <15 mins
5	Bus time to a branded super-market?	R = >30 mins A = 15 – 30mins G = <15 mins

<sup>36</sup> Specifically, the following criteria were used as part of the appraisal of site options in 2013, but are now removed from the analysis on the basis that data to inform the appraisal is available for Stroud only: Bus time to a community centre? Bus time to a leisure facility? Bus time to a primary retail area? Distance to protected outdoor space? Distance to a children's play area?

<sup>37</sup> N.B. A **red** categorisation equates to the prediction of a 'notable constraint', an **amber** categorisation equates to the prediction of a 'potential constraint', and a **green** categorisation equates to the prediction of 'no constraint'.

<sup>38</sup> Special Areas of Conservation, Special Protection Areas and 'Ramsar sites'.

<sup>39</sup> i.e. Sites of Special Scientific Interest (SSSIs)

<sup>40</sup> There are approximately 800 Key Wildlife Sites across Gloucestershire

6	Bus time to a post office?	<b>R</b> = >30 mins <b>A</b> = 15 – 30mins <b>G</b> = <15 mins
7	Bus time to a primary school?	<b>R</b> = >30 mins <b>A</b> = 15 – 30mins <b>G</b> = <15 mins
8	Bus time to a secondary school?	<b>R</b> = >30 mins <b>A</b> = 15 – 30mins <b>G</b> = <15 mins
10	Bus time to a doctor?	<b>R</b> = >30 mins <b>A</b> = 15 – 30mins <b>G</b> = <15 mins
11	Bus time to a pharmacy?	<b>R</b> = >30 mins <b>A</b> = 15 – 30mins <b>G</b> = <15 mins
12	Bus time to a minor injury unit or A&E?	<b>R</b> = >30 mins <b>A</b> = 15 – 30mins <b>G</b> = <15 mins
13	Location in relation to areas of relative deprivation (overall)? <sup>41</sup>	<b>R</b> = Site does not intersect with an 'output area' that is relatively deprived <b>A</b> = Any of the site intersects with an 'output area' that is relatively deprived i.e. in the 20-40% (2 <sup>nd</sup> quintile) most deprived in the district <b>G</b> = Any of the site intersects with an 'output area' that is relatively deprived (i.e. in the 0-20% (1 <sup>st</sup> quintile) most deprived in the district
14	Location in relation to areas of relative income deprivation?	<b>R</b> = Site does not intersect with an 'output area' that is relatively deprived <b>A</b> = Any of the site intersects with an 'output area' that is relatively deprived i.e. in the 20-40% (2 <sup>nd</sup> quintile) most deprived in the district <b>G</b> = Any of the site intersects with an 'output area' that is relatively deprived (i.e. in the 0-20% (1 <sup>st</sup> quintile) most deprived in the district
<b>Landscape and cultural heritage</b>		
15	Location in relation to a Conservation Area?	<b>R</b> = Intersects with <b>A</b> = 0 – 50m <b>G</b> = >50m
16	Location in relation to a Listed Building?	<b>R</b> = Intersects with or is within 10m <b>A</b> = 10 – 25m <b>G</b> = >25m

<sup>41</sup> According to the 'Index of Multiple Deprivation 2010' dataset available @ <https://www.gov.uk/government/publications/english-indices-of-deprivation-2010> .

17	Landscape sensitivity?	Landscape sensitivity is classified using the following 'five point' scale: Low; Medium – Low; Medium; Medium – High; High
<b>Soil</b>		
18	Loss of high quality agricultural land?	<b>R</b> = Grade 1 or 2 <b>A</b> = Grade 3 <b>G</b> = Grade 4
19	Loss of greenfield land / good use of brownfield land?	<b>R</b> = Greenfield <b>A</b> = Mix <b>G</b> = Brownfield
20	Good use of contaminated land?	<b>A</b> = Site contains no contaminated land <b>G</b> = Site contains contaminated land
<b>Transport and accessibility</b>		
21	Proximity to the Stroudwater Navigation, Thames and Severn Canal or Gloucester and Sharpness Canal (opportunity to restore/regenerate canal and open up towpaths)?	<b>R</b> = >1200m <b>A</b> = 400m – 1200m <b>G</b> = <400m
22	Proximity to a National Cycle Route	<b>R</b> = >2km <b>A</b> = 1km – 2km <b>G</b> = <1km
<b>Water</b>		
23	Flood risk (fluvial and coastal)?	<b>R</b> = Zone 3 <b>A</b> = Zone 2 <b>G</b> = Zone 1
24	Surface water flood risk?	<b>R</b> = Deep (1 in 30 yr event) <b>A</b> = Shallow (1 in 30 yr event) <b>G</b> = Neither of the above

### Summary appraisal findings

**Table B** presents summary appraisal findings in relation to the all site options. Those that figure within one or more of the 2014 Growth Scenarios are **highlighted**.

Table B: Summary appraisal findings: Site options

N.B. A **red** categorisation equates to the prediction of a 'notable constraint', an **amber** categorisation equates to the prediction of a 'potential constraint', and a **green** categorisation equates to the prediction of 'no constraint'.

Landscape sensitivity is classified using the following 'five point' scale: **Low (L)**<sup>42</sup>; **Medium – Low (ML)**; **Medium (M)**; **Medium – High (MH)**; **High (H)**

Sustainability topic	Biodiversity			Community and well-being								Heritage & landscape			Soil			Trans & access		Water					
	1. Biodiversity (Euro)	2. Biodiversity (national)	3. Biodiversity (local)	4. Major town	5. Supermarket	6. Post office	7. Primary school	Secondary	10. Doctor	11. Pharmacy	12. Minor injury unit	13. Deprivation	14. Income deprivation	15. Conservation Area	16. Listed building	17. Landscape sensitivity	18. Agricultural land	19. Greenfield/brownfield	20. Contaminated Land	21. Canal restoration	22. Cycle route	23. Flood risk	24. Surface flooding		
Site (with sites reflected in one or more of the alternative growth strategies <b>highlighted</b> )																									
1. Chipmans Platt				Not applicable to employment site options												M									
2. Land adjacent to A419 and M5				Not applicable to employment site options												M									
<b>3. Land adjacent to Old St Georges House</b>				Not applicable to employment site options												M									
4. Land adjacent to Pike Lock Cottage				Not applicable to employment site options												M									
5. Land adjacent to Stroudwater Depot				Not applicable to employment site options												M									
6. Land at Elstub Lane, Cam															MH										
7. Land at Grove Farm				Not applicable to employment site options												M									
8. Land at Nortonwood, Nailsworth															H										
9. Land at Quedgeley Trading Estate East <sup>43</sup>				Not applicable to employment site options												ML									
10. Land east of the Stanley, Upton St Leonards															MH										
11. Land off Bowlers Lane, Cam															MH										
12. Land south of Doctor Newtons Way															MH										
<b>13. Land at Aston Down</b>															B										
14. Land north of Birchall Lane, Upton St Leonards				Not applicable to employment site options												MH									

<sup>42</sup> Sites comprised entirely of brownfield were not a focus of landscape assessment and are assumed to have a 'low' sensitivity. These sites are labelled with a 'B' in Table 3.

<sup>43</sup> This site is a preferred employment allocation in the submitted Local Plan. It is a constant across all scenarios, i.e. there is no suggestion that the preferred approach requires further consideration.

15. Severn Distribution park/Land north of Sanigar Farm <sup>44</sup>	Red	Red	Yellow	Not applicable to employment site options	Yellow	Yellow	Green	Green	ML	Yellow	Red	Yellow	Red	Green	Red	Yellow					
16. Blooms Garden Centre	Green	Green	Green		Red	Red	Green	Green	B	Yellow	Green	Yellow	Red	Red	Red	Red					
17. Eastington Trading Estate	Green	Green	Red		Red	Red	Yellow	Green	B	Yellow	Green	Yellow	Green	Red	Red	Yellow					
18. Land at Bucketts Hill Farm, Newtown	Red	Yellow	Yellow	Yellow	Green	Green	Green	Red	Yellow	Yellow	Green	Green	M	Yellow	Red	Yellow	Yellow	Green	Green	Red	
19. Land east of Dursley	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Green	Green	M	Yellow	Red	Yellow	Red	Red	Green	Red	
20. Land north east of Old Aerodrome Farm	Green	Green	Green	Yellow	Red	Yellow	Yellow	Yellow	Red	Red	Green	Green	B	Yellow	Green	Yellow	Yellow	Red	Green	Yellow	
21. Land South of Green Lane, Hardwicke	Green	Green	Green	Yellow	Green	Yellow	Green	Green	Red	Red	Green	Green	ML	Yellow	Red	Yellow	Yellow	Green	Yellow	Yellow	
22. Land south of Grove Farm, adjacent to M5 J13	Green	Green	Yellow	Not applicable to employment site options				Green	Green	Green	Green	Green	M	Yellow	Red	Yellow	Green	Red	Green	Red	
23. Old MoD recreation & social club, Aston Down	Green	Green	Green	Yellow	Red	Yellow	Yellow	Red	Yellow	Yellow	Red	Red	Green	B	Yellow	Green	Yellow	Yellow	Red	Green	Yellow
24. Upthorpe Farm, Cam	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Yellow	Green	Green	M	Yellow	Red	Yellow	Red	Red	Green	Red	
25. Brimscombe Mills, Thrupp	Yellow	Red	Yellow	Green	Yellow	Green	Green	Green	Red	Red	Red	Green	B	Green	Green	Yellow	Green	Red	Red	Red	
26. Brimscombe Port, Brimscombe	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Red	B	Green	Green	Yellow	Green	Red	Red	Red	
27. Daniels Industrial Estate, Bath Road, Stroud	Red	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	B	Green	Green	Yellow	Green	Red	Green	Green	
28. Former Golden Valley Service Station, Brimscombe	Red	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Red	B	Green	Green	Yellow	Green	Red	Green	Green	
29. Griffin Mills Industrial Estate, Thrupp	Red	Red	Yellow	Green	Green	Green	Green	Green	Red	Red	Red	Red	B	Green	Green	Yellow	Green	Red	Red	Red	
30. Ham Mill, London Road, Stroud	Yellow	Red	Red	Yellow	Green	Green	Green	Green	Red	Red	Red	Red	B	Green	Green	Yellow	Green	Red	Red	Red	
31. Hope Mills Industrial Estate, Brimscombe	Red	Red	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Red	Red	Red	Green	B	Green	Green	Yellow	Green	Red	Red	Red	
32. Land adj football ground, London Road, Brimscombe	Red	Red	Yellow	Yellow	Green	Green	Green	Green	Red	Red	Red	Red	B	Green	Green	Yellow	Green	Red	Red	Red	
33. Land at Coaley Junction, Cam	Yellow	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Green	Red	B	Red	Green	Yellow	Red	Yellow	Green	Yellow
34. Land at Draycott, Cam	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	Green	M	Red	Red	Yellow	Red	Red	Red	Red
35. Land between Millend Lane and Bath Rd, Eastington	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Red	Yellow	Yellow	Green	M	Yellow	Red	Yellow	Yellow	Red	Green	Green	
36. Land between Rowley and Upthorpe, Cam	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Yellow	Green	Green	M	Yellow	Red	Yellow	Red	Red	Red	Red	
37. Land north of Broadfield Road, Eastington	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Red	Red	Red	Green	Red	ML	Yellow	Red	Yellow	Yellow	Red	Green	Yellow
38. Land north of Eastington	Green	Green	Red	Yellow	Green	Green	Yellow	Yellow	Red	Red	Red	Yellow	Green	ML	Yellow	Red	Yellow	Green	Red	Red	Red
39. Land north west of Oak Villa, Brimscombe	Red	Red	Yellow	Red	Green	Green	Red	Yellow	Yellow	Red	Red	Green	ML	Green	Red	Yellow	Yellow	Red	Green	Yellow	
40. Land off Cotswold Avenue, Eastington	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Red	Red	Green	Green	ML	Green	Red	Yellow	Yellow	Red	Green	Green

<sup>44</sup> This site is a preferred employment allocation in the submitted Local Plan. It is a constant across all scenarios, i.e. there is no suggestion that the preferred approach requires further consideration.

41. Land south of Haresfield Lane, Hardwicke															ML										
42. Land south west of Canal Ironworks, Brimscombe															B										
43. Land surrounding Box Road Avenue, Cam															M										
44. Land to the east of Draycott Mills, Cam															M										
45. Land to the north of Millend Lane, Eastington															M										
46. Land to the rear of Nupend Farm, Nupend															M										
47. Land west of Stonehouse															M										
48. Stafford Mills Industrial Estate, Thrupp															B										
49. Strategic Land at Cheapside, Stroud															B										
50. Strategic Land at Dudbridge, Stroud															B										
51. Wallbridge Quay, Stroud															B										
52. Folly Lane, Stroud															MH										
53. Brunsdon Yard, Ryeford, Stonehouse															B										
54. Dockyard Works, off Knapp Lane, Brimscombe															B										
55. Ebley Road, Stonehouse															M										
56. Grange Fields, Stroud															MH										
57. Green Farm, Green Lane, Hardwicke															ML										
58. Hardwicke Green, Hardwicke															ML										
59. Highfields Nursery, Whitminster															M										
60. Land adj. Brockworth Airfield, Upton St Leonards															M										
61. Land adjacent to Pooles Farm, Upton St Leonards															MH										
62. Land at No.13 Ebley Road, Stroud															M										
63. Land at Parklands, Whitminster															M										
64. Land at Purton Cottage, Hardwicke															ML										
65. Land at Sladbrook, Stroud															M										
66. Land at The Pilot Inn, Hardwicke															ML										
67. Land at Whitecroft, Nailsworth															M										
68. Land at Wimberley Mills, Brimscombe															B										



69. Land at Wynnstay, Hardwicke																B							
70. Land behind Farnhill Lane, Stroud																MH							
71. Land behind Summer Street, Stroud																M							
72. Land behind Woodhouse Drive, Rodborough																MH							
73. Land between 13-15 Ebley Road																M							
74. Land between 9-11 Ebley Road																M							
75. Land north west of Whitminster																M							
76. Land off Bisley Old Road, Stroud																M							
77. Land off Bridge Road, Ebley, Stroud																M							
78. Land off Butterow West, Rodborough																MH							
79. Land off Hyde Lane, Whitminster																M							
80. Land off The Stanley, Upton St Leonards																MH							
81. Land south of Bays Hill, Newtown, Sharpness																M							
82. Land south of Callowell Farm, Stroud																MH							
83. Land south of Gloucester, at Whaddon																ML							
84. Land to the rear of Parkland Farm, Whitminster																M							
85. Land west of The Stanley, Upton St Leonards																MH							
86. Mayos Land, Hardwicke																ML							
87. Rear of Perry Orchard, Upton St Leonards																MH							
88. Rodborough Fields, Rodborough																MH							
89. Former garden centre, off Ebley Rd, Stonehouse																B							
90. South Woodchester Industrial Area																B							
91. Summerhill Equestrian Centre, Hardwicke																B							
92. Wades Farm, Slad Road, Stroud																MH							
93. Wallbridge Fields, Rodborough																MH							
94. Ecotown at Sharpness																M							
95. Land at Hopton Road, Cam																M							
96. Land behind Draycott Crescent, Cam																ML							

97. Land east of Tait's Hill Road, Cam	Green	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Green	Green	M	Yellow	Red	Yellow	Red	Red	Green	Red
98. Land north of Hyde Lane, Whitminster	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	M	Yellow	Red	Yellow	Yellow	Yellow	Green	Yellow
99. Land off Birchall Lane, Upton St Leonards	Yellow	Green	Green	Red	Green	Green	Yellow	Green	Green	Yellow	Yellow	Red	Red	Red	Green	MH	Yellow	Red	Yellow	Red	Red	Green	Red
100. Land off Field Lane, Cam	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	MH	Yellow	Red	Yellow	Red	Red	Green	Green
101. Land south east of Hyde Lane, Whitminster	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	M	Yellow	Red	Yellow	Yellow	Yellow	Green	Green
102. Land south of High Street, Upton St Leonards	Yellow	Green	Green	Red	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	MH	Yellow	Red	Yellow	Red	Red	Green	Green
103. Land south of Lower Knapp farm, Cam	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	MH	Yellow	Red	Yellow	Red	Red	Green	Yellow
104. Land to north of community centre, Eastington	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	ML	Yellow	Red	Yellow	Yellow	Yellow	Red	Green
105. Land to north of Lower Knapp Farm, Cam	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	ML	Yellow	Red	Yellow	Red	Yellow	Green	Red
106. Land to west of Lower Knapp Farm, Cam	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	MH	Yellow	Red	Yellow	Red	Yellow	Green	Green
107. Land West of A38, Whitminster	Green	Green	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Yellow	M	Yellow	Red	Yellow	Green	Yellow	Yellow	Yellow
108. Land east of Courthouse Gardens, Cam	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	M	Yellow	Red	Yellow	Red	Red	Green	Yellow
109. Strategic Land at Sharpness	Yellow	Red	Red	Red	Yellow	Green	Yellow	Red	Yellow	Yellow	Yellow	Red	Red	Red	Green	M	Yellow	Yellow	Green	Green	Yellow	Red	Red
110. Hunts Grove southern extension*	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Green	ML*	Green	Red	Yellow	Red	Red	Yellow	Red

\* N.B. Whilst the landscape scores for site options 1 – 109 were assigned subsequent to site visits (see the Landscape Sensitivity Appraisal Report for further details) no site visit was undertaken prior to assigning a 'Medium-low' sensitivity score to Site 110, i.e. the new southern extension to the Hunts Grove site. Rather, it is assumed that the conclusions reached for Site 41 'Land south of Haresfield Lane, Hardwicke', which is the 'Hunts Grove' site, also hold true for site 11. The discussion in the Landscape report refers to the M5 and elevated Junction 12 roundabout, and these issues are equally applicable to the extension. If anything, it might be the case that the Site 110 is less sensitive than Site 41 given its closer proximity to the motorway junction.

## APPENDIX III: THE 2014 ALTERNATIVE GROWTH SCENARIOS APPRAISAL

### Introduction

Chapter 9 presents summary appraisal findings in relation to the alternative Growth Scenarios that were a focus of appraisal in 2014. Detailed appraisal findings are presented within this appendix.

The alternatives are introduced in detail in Chapter 8, but in summary are as follows:

- **Scenario A** – Using the existing Plan allocations but increasing their capacities and/or extending them, reflecting views expressed recently through representations. **10,550** new homes in total.<sup>45</sup>
- **Scenario B** – Maximising growth at the principal town, drawing in greenfield peripheral locations identified in 2011/12 but not subsequently taken forward. **10,600 – 11,150** new homes in total.
- Scenarios C and D – Focusing considerably more growth in M5 catchment area, drawing on two locations (Eastington and West of Stonehouse) identified in 2011/12 but not subsequently taken forward.
  - **Scenario C** (Eastington focus) = **10,550 – 11,100** new homes in total.
  - **Scenario D** (West of Stonehouse focus) = **11,200 – 11,750** new homes in total.
- Scenarios E, F and G - Composite scenarios, combining elements of Scenarios A, B and C to achieve higher growth levels.
  - **Scenario E** (extend existing sites + West of Stonehouse) = **11,900** new homes in total.
  - **Scenario F** (increase/extend existing sites + additional valley + edge of Stroud + Aston Down + West of Stonehouse) = **12,500** new homes in total.
  - **Scenario G** (increase/extend existing sites + additional valley + edge of Stroud + Aston Down + West of Stonehouse + Eastington) = **13,200** new homes in total.

The appraisal **methodology** is explained in detail in Chapter 9, but in summary: For each sustainability topic the performance of each scenario is categorised in terms of 'significant effects (using **red** / **green** text) and also ranked in order of preference.

<sup>45</sup> 'In total' figures comprise existing commitments (7,300 homes) plus new allocations set to be made through the plan. Further explanation is presented in Chapter 3 – see para 3.3.15.

Sustainability Topic: <u>Air</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	4	★ 1	2	3	5	5	7
Significant effects?	Significant effects are not predicted for any scenario						
Discussion	<p>In descending order of preference:</p> <ul style="list-style-type: none"> <li>• <b>(B)</b> performs best as a 500 – 750 home scheme would be directed to Hunts Grove, on the Gloucester Fringe. Gloucester City suffers from localised areas of poor air quality, with three Air Quality Management Areas (AQMA) designated along congested roads. Furthermore, under this scenario growth would be diverted away from the M5/A38 corridor more widely, in that a lower growth approach would also be followed at North East Cam, and no growth would come forward at North of Eastington or West of Stonehouse. One of the three designated AQMA is located adjacent to the A38, at Priory Road on the northwest fringe of Gloucester.</li> <li>• <b>(C) and (D)</b> also perform well on the basis that a 500 – 750 home scheme would be directed to Hunts Grove, and a lower growth approach would also be followed at North East Cam.                     <ul style="list-style-type: none"> <li>– (C) performs better as there would be a 700 home scheme at North of Eastington, rather than a 1,350 home scheme at West of Stonehouse.</li> </ul> </li> <li>• <b>(A)</b> performs fairly well, as despite a larger schemes at Hunts Grove and North East Cam there would be no growth at North of Eastington or West of Stonehouse.</li> <li>• <b>(E), (F) and (G)</b> perform less well on the basis that a 750 home scheme would be directed to Hunts Grove, and a higher growth approach would also be followed at North East Cam.                     <ul style="list-style-type: none"> <li>– (G) performs the worst, as there would also be the most growth within the M5/A38 corridor (i.e. schemes at both North of Eastington and West of Stonehouse). It is not possible to conclude ‘significant negative effects’ however, given: 1) the distance of Hunts Grove from the nearest AQMA; and 2) uncertainties around A38 traffic flows and implications for the nearby AQMA.</li> </ul> </li> </ul> <p>N.B. It is assumed that growth can be delivered in a concentrated fashion at any location without leading to traffic congestion to the extent where air quality becomes a problem. However, this assumption might not hold true under <b>(G)</b> given the scale of growth within and around Stroud (inc. 1,150 homes at Stroud Valleys, 1,350 West of Stonehouse and 700 North of Eastington).</p>						

### Sustainability Topic: Biodiversity

N.B. This discussion should be read alongside the separate Habitats Regulations Assessment (HRA) reports of October/November 2014. HRA focuses purely on the assessment of effects to internationally designated sites.

	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
Rank	4	4	6	★1	2	2	6
Significant effects?	Significant effects are not predicted for any scenario						

Discussion	<p>Sharpness stands out as a sensitive location given nearby internationally important habitats / species assemblages associated with the Severn Estuary Special Protection Area (SPA). However, this need not be a focus of appraisal here (under the heading 'biodiversity' or under any other topic heading) given that the approach to growth is constant across the alternatives (at 300 homes). This scale of growth has passed the Habitats Regulations Assessment (HRA) test, although there is a need to 'keep an eye' on HRA conclusions in light of evolving understanding of cumulative effects, i.e. the effects of development at Sharpness in combination with development elsewhere around the estuary).<sup>46</sup></p> <p>Other issues (in descending order of importance) relate to:</p> <ul style="list-style-type: none"> <li>• North of Eastington, which intersects the 'Frome Valley' Strategic Nature Area, as defined by the Gloucestershire Local Nature Partnership.<sup>47</sup> The river and associated floodplain grazing marsh Key Wildlife Site is located at the northern extent of the site, and so there would be the potential to mitigate impacts through masterplanning / careful design of green infrastructure. North of Eastington is also only 4km from the Severn Estuary SPA.</li> <li>• Stroud Valleys, where it is understood that Suitable Alternative Natural Greenspace (SANG) and other mitigation measures (e.g. investment in visitor management) will be required to avoid unsustainable increases in visitor pressure at Rodborough Common Special Area of Conservation (SAC), which is located to the south of Stroud, along with Selsey Common SSSI.                         <ul style="list-style-type: none"> <li>– It is also the case that brownfield Valley Bottom sites may have some ecological value, i.e. may contribute to the role of the valleys as ecological corridors; however, this is somewhat uncertain.</li> <li>– Finally, it is noted that Kilminster Farm, one of the two small 'Edge of Stroud' sites on the north-eastern edge of Stroud, is adjacent to Slade Wood, which is designated as a Key Wildlife Site and forms part of the Knapp Farm Strategic Nature Area.</li> </ul> </li> <li>• North East Cam, a location that is somewhat sensitive given its location adjacent to the River Cam, although it is recognised that there is the potential to 'design-in' green infrastructure that maintains or enhances the role of the river as an ecological 'corridor'. It is also c.5km from the Severn Estuary SPA.</li> </ul> <p>West of Stonehouse and Hunts Grove are understood to be relatively unconstrained in terms of strategic biodiversity considerations, although it is noted that the West of Stonehouse site does intersect the edge of the Severn Vale Priority Landscape, and is also c.4.5km from the Severn Estuary SPA. A major development at either of these locations should lead to the potential to design-in green infrastructure, delivering habitats that support or enhance the functioning of the</p>
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<sup>46</sup> An HRA report was produced for submission by URS. It concluded that the submitted plan is not likely to lead to significant effects on European sites. It identifies the need to work with neighbouring Severn Estuary authorities to assist in ongoing monitoring of visitor activities and disturbance in order to inform any future changes to visitor management that may prove necessary. It is noted that a multi-authority forum (Association of Severn Estuary Relevant Authorities) already exists for monitoring and coordinating delivery of environmental management in the Severn Estuary and this would clearly be the appropriate forum for on-going participation.

<sup>47</sup> The Gloucestershire Local Nature Partnership has prepared a draft 'Nature Map' for the County. The Nature Map, alongside the rivers targeted through the Water Framework Directive process, represents a strategic ecological network for Gloucestershire. The map comprises selected areas of value sitting within locations where the natural environment could be enhanced or restored. The map defines 1) Six broad 'Priority Landscapes', two of which – the Severn Vale and the Cotswolds Escarpment – are relevant at the current time; and 2) Strategic Nature Areas (SNAs), which are more discrete areas within the broader Priority Landscapes. SNAs are landscape-scale areas where there is opportunity for both the maintenance and, crucially, the restoration/expansion of priority habitat. See "A Guide for Planners on Incorporating the Nature Map into Local Plans" (2013) available at: <http://gloucestershirebiodiversity.net/>

Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	4	4	6	★ 1	2	2	6
Significant effects?	Significant effects are not predicted for any scenario						

district-wide ecological network. Alternative locations for growth in the sub-region that are as unconstrained are likely to be few and far between, and so development at these locations is assumed to be a 'positive' from a biodiversity perspective. In other words, development at these locations would lead to positive effects on the baseline, as the baseline situation is assumed to involve development elsewhere in more sensitive locations.

On the basis of the above discussion:

- **(D)** performs well. There would be low growth at the Stroud Valleys (400 homes), the 'door is left open' to following a lower growth approach at North East Cam (500 homes rather than 750 homes) and a large scheme at West of Stonehouse (1,350) is a positive. There is little reason to suggest that 'significant' positive effects would result, however.
  - Scenario D was subjected to detailed HRA in November 2014, on the basis that it is the Council's emerging preferred approach. The HRA raises concerns regarding the potential for a large scheme at West of Stonehouse to result in visitor pressure at the Severn Estuary SPA, stating that: *"Stroud District Council are undertaking further work to elucidate the core recreational catchment for the Severn Estuary SPA/SAC/Ramsar site in Stroud district. Until that work is completed, it is not possible to state definitively that the delivery of 1,350 dwellings West of Stonehouse will not make a significant in combination contribution to recreational pressure within the SPA/SAC/Ramsar site when considered alongside the Sharpness development. It is therefore considered appropriately precautionary that any application for development at [West of Stonehouse] includes a project specific visitor survey and/or impact analysis to demonstrate that no likely significant effects will arise. If such effects are identified that the Council is confident that mitigation measures could be devised to address any impact without affecting the deliverability of the development."*
  - The November 2014 HRA also considers the implications of Scenario D for Rodborough Common SAC. It identifies that there is the potential for 400 new homes in the Stroud Valleys to lead to negative effects, but explains that discussions between Stroud District Council, Natural England and the National Trust (who manage Rodborough Common) have found there to be the potential for sufficient mitigation to be put in place. Mitigation measures will be in-line with the National Trust Management Plan for the Commons, and there will also be links to the Stroud Valleys Project (SVP), which seeks to improve access to greenspace for local residents.
- **(E) and (F)** are the other scenarios that would involve development at West of Stonehouse (understood to be a 'positive') and would not involve development at North of Eastington (understood to be a 'negative'). Under (E) a 'medium-level' approach to growth would be followed at the Stroud Valleys (550 homes), with the additional homes at Valley Bottom sites in the Dudbridge area, i.e. in relatively close proximity to Rodborough Common. Under (F) a higher growth approach would be taken at the Stroud Valleys, although the additional growth would be at relatively unconstrained locations (Edge of Stroud, and Aston Down).
- **(A) and (B)** perhaps perform on a par. Both would avoid growth at Eastington, but no growth at West of Stonehouse would be an opportunity missed.
- **(C) and (G)** would involve development at Eastington, which is understood to be a 'negative' given that the site intersects the Frome Valley Strategic Nature Area. However, there is little certainty on the extent of negative effects, given the potential to mitigate through masterplanning and design of green infrastructure. Indeed it may transpire that development supports habitat enhancement, and hence the ecological functioning of the river corridor. (C) would not involve development of the 150 home scheme at Dudbridge, but no growth at West of Stonehouse would be an opportunity missed.



Sustainability Topic: <u>Climate change mitigation</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	6	7	4	★1	3	4	2
Significant effects?	Significant effects are not predicted for any scenario						
Discussion	<p>The focus of attention here is on the potential to minimise per capita <u>CO<sub>2</sub> emissions from the built environment</u>. Consideration is not given here to the performance of scenarios in terms of minimising per capita transport-related CO<sub>2</sub> emissions. Rather, this is a focus of discussion under the 'Transport and accessibility' heading, below.</p> <p>In descending order of performance:</p> <ul style="list-style-type: none"> <li>• <b>(D)</b> performs best as growth would be concentrated at a relatively small number of locations (ten in total). The average size of each allocation would be 300-355 homes, leading to economies of scale that increase development viability and the likelihood of climate change mitigation measures being designed-in. There is a 500 home threshold level at which it is assumed<sup>48</sup> that there is potential to deliver an optimal district heating scheme - i.e. one that is powered by biomass fuelled combined heat and power (CHP)<sup>49</sup> – and under this scenario this threshold could potentially be passed at three locations. It is certainly the case that the 1,350 homes scheme at West of Stonehouse will lead to opportunities. There is little reason to suggest that 'significant' positive effects would result, however.</li> <li>• <b>(G)</b> also performs well on the basis that there would be four large schemes, each well in excess of the 500 home threshold discussed above. There would also be schemes (at Sharpness; at Callowell Farm on the northern edge of Stroud; and at Aston Down) that would be in the region of 200-300 homes. At this scale a 'less optimal' district heating scheme - i.e. one powered by a biomass fuelled boiler or gas fuelled CHP system – might be feasible. The potential for a CHP plant at Aston Down has been muted, as has the potential for a large wind turbine at Sharpness. The downside of this Scenario is that a high growth approach in the Stroud Valleys will involve five additional relatively small developments (two in the Dudbridge area, and three on the northern edge of Stroud). There might be one or two opportunities for developers of individual sites to work in conjunction to bring forward low carbon energy infrastructure (i.e. a district heating scheme); however, in practice this is unlikely to be feasible. In total this scenario would involve 18 separate allocations, at an average size of 278 homes.</li> <li>• <b>(E)</b> also performs well as there would be three large schemes well in excess of 500 homes, whilst a 'medium-level' approach to growth would be taken at Stroud Valleys (with additional growth at two adjacent locations in Dudbridge). In total this scenario would involve 12 separate allocations, at an average size of 308 homes.</li> <li>• <b>(C) and (F)</b> perform roughly on a par. (C) would involve fewer allocations, but not a major scheme at West of Stonehouse.</li> <li>• <b>(A)</b> would involve just two schemes above the 500 home threshold (at North East of Cam, and Hunts Grove) with 11 allocations in total at an average size of 214 homes.</li> <li>• <b>(B)</b> performs poorly on the basis that there might only be one scheme above the 500 home threshold, and the average size of allocations could be as low as 150 homes. There is little reason to suggest that 'significant' negative effects would result, however.</li> </ul>						

<sup>48</sup> AMEC, 2011. Stroud Carbon Footprinting Study

<sup>49</sup> This is on the basis that biomass fuelled CHP give rise to a need space requirements for fuel storage and delivery.

Sustainability Topic: <u>Community and wellbeing</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	5	6	6	2		3	3
Significant effects?	No				Yes	No	
Discussion	<p>In descending order of performance:</p> <ul style="list-style-type: none"> <li>• <b>(E)</b> performs well on the basis that development would be concentrated at locations with good access to main settlements (i.e. existing services and facilities), and there will be a focus on major schemes that should lead to good potential to bring forward new services/facilities, and support a degree of self-containment and establishment of cohesive, inclusive new communities. In terms of access to existing settlements, 48% of growth would be targeted at first tier settlements and a very high proportion (88%) of growth would have direct access to 'A' roads with public transport services. The upshot is that there would be the potential for benefits to be realised by people living within existing settlements as well as those inhabiting new developments. Ensuring good access to health services is particularly important given an ageing population. Taking this into account, <b>significant positive effects</b> are predicted. It is noted, however, that a larger scheme at North East Cam (750 homes) would involve development stretching further to the north, further away from the town centre (but closer to the train station).</li> <li>• <b>(D)</b> performs equally well in many respects, although is less preferable to (E) on the basis that it 'leaves the door open' to the possibility of smaller schemes at Hunts Grove and North East Cam. A larger, 750 home extension to Hunts Grove would enhance the role of the Local Service Centre (already committed under the previous plan and subsequent planning permission). At North East Cam, a larger scheme would support the continued role of the town centre, albeit some of the additional growth under a 750 home scheme would be at the northern extent of the site, away from the town centre. Supporting the town centre is important both for residents of the town, and also residents of the extensive rural hinterland. The other difference between (D) and (E) is that under (D) land at Dudbridge would be developed for canal related tourism development, retail and employment uses (as per the submitted Local Plan) rather than mixed-use development to involve 150 new homes (at two adjacent sites). Dudbridge would seem to be a good location for new housing (as per E). There would be greater potential to secure the role of Dudbridge as a functioning 'suburb', support public realm improvements that enable this area to function as an attractive 'gateway' to Stroud and also support town centre trade given good pedestrian/cycle links.</li> <li>• <b>(F) and (G)</b> also perform well in terms of concentrating growth at locations with good access to main settlements; however, both would involve high growth in the Stroud Valleys. Additional growth in the Stroud Valleys would include four 'Edge of Stroud' sites. Development on the northern edge of Stroud would appear to have little merit from a communities and wellbeing perspective (although it is noted that the two larger sites are adjacent to Stratford Park and the associated leisure centre). It is certainly the case that the two smaller sites to the east are not well connected to Stroud town centre. (F) is preferable to (G) on the basis that development of a 700 home scheme at Eastington (a third tier village, with a population of c.1,100 and limited facilities) has limited merit from a communities and well-being perspective.</li> <li>• <b>(A)</b> would involve large schemes at Hunts Grove and North East Cam, and additional Stroud Valley growth would be at Dudbridge, with no growth directed to the northern edge of Stroud. However, a low growth approach district-wide would lead to a risk of unmet housing need in the short term, and also the possibility of this need being met in the longer term in less than ideal locations.</li> <li>• On the basis of the constraints and opportunities discussed above, both <b>(B) and (C)</b> can be seen to have little merit, although it is not clear that either scenario would lead to 'significant'</li> </ul>						

Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	5	6	6	2	★1	3	3
Significant effects?	No				Yes	No	

negative effects. The characteristics of the scenarios that are less than ideal from a 'community and wellbeing' perspective are as follows:

- (B) is a low growth option that would involve growth at 'Edge of Stroud' sites, i.e. four sites on the northern edge of Stroud (totalling 400 homes). This scenario also leaves the door open to the possibility of smaller schemes at Hunts Grove and North East Cam, and it is suggested that no growth at West of Stonehouse would lead to something of an opportunity missed, given the potential to enhance the role of this settlement.
- (C) would involve a 700 home scheme at Eastington, a smaller scale of growth at Stroud Valleys (400 homes) and the possibility of smaller schemes at Hunts Grove and North East Cam.

**Sustainability Topic: Economy and employment**

Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	7	6	5	4	3	★1	★1
Significant effects?	Yes	No				Yes	

Discussion	<p>In descending order of performance:</p> <ul style="list-style-type: none"> <li>• <b>(F) and (G)</b> perform well as 1) they are high growth options and there is an understood need to increase the workforce locally with a view to achieving economic growth objectives; 2) an enhanced employment offer would be supported at locations in close proximity to the M5, most notably at West of Stonehouse,<sup>50</sup> and 3) nine mixed-use schemes would be supported, therefore maximising the potential for housing development to cross-subsidise (or in other ways stimulate) employment. <b>Significant positive effects</b> are predicted in terms of economy and employment related sustainability objectives, although there is some uncertainty given ongoing debates around economic forecasting (see discussion below).                     <ul style="list-style-type: none"> <li>– The difference between (F) and (G) is a 700 home scheme at North of Eastington. It is understood that this would <i>not</i> be a mixed-use scheme, which perhaps equates to something of an opportunity missed at this accessible site adjacent to the M5, but there would be the benefit of increasing the local workforce in the M5 catchment.</li> </ul> </li> <li>• <b>(E)</b> performs only marginally worse than (F) and (G). The only difference between (E) and (F) relates to 600 homes in the Stroud Valleys identified under (F). 400 of these would be at Edge of Stroud sites, which are assumed to have relatively limited merit from a perspective of supporting economic growth (it not being the case that any of the sites would be mixed use), but 200 would be at Aston Down - a location where housing could support the maintenance / expansion of the employment offer. As under (F) and (G), additional housing would come forward at Dudbridge (150 homes at two adjacent sites). This is less than ideal from an economic perspective (as some of the land might alternatively be used for employment, as per the submitted plan) although there will be potential for employers to relocate to Aston Down.</li> <li>• <b>(D)</b> is a lower growth approach that 'leaves the door open' to the possibility of smaller schemes at Hunts Grove and North East Cam; however, a 1,350 home scheme at West of Stonehouse would support economic growth objectives for the M5 corridor. Another positive associated with (D) is that land at Dudbridge would not be allocated for housing, but rather would be allocated for employment and canal related uses, as per the submitted plan. There is a need to make better employment use of Valley Bottom sites in Stroud, particularly given that under all scenarios it is the case that less land will be available for employment at Ham Mills and Wimberley Mills, i.e. more land at these sites is set to be allocated for</li> </ul>
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<sup>50</sup> Demand for employment land within Stroud District is driven by demand for land close to the M5. This is reflected in demand for employment growth at Stonehouse (home to a major industrial and business area, which provides jobs for over 4,000 and has seen recent construction of office units) and the Gloucester fringe (with Hardwicke being a particular employment 'hub'). The Gloucestershire Local Enterprise Partnership's recently published Strategic Economic Plan promotes employment development in proximity to junctions 9 and 10 in particular, but through representations made on the Stroud Local Plan has also been clear about supporting growth in the M5 corridor more generally, including at junctions 12 and 13 (i.e. to the west of Stroud, and south of Gloucester). The LEP have stated that they would "encourage the Council to reappraise [the growth figure] and look to concentrate more and larger employment growth along the M5/A38 corridor and especially around Junction 12 and 13 of the Motorway and within the Severn Estuary corridor... Quedgeley East and Stonehouse are considered to be strong locations for further employment growth but it is apparent that both sites have only been allocated small land allocations (13ha and 10 ha respectively). It is considered that both these allocations should be expanded, in particularly the allocation for Stonehouse, which is proving to be a popular location for employers and within easy reach of the Districts principle towns." The existing draft plan is proposing to allocate an employment site at West of Stonehouse (Policy SA2), and none of the scenarios currently under consideration would involve allocation of additional employment land (i.e. B1-B8 land); however, it is understood that housing at this location will cross subsidise the employment allocation and make it deliverable. The allocation of employment land at Stonehouse (Policy SA2) is an existing adopted Local Plan allocation which hasn't come forward due to the need to fund a bridge across a watercourse into the site. It is also the case that a housing scheme at West of Stonehouse would deliver a local centre, which will involve additional employment opportunities.

Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	7	6	5	4	3	★1	★1
Significant effects?	Yes	No				Yes	

housing, in comparison to the approach presented within the submitted plan.


- Scenario D is the Council’s emerging preferred approach, and hence has been the focus of detailed work over recent months. A study into ‘The Objectively Assessed Housing Needs of Stroud, Forest of Dean and Cotswold’ (Oct, 2014) found that 11,200 new homes over the plan period (i.e. Scenario D) would likely be sufficient to ensure the achievement of economic objectives sub-regionally; however, the study highlighted considerable uncertainties. The study was informed by two employment growth forecasts that show very different results. One suggests a need to plan for an increase in economic output that necessitates a 7.7% increase in jobs in Stroud over the plan period (which would necessitate 1,800 homes in Stroud District, over and above those required to meet demographic needs, to accommodate the workforce); whilst the other suggests 4.3% increase in jobs, which would not necessitate delivery of homes over and above those needed to meet demographic needs. The study rejected the higher figure (7.7% increase in jobs) on the basis that it does not take enough account of the LEP’s focus on promoting growth in other parts of Gloucestershire; it reflects a bullish view on job growth in government services (i.e. it assumes an end to austerity measures impacting jobs in health, education etc.); and it is pessimistic regarding improvements in productivity (i.e. the potential for increases in productivity to mean that economic output increases can be achieved without additional jobs). Similarly, the study rejected the lower figure (4.3% increase in jobs). The study concluded, in order to ensure a sufficient local workforce to support jobs growth, the Stroud Local Plan needs to provide for 800 new homes over and above those required to meet demographic needs. This equates to a figure 11,200 new homes in total.
- **(B) and (C)** are lower growth options, and hence perform less well on this basis. (C) would involve a 700 home scheme at North of Eastington, i.e. in the M5 corridor where there is a need to increase the workforce.
- **(A)** is a low growth option that would involve fewest mixed-use schemes (eight in total). **Significant negative effects** are predicted, although there is some uncertainty given that economic forecasting work is ongoing.

Sustainability Topic: <u>Housing</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	7	6	5	4	3	2	★1
Significant effects?	Yes		No?	Yes			
Discussion	<p>In descending order of performance:</p> <ul style="list-style-type: none"> <li>• <b>(D), (E), (F) and (G)</b> would all lead to <b>significant positive effects</b> on the basis that all would involve delivering at least 11,200 homes over the plan period, and so would meet objectively assessed housing needs.               <ul style="list-style-type: none"> <li>– A recent study of ‘The Objectively Assessed Housing Needs of Stroud, Forest of Dean and Cotswold’ (Oct, 2014) found that there is a need to deliver 11,200 new homes within Stroud District over the plan period, a figure which aligns with Scenario D. That is not to say, however, that there is not merit to allocating land for a higher level of housing growth (i.e. a level in line with Scenarios E – G). The figure to emerge from the study is based on a number of major assumptions, and should be understood only as a ‘starting-point’ for plan-making. For example, the report assumes a partial return to trend for households within the 25-34 year old range only and does not take forward the additional housing numbers implied by the highest economic growth forecast for the District.</li> <li>– In addition to considering whether a Scenario would involve allocating sufficient land to ensure that housing need is met over the plan period, there is also a need to consider whether a good proportion of the sites allocated are deliverable in the short term (as opposed to only being deliverable in the latter part of the plan period) so that housing need can be met in a timely fashion. Recent work by the Council (Oct, 2014) has found that the emerging preferred approach to site allocations (which aligns with Scenario D) performs well in that it provides for a range of sites which can be delivered early in the remaining Plan period, thus maintaining a five year supply of housing land well into the future.</li> </ul> </li> <li>• <b>(C)</b> would involve a level of growth below Objectively Assessed Housing Need (OAHN), although it is recognised that a figure in-line with (C) would be found to represent OAHN if different assumptions are made regarding the level of employment growth that housing locally must support (see discussion above, under ‘Economy and employment’).</li> <li>• <b>(B)</b> would involve a level of growth below OAHN. Furthermore under this scenario the average size of allocations would be low, at only 150-184 homes. As a result it is fair to assume that there would be less potential to deliver affordable housing. <b>Significant negative effects</b> are predicted.</li> <li>• <b>(A)</b> would not meet OAHN, and hence would lead to <b>significant negative effects</b>.</li> </ul> <p>It is not thought that the spatial approach reflected in the various alternatives has a significant bearing on the achievement of housing related sustainability objectives. All scenarios would involve an ‘OK’ spread of development across the district, although the following is noted:</p> <ul style="list-style-type: none"> <li>• (A), (B) and (C) only involve limited growth at Stonehouse (3% of the total) despite the settlement being one of the four main settlements in the District. Growth at Eastington (Scenarios E and G) could help to meet housing need at Stonehouse, however.</li> <li>• It might also be suggested that housing need associated with Gloucester will be difficult to address (given Green Belt and other constraints to the north of the town) and so from a ‘housing’ perspective a higher growth approach should be taken at Hunts Grove.</li> <li>• Sharpness is an isolated location where housing need is probably less than is the case at the main towns (although rural housing need is also an issue); however, the approach to Sharpness is constant across the scenarios (at 300 homes).</li> <li>• Similarly, Aston Down (200 homes under Scenarios B, F and G) is a remote location.</li> </ul>						



Sustainability Topic: <u>Landscape and cultural heritage</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	3	5	4	★ 1	2	6	7
Significant effects?	No	Yes		No		Yes	
Discussion	<p>An important issue relates to the four Stroud Valleys ‘Edge of Stroud’ sites. The Cotswold AONB wraps around the edge of Stroud, and so there is the potential for impacts to this nationally important landscape. Of the four sites under consideration, three are found to have a ‘medium-high’ sensitivity by a recent Landscape Sensitivity Appraisal. The appraisal notes that importance of inter-visibility across the valleys, a prevalence of woodland and other mature vegetation and areas with an undeveloped agricultural character representative of the upland AONB landscape. The fourth site – which is that to the east – is found to have a ‘medium’ sensitivity. The site borders the AONB, and would be visually conspicuous from the AONB, but is currently in a somewhat degraded state.</p> <p>Of the four scenarios that would not involve development at Edge of Stroud sites, <b>(D) and (E)</b> are best performing on the basis that a large scheme would come forward at West of Stonehouse, a location with a ‘medium-low’ rating assigned by the Landscape Sensitivity Appraisal (although development would impact upon a number of listed buildings).</p> <p>(D) performs slightly better than (E) on the basis that a smaller scheme might be progressed at North East Cam. The Landscape Sensitivity Appraisal assigns North East Cam a ‘medium’ sensitivity rating, concluding that there are “<i>some views to elevated AONB uplands to the available, but generally the topography orientates to the north west resulting in some locally extended views over the lowland plains and a stronger visual association with the urban area of Cam</i>”. It is also noted that there is no obvious and easily defensible limit to potential urban expansion north east of Cam (unlike at Hunts Grove, where the expansion would abut the M5).</p> <p>Another notable difference between (D) and (E) relates to Land at Dudbridge. Under (E) redevelopment would occur at two adjacent sites, with the land allocated for 150 homes in total. Prioritising the development of brownfield sites in the Stroud Valleys that are currently underused offers a chance to bring about townscape improvements and secure ‘a new lease of life’ for features of the valleys’ unique industrial heritage; however, under (D) much of this land (the larger of the two sites) would be also be redeveloped, with an allocation for ‘canal related tourism development, retail and employment uses’ as per the submitted Local Plan.</p> <p><b>(A)</b> performs relatively well, although a larger scheme would be progressed at North East Cam, and no development at West of Stonehouse would represent something of an opportunity missed.</p> <p><b>(C)</b> would involve a 700 home scheme at North of Eastington. This location is assigned a ‘medium-low’ rating by the Landscape Sensitivity Appraisal, i.e. is suitable from a landscape perspective; however, it is possibly less than ideal from a heritage perspective given the adjacent Industrial Heritage Conservation Area.</p> <p>Given the importance of the AONB designation it is appropriate to conclude that <b>(B), (F) and (G)</b> – i.e. the four scenarios that would involve development at the Edge of Stroud - would result in <b>significant negative effects</b> to the landscape baseline. Of the three scenarios, (B) is best performing on the basis that ‘the door is left open’ to the possibility of a smaller scheme at North East Cam. (G) performs worst as it is a higher growth option that would involve development at North of Eastington.</p>						

Sustainability Topic: <u>Soil</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	★ 1	2	3	3	5	5	5
Significant effects?	Significant effects are not predicted for any scenario						
Discussion	<p>It is appropriate to conclude that <b>(A) and (B)</b> are best performing as they would involve the highest proportion of growth focused at brownfield land, i.e. at Valley Bottom sites in Stroud (where it is also assumed there would also be extensive re-use of existing buildings) and at Aston Down. Under (A) c.17% of new allocations would be at brownfield locations, whilst under (B) that figure would be in the region of 19-23%. However, either scenario could potentially lead to unmet housing needs, which might well be met through greenfield development elsewhere. On this basis, it is not possible to predict significant positive effects.</p> <p>The other scenarios perform similarly in terms of the proportion of new allocations that would be targeted at brownfield land, with figures ranging from 9% (Scenario D) to 14% (Scenario F). Another consideration relates to the loss of high quality ('best and most versatile') agricultural land. The majority of agricultural land in the district is Grade 3, whilst there are smaller areas of Grade 2 (i.e. better quality) and Grade 3 (i.e. worse quality) land. It is noted that if the North East Cam site allocation stretches to the north as far as the train station, as would probably be necessary under a 750 home scenario (Scenarios <b>B, E, F and G</b>), then it would intersect an area of Grade 2 land.</p>						

Sustainability Topic: <u>Transport and accessibility</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	2	2	2	2	2		2
Significant effects?	Significant effects are not predicted for any scenario						
Discussion	<p><b>(F)</b> performs well on the basis that growth would be maximised at the Stroud Valleys and all strategic locations other than North of Eastington.</p> <ul style="list-style-type: none"> <li>Additional Valley Bottom sites (i.e. two adjacent sites in the Dudbridge area, allocated for a total of 150 homes) would be well connected to the town centre by a walking / cycling path, and the two large sites that would be allocated at the northern edge of Stroud (for a total of 300 homes) are in quite close proximity to the centre. However, it is noted that Aston Down (200 homes) is very remote, with very limited public transport accessibility; and it is also the case that the two smaller sites on the northern edge of Stroud (allocated for a total of 100 homes) are some distance from the town centre.</li> <li>Maximising growth at Hunts Grove, North East Cam and West of Stonehouse should secure funding for transport infrastructure improvements to an extent where there could be a positive effect in terms of 'car dependency'. At Cam, improvements to the railway station would be secured (as well as an extension of the Cam and Dursley cycle path); at Hunts Grove a 750 dwelling extension could go towards the provision of a railway station on the Gloucester-Bristol line; and at West of Stonehouse there would be the potential to reopen the Stonehouse (Bristol line) railway station as well as ensure good links to the nearby major employment site and Stroud town centre.</li> <li>North of Eastington is assumed to be less than ideal given that Eastington is a third tier settlement with limited facilities; however, it is noted that residents would have good access to the new local centre at Stonehouse, and indeed there would be the potential for development to support the functioning of a new local centre at West of Stonehouse.</li> </ul> <p>Whilst it is appropriate to conclude that (F) is best performing, it is important to emphasise that there are numerous issues that would need to be addressed. The Highways Agency is concerned about the capacity of the M5, including junctions 12 and 13 in Stroud. The Council has undertaken Transport Assessment work that has identified the potential for junction improvements, but the TA has not considered the implications of the scale of growth proposed under (F). The scale of growth at West of Stonehouse proposed under (F) is a particular concern of the Highways Agency, and it is fair to assume that concerns would be similar under a scenario that involves growth at North of Eastington rather than at West of Stonehouse (i.e. Scenario C) and concerns would be greatest under a scenario that involves growth at both locations (i.e. Scenario G).</p> <p>Aside from in relation to (F), it is difficult to conclude on the relative merits of the alternative scenarios in terms of the sustainability objective 'to promote traffic reduction and encourage more sustainable alternative forms of transport'. All scenarios have pros and cons.</p>						

Sustainability Topic: <u>Waste</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	N/a	N/a	N/a	N/a	N/a	N/a	N/a
Significant effects?	N/a						
Discussion	The plan approach to addressing the issue total growth quantum / broad distribution does not have a bearing on waste management related sustainability issues, i.e. it is not possible to come to any conclusions on the likely effects of the alternative scenarios. There is no reason to suggest that a 'higher growth quantum' approach would create problems in terms of sustainable waste management. It might be suggested that larger allocations provide opportunities for more efficient waste separation and collection services; however, it is not possible to be certain in this respect.						

Sustainability Topic: <u>Water</u>							
Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	4	3	2	★1	4	4	4
Significant effects?	Yes		No		Yes		
Discussion	<p>The Environment Agency (EA) raised objections in relation to flood risk and waste water infrastructure capacity during the Local Plan ‘publication’ period in September 2013; however, most issues were subsequently resolved in-light of 1) a completed Sequential Test document (April 2014), which considered each proposed development with flood risk issues in turn; and 2) an Infrastructure Delivery Plan.</p> <p>A key issue for the plan relates to Sharpness, which is located within an area of flood risk (although it is recognised that flood risk is not uniform and hence there is the potential to direct sensitive development to low risk areas) and is constrained in terms of wastewater and sewerage infrastructure (which would necessitate development funding necessary improvements). However, this need not be a focus of appraisal here given that the approach to growth is constant across the alternatives (at 300 homes). It is also noted that detailed work has been undertaken recently (Nov, 2014) to consider flood risk at Sharpness, with a range of measures identified that could be put in place to mitigate risk.</p> <p>Other issues, which are relevant to the appraisal of alternatives, include the following -</p> <ul style="list-style-type: none"> <li>Land at Dudbridge – which is allocated for non-residential uses by the submitted Local Plan, but would be allocated for 120 homes under Scenarios (A), (B), (F) and (G) - is within flood zones 2 and 3, i.e. in a location where vulnerable uses should only be permitted in exceptional circumstances. The Sequential Test document establishes that redevelopment for non-residential uses is appropriate ‘for sustainability reasons’ (i.e. because of the importance of this area to the local community for employment in an accessible location) and concludes that there is good potential to mitigate any risk through design measures. It may well be possible for a proposal for residential development here to pass the Sequential / Exceptions test; however, it is not possible to be certain at the current time.</li> <li>Ham Mills, Brimscombe Mill, Brimscombe Port, Wimberley Mills and Dockyard Works (all of which are allocated for residential uses to an equal extent under all scenarios) are affected by flood risk, but pass the sequential test on the basis that the theoretical housing capacity of the sites has been reduced to a level that enables space for Sustainable Drainage Systems (SuDS) and other flood risk mitigation measures.</li> <li>Other issues relate to North East Cam, Eastington and Hunts Grove, with areas of flood risk affecting the margins of the sites under consideration. Eastington appears to have the largest proportion of the site footprint intersecting with a flood risk zone (c.30%). At both North East Cam and Hunts Grove the additional land that would be developed under a high growth scenario intersects an area of flood risk, and it is not clear whether the overall effect will be that a high growth scenario is difficult to achieve whilst avoiding areas of flood risk. North East Cam is located adjacent to the River Cam and surface water run-off will require careful consideration to ensure that neither the development nor areas downstream are at risk of flooding.</li> </ul> <p>On the basis of the above discussion:</p> <ul style="list-style-type: none"> <li><b>(D)</b> is best performing as it would avoid housing growth in Dudbridge, avoid development at North of Eastington and also ‘leave the door open’ for smaller scale schemes at Hunts Grove and North of Cam.</li> <li><b>(C)</b> also performs well as it would avoid housing growth in Dudbridge, although there would be a 700 home scheme at North of Eastington.</li> <li>There is little to differentiate between the other scenarios, all of which would involve housing growth at Dudbridge. At the current time, when there is little certainty regarding the</li> </ul>						

Rank	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G
	4	3	2	★ 1	4	4	4
Significant effects?	Yes		No		Yes		

potential for mitigation measures, it is appropriate to conclude **significant negative effects**. (B) is perhaps marginally better performing as it offers the opportunity for smaller scale schemes at North East Cam and Hunts Grove.

N.B. There is no reason to suggest that a lower growth scenario is preferable to a higher growth scenario on the basis of 'water resource' considerations. Stroud is not a particular area of 'water stress', i.e. Stroud is not an area where water resources are depleted as a result of extraction. Similarly, it is not thought that 'water quality' is a strategic issue here, i.e. an issue that has a bearing on the selection of a preferred scenario. It is noted that development at North East Cam and North of Eastington would be on greenfield land adjacent to major water courses, and hence SuDS would be required with a view to surface water attenuation.