

Sustainability Appraisal Report for the Stroud District Local Plan Review – Draft Plan

Appendices

Prepared by LUC November 2019

Project Title: Sustainability Appraisal of the Stroud District Local Plan Review – Draft Plan

Client: Stroud District Council

Version	Date	Version Details	Prepared by	Checked by	Approved by
1	01/11/19	First Draft Sustainability Appraisal Report Appendices for the Stroud Draft Local Plan			
2	18/11/19	Final Draft Sustainability Appraisal Report for the Stroud Draft Local Plan – addressing client comments			
3	18/11/19	Final Draft Sustainability Appraisal Report for the Stroud Draft Local Plan – final version			



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Appendices

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Contents

Appendix 1	1
Consultation Comments on SA Scoping Report and Emerging Strategy Paper SA Report	: 1
Appendix 2	34
Baseline Information	34
Geography	35
Population	36
Housing	36
Social Inclusion and Deprivation	38
Health	39
Culture, Leisure and Recreation	39
Education	40
Crime	41
Landscape, Biodiversity and Geodiversity	41
Historic Environment	43
Air and Water	46
Flood Risk	47
Energy and Climate Change	49
Soils	50
Resource Use/Waste and Recycling	51
Employment and Economic Activity	51
Transport	55
Tourism	56
Appendix 3	67
SA findings for Policy Options considered at the Issues and Options stage (2017)	67
Introduction	68
Chapter 1: Key Issues	68
Chapter 2: Needs	68
Chapter 3: Future Growth Strategy	71
Chapter 4: Background Studies	75
Appendix 4	76
Assumptions Informing the Appraisal of Site Options	76
Appendix 5	112
Detailed SA Matrices for all of the Site Options considered to date	112
Summary of Sustainability Appraisal Findings for all of the Reasonable Site Options con	
date	113
Residential site options	137
New site options considered following the Emerging Strategy Paper	490
Appendix 6	545
Summary of SA effects identified for the Emerging Strategy Paper	545
Appendix 7	553
Detailed SA Matrices for draft site allocations in the Draft Plan	553 553
Sites Allocations in the Draft Local Plan	554
Annondix O	635
Appendix 8 Audit Trail of Policy and Site Options	625 625
read from or rough and one options	U2J

Appendix 1

Consultation Comments on SA Scoping Report and Emerging Strategy Paper SA Report

Table A1.1: Consultation responses to comments on the Emerging Strategy Paper SA Report

Consultee	Representation	Comment	SA Team Response
	relating to		
Natural England	SA rep 1 – consideration of biodiversity and geodiversity; landscape and townscape; and efficient land use	Natural England welcomed the thorough approach taken to preparation of the SA. Comments relating to the emerging growth strategy are included specifically with regards to the themes of biodiversity and geodiversity (SA objective 7), landscape and townscape (SA objective 8) and efficient land use (including soils and best most and versatile land) (SA objective 13): Table 6.4 Summary of SA effects for emerging growth strategy' allocates a '?' (Significant adverse) score for SA7 Biodiversity. This is the only SA objective to attract such a score, highlighting the juxtaposition of the proposed new settlement immediately adjacent to the estuary with its multiple nature conservation designations and potential 'functionally linked land'. The consultee states that scale of this development also requires consideration of loss of 'best and most versatile land'. Natural England is to continue to advise the LPA in relation to this allocation. The general trend towards avoiding those sites requiring development within the Cotswolds AONB, consistent with this designated landscape's level of protection is welcomed by the consultee. The SA Report describes partial coverage of the district using Landscape Sensitivity Analysis (LSA) and makes a case for further evidence base work to address this shortfall. The consultee states that subsequent stages of the local plan's development should take account of any gaps in LSA where these represent a material gap in the evidence base. The consultee also highlights the commentary of the	Comment noted. The loss of greenfield land and impacts on higher value agricultural soils have been considered as part of SA objective 13 as set out in Table 2.2: SA framework for the Stroud District Local Plan Review. The emerging growth strategy (as presented in the Emerging Growth Strategy Paper) has been appraised as having significant negative effects in terms of both loss of greenfield land and higher value agricultural soils. The full effects have been described in Appendix 6 and the summary is presented in paragraph 6.40 of the main body of the SA report for the Emerging Growth Strategy Paper. The summary of these effects is presented in Appendix 6 of this report. The overall effect has been recorded as mixed minor positive and significant negative given that the strategy would also prioritise the use of brownfield sites across the district. The SA report has drawn on information that is available and proportionate to its strategic nature. Should further landscape sensitivity assessment work become available it will be used to inform the findings of the forthcoming iterations of the report. The findings of the HRA in relation to land and waterways which may be functionally linked to the Severn Estuary designations will be used to inform forthcoming iterations of the SA report, in the appraisal of the Local Plan in relation to SA objective 7: biodiversity and geodiversity.
		SA Report at paragraph 6.47 which states that most	

Consultee	Representation relating to	Comment	SA Team Response
		significant infrastructure improvements would not come forward in close proximity to any national or international biodiversity designations and that there may be a need to identify reserve sites for housing if potential sites for development do not come forward. This commentary of the SA report has been related to comments on the HRA with regards to the need for further work to understand the distribution, extent and sensitivities of land and waterways functionally linked to the Severn Estuary designations.	
Environment Agency	SA rep 2 - consideration of flood risk (SA objective 12)	The consultee notes that their previous recommendations have been included within the sub objectives for SA 12. The consultee does not concur with the statement made in the section of the report which relates to the residential site options (from paragraph 5.9 of the SA Report for Emerging Strategy Paper) because too much weight is being given to the issue of surface water runoff in relation to other sources of flood risk. The consultee states that fluvial flooding may have a greater impact, or at minimum equate to potential impacts from greenfield sites. The consultee considers that too much emphasis seems to have been placed on potential flood risk from surface water than other risk sources when appraising the potential sites for allocation. The consultee states that assumptions for the appraisal of sites should be updated as follows (SA objective 12): Sites that are entirely or mainly (i.e. >50%) on greenfield land that is within flood zones 3a or 3b or mainly on brownfield within flood zones 3a or 3b are likely to have a significant negative () effect. Sites that are either entirely or mainly on greenfield outside of flood zones 3a and 3b, or that are entirely	In relation to the residential site options, while paragraph 5.9 of the SA Report for Emerging Strategy Paper refers to impacts of developing greenfield or brownfield land on flood risk it also states "if any of those sites (within flood zone 3) are to be allocated in the Local Plan Review it will be necessary to direct built development to those areas of the sites that are outside of flood zone 3 and incorporate appropriate mitigation measures such as Sustainable Drainage Systems (SuDS)". All sites have been appraised based on the area of the site that is within Flood Zone 3a and 3b. The assumptions which have been used to achieve a consistent approach to the appraisal of site options are presented in Appendix 4 of the SA Report for Emerging Strategy Paper and this report. The appraisal of SA objective 12 therefore takes into account land that is located within these higher risk flood areas as well as whether it is greenfield or brownfield land. As such fluvial flood risk has been considered as part of the SA. The above points considered the SA assumptions have been updated in this iteration of the SA Report to better reflect the consultee's comment. Changes to the SA assumptions are shown in underlined text. The appraisal

Consultee	Representation relating to	Comment	SA Team Response
		or mainly on brownfield outside flood zones 3a or 3b are likely to have a minor negative (-) effect. • Sites that are on brownfield land outside of flood zones 3a and 3b are likely to have a negligible (0) effect. In relation to the Stroud Valleys the consultee states that provision of appropriate sustainable layouts has the potential to deliver benefits for green infrastructure in this area and should be identified in relation to SA objective 12. As part of the proposed monitoring indicators the consultee states that any permissions granted contrary to the advice of the Lead Local Flood Authority who are the statutory consultee on surface water discharges should be included.	of all sites has been updated in line with the change to this SA assumption. This SA report is reflective of the potential green infrastructure to be incorporated as part of sustainable layouts through an appropriate approach where it is included in the Local Plan document. The mini-vision for Stroud Valleys was appraised in the SA Report for the Emerging Strategy Paper as it has been presented in the Emerging Strategy Paper which does not contain explicit reference to sustainable layouts or green infrastructure for this area. The Draft Local Plan does not update the minivision for this area to reflect this issue and as such the appraisal does not include reference to this. SA objective 7 which relates to biodiversity considers where there are opportunities for green infrastructure provision and where green infrastructure might be lost to new development. To avoid a duplication of effects which are recorded any potential impacts on green infrastructure assets have not been considered as part of the appraisal work for site options undertaken for SA objective 12. The proposed monitoring framework has been updated in this SA Report to include an indicator relating to any permissions granted contrary to the advice of the Lead Local Flood Authority.
Kingswood Parish Council	SA rep 3 – approach of appraisal in relation to education; appraisal of options for emerging growth strategy;	The consultee states that the use of SA Objective 17: economic growth as the indicator for access to education and to base scoring solely on access to existing facilities is inappropriate. It is stated that the issue of capacity and opportunities for expansion should inform the appraisal. This has been related to the consideration of the options for the emerging growth strategy for the Local Plan.	The SA is a strategic, high-level process that is required to assess all options in the same level of detail. Evidence base information which is considered proportionate and available across the entirety or majority of the District has been used to inform the appraisal process. Gloucestershire County Council recently published the School Places Strategy 2018-2023. This information has been used to update the baseline for the SA process and has informed the SA findings. Considering the sensitivity

	epresentation elating to	Comment	SA Team Response
foi po	easons included or selection of otential sites or development	The consultee queries whether or not the SA report has taken account of the inclusion of up to 20 dwellings adjoining Tier 1 to 3 settlements as set out in the Emerging Growth Strategy in section 4.2 of the Emerging Strategy Paper. The consultee considers that this element of the Emerging Growth Strategy could have impacts which have not been identified through the SA Report. The consultee also states there is an inconsistency in the appraisal of option 2 for the growth strategy in relation to SA Objective 6 ('access to services') (at page 201 of the SA Appendix). The consultee suggests that benefits identified for Wotton-under-Edge through the wider distribution proposed in option 2 "despite the lack of development proposed in the town" are not appropriate. The consultee queries reasons for selecting the site options at Kingswood ('KIN A' and 'KIN B') in comparison to the reasons for rejecting other sites at Tier 3a or 3b settlements where different views of the overall strategy are said to be provided for sites such as for 'FRA B'. The consultee comments on the suitability of sites PS38 and PS39 to be considered for allocation. It is stated that the site assessment process through the SALA, supported by the evidence base and SA report, provides a logic for indicating these locations as 'preferred' against other options. It is stated however that further evidence is required to demonstrate that the options are acceptable. Capacity at Kingswood Primary School and the solution to education infrastructure as well as other community facilities is highlighted and the uncertain minor positive effect identified in relation to SA objective 17 for both sites is contested. The differing appraisal of the sites in	of school capacity data it has not been possible to appraisal this issue at an individual site level. Furthermore, access to opportunities for education and educational attainment are strongly linked to economic performance and growth in a given area. It is therefore considered appropriate to address the issue of education through SA objective 17 which is to "To allow for sustainable economic growth within environmental limits and innovation, an educated/skilled workforce and support the long term competitiveness of the District" and includes the sub objective "Does the Plan promote access to education facilities for residents?"". The Emerging Growth Strategy states that "small and medium sized sites (up to 20 dwellings) immediately adjoining settlement development limits at Tier 1-3 settlements will be allowed to meet specific identified local development needs (i.e. exception sites for first time buyers, self build and custom build housing, rural exception sites), subject to being able to overcome environmental constraints." The sustainability effects of the Emerging Growth Strategy are summarised from paragraph 6.35 (with more detail provided in Table A6.1 in Appendix 6) of the SA Report for the Emerging Strategy Paper, with a summary provided in Appendix 6 of this SA Report. These effects are reflective of all growth which would be supported through the Emerging Growth Strategy. The appraisal of option 2 for the growth strategy in relation to SA objective 6 (access to services) takes into account potential benefits to Wotton-under-Edge, as this location is supported for 200 homes through this option. Option 2 would deliver the highest number of new homes at Wotton-under-Edge when compared to the other options put forward. As such the identification of the

Consultee	Representation relating to	Comment	SA Team Response
		relation to SA objective 10: air quality and SA objective 16: employment is also contested.	potential for improving the viability of local services through this option at the settlements which are outside of the tier 1 settlements is considered to be appropriate.
			Although presented in the SA Report for the Emerging Strategy, Appendix 7 (and updated in Appendix 8 of this SA Report) sets out the Council's reasons for selecting or rejecting site options, which include wider planning considerations, and not just the SA findings. The reasons for rejecting broad location FRA B include "the scale of development proposed and location of this site would not accord with the emerging strategy of allocating development at the main tier 1 towns and at two new settlements, together with modest allocations at tier 2 settlements and lesser allocations at tier 3a settlements nearest to Stroud and Wotton-under-Edge." Therefore, fit with the emerging strategy is a key reason for its rejection. The reasons for selecting KIN A and KIN B (which have been taken forward as KIN005 which formed part of PS38 and as KIN010 which forms part of PS39) include "The site is considered suitable and available for the scale and type of development as set out in the emerging strategy". The sites KIN A and KIN B would provide more modest levels of growth than the sites at FRA B given that up 50 homes were considered at the KIN A/KIN B locations and 80 homes considered for site FRA B.
			All site options considered as part of the Emerging Strategy Paper and the Draft Local Plan have been appraised in line with the SA assumptions presented in Appendix 4 of the SA report for the Emerging Strategy paper and represented in Appendix 4 of this SA Report. This has ensured a consistent approach to the appraisal work. The data sources used and any explanation relating to their use is also included in the SA assumptions table in Appendix 4. The site appraisal matrices for each site

Consultee	Representation relating to	Comment	SA Team Response
			option considered in Appendix 5 (in the SA Report for the Emerging Strategy Paper and this SA Report also) provide justification for the potential effects identified in relation to each SA objective (based on the more detailed assumptions and explanation in Appendix 4).
			Schools capacity data was not available at the time and therefore was not considered in relation to the sites appraised in the November 2018 SA report. Both sites referred to by the consultee (PS38 and PS39) are within 800m of a primary school and therefore a minor positive effect has been recorded. The uncertainty attached to the effects for SA objective 17 for both sites reflect the potential for capacity issues at the education facility in question.
			The effects identified for sites in relation to air quality (SA objective 10) have been informed by findings of the Council in relation to SALA transport accessibility scoring. This assessment work was undertaken by Gloucester County Council on behalf of the Council and considered accessibility to town/district/local centres, employment sites and services and facilities that people may be required to access on a regular basis. Sites were assessed in terms of accessibility to 14 such features by walking, by car and by bus (including walking journey time to the relevant bus stop). Site PS38 was assessed by the County Council as performing more poorly than site PS39 in relation to access to a principal/other town centre by bus or by walking; a key employment site by bus or by
			walking; a bank/building society by bus or by walking; a GP surgery by bus or by walking; a leisure centre by bus or by walking; a major supermarket by bus or by walking; and a post office by bus or by walking. It is therefore expected that the development of site PS38 would be likely to result in an increased requirement to travel by

Consultee	Representation relating to	Comment	SA Team Response
			private car on a more regular basis than if site PS39 was to be developed. Therefore, site PS38 was identified as having a significant negative effect and PS39 a negligible effect on SA objective 10 in the SA Report for the Emerging Strategy Paper.
			Furthermore site PS39 has been identified as containing an existing employment use which could be lost to new development. As such a significant negative effect (as part of an overall mixed minor positive and significant negative effect) has been recorded in relation to SA objective 16: employment for this site, whereas site PS38 is identified as having a minor positive effect because it is located within 600m of key employment sites but not at a Tier 1 or Tier 2 settlement.
NDA and Magnox Limited	SA rep 4 – general comment on the SA findings and specific support for the findings in relation to site BER013	The consultee states that the Issues and Options document detailed four alternative patterns for future growth and in relation to this the SA of the options concluded that Option 1 performs slightly better overall. The consultee is supportive of a policy approach that would provide context in relation to the on-going decommissioning process on the nuclear licensed site, as well as employment uses and employment related training and education uses for the site. The consultee does not provide any further comment in relation to the specific findings of the SA in this regard and whether or not they are expressly supportive of or in dispute of them.	Comment noted.
		The consultee is, however, supportive of the approach to and conclusions of the SA report in relation to the sites considered as part of the Emerging Strategy Paper. The consultee highlights their particular support for the findings of the SA in relation to employment site BER013	

Consultee	Representation relating to	Comment	SA Team Response
		which has been identified as having some positive effects on some of the social and economic objectives.	
Robert Hitchins Ltd	SA rep 5 -	The consultee noted that the four options included in Issues and Options have been subject to a Sustainability Appraisal against 17 sustainability objectives but makes no further comment at this point in relation to any points of support or contention with the findings. The consultee contests the moving of Painswick from a tier 3 settlement to a tier 2 settlement in the settlement hierarchy. The commentary at paragraph 6.87 of the SA report is referenced in that Painswick has "high sensitivity to employment or residential development." Reference is also made to the SA commentary which relates to the position of the AONB and national and international biodiversity designations in the plan area. The consultee instead seeks to promote Whitminster to a tier 2 settlement in the emerging Local Plan document. The consultee also questions the appraisal of site STO016 stating that the appraisal findings should be considerate of the presence of site SA2 which is allocated through the current Local Plan. The consultee is ultimately supportive of the potential allocation of site PS19 which is included in the Emerging Strategy Paper as an altered boundary of site STO016. It is stated that the site should be scored more favourably given that development would be made up to its southern edge with consideration for this strategic site. The consultee contends that site STO006 should have been appraised for residential use and not mixed use development. As such the SA findings are therefore	The SA report has not informed the setting out of changes for the settlement hierarchy. No alternatives have been considered for the approach in the Emerging Strategy Paper and the Draft Local Plan and therefore no further appraisal work was undertaken. As explained in paragraph 3.7 of the SA Report for the Emerging Strategy Paper, changes to the settlement hierarchy reflect changes on the ground and were identified by the Council through a detailed review of settlement roles and function, which responded to concerns raised through the Issues and Options consultation. For example, through an increased or reduced level of provision of services and facilities or transport infrastructure. Changes in the settlement hierarchy ultimately reflect the findings of the 2018 Settlement Role and Function Study Update. For clarification, paragraph 6.87 of the SA report for the Emerging Strategy Paper reads "areas around the settlements of Brimscombe and Thrupp, Minchinhampton, Nailsworth, Kingswood, Stonehouse, Cam, Berkeley, Newtown and Sharpness and Painswick have been identified as having high sensitivity to employment or residential development." It is not to be inferred that all land around Painswick is sensitive to new development. The findings for the site options in this SA Report (Appendix 5) have been updated to reflect the allocations in the adopted Local Plan, including site SA2. Site STO006 has been appraised for mixed use in line with the list of alternatives which are considered reasonable by
		objected to. The previous submission of an outline planning application for the site for up to 90 dwellings including infrastructure, ancillary facilities, open space	the Council. While Appendix 3 of the 2017 SHLAA identified the site as having potential for up to 70 dwellings, the site appraised through the SA report was

Consultee	Representation relating to	Comment	SA Team Response
		and landscaping and construction of new vehicular access have been referred to by the consultee. The consultee has also highlighted that the site was included in the 2017 SHLAA as having potential for up to 70 dwellings. The consultee has also referred to the findings of the SA report in relation to site CAM008 which is included as a potential site (PS21) in the Emerging Strategy Paper. The site is promoted by the consultee and the SA findings in relation to potential impacts on biodiversity, air quality, landscape and townscape with regard for other sites at Cam are highlighted. Similar comments have been included in relation to site WHI001 and WHI005 with regards to the findings of the SA report potentially supporting the allocation of the site. The findings of the SA report for site WHI001 and WHI005 have however been disputed in relation to air quality. The findings of the SA report for site WHI005 are also disputed in relation to water quality. The response also contains commentary on site WHI007 which the consultee is promoting for mixed uses. The comment is in agreement with the appraisal of the site through the SA report for mixed use. Impacts identified in relation to the site in terms of landscape, air and water quality and efficient use of land are disagreed with by the consultee.	considered for 90 dwellings as part of a mixed use development, as advised by the Council and reflective of the recent planning history of the site. Sites are not identified for allocation at this stage in the Local Plan process and decisions relating to potential inclusion or rejection for allocation will be taken by the Council during the later stages of the Local Plan preparation as informed by a number of decision making criteria. This will include but not be limited to the findings of the SA report. Decision making by the Council will be reported upon at later stages of the SA report. In terms of the disagreement with SA findings for sites WHI001, WHI005 and WHI007, all site options considered as part of the Draft Plan have been appraised in line with the updated SA assumptions presented in Appendix 4 of this SA Report. This has ensured a consistent approach to appraisal. The data sources used and any explanation relating to their use is also included in the SA assumptions table in Appendix 4. The site appraisal matrices in Appendix 5 provide justification for the potential effects identified in relation to each SA objective (based on the more detailed assumptions and explanation in Appendix 4).
Robert Hitchins Ltd and Persimmon Homes Severn Valley	SA rep 6 - sustainability effects relating sites PS24	Site PS24 comprises CAM013, CAM025 and CAM026 and is being promoted by the developers. The positive effects identified through the SA report for the Emerging Strategy Paper for these sites in relation to a number of issues including housing provision, landscape, employment, services and facilities have been highlighted by the developers.	Comment noted.

Consultee	Representation relating to	Comment	SA Team Response
Persimmon Homes	SA rep 7 – consideration of hybrid growth strategy and promotion site in Kingswood	The consultee generally agrees with the findings of the SA report in relation to the sustainability of the hybrid approach to a growth strategy in the district. The variable options which might be used to achieve this hybrid approach should be tested as part of the SA. The consultee highlights the findings of the SA report in relation to the vision for the Wotton-under-Edge Cluster citing the minor positive effects in relation to SA objectives 3, 5, 6, 8, 9, 10, 14, 16 and 17. The consultee also highlights the SA findings for the individual site P38 which it is promoting within Kingswood in the Wotton-under-Edge Cluster in support of the allocation of this site which contains land which is being promoted.	The appraisal of four different approaches to delivering the growth strategy has been presented as part of the SA Report for the Emerging Strategy Paper as well as in Appendix 3 of this SA Report. These were concentrated development adjacent to the main settlements (option 1), wider distribution (option 2), dispersal across the District (option 3) and the inclusion of a significant growth point (option 4). The SA Report recommended that a hybrid option would be worth considering. The Emerging Strategy Paper then took forward a hybrid approach to the Emerging Growth Strategy. The SA is required to test alternatives which are considered reasonable and the SA work should be proportionate to the plan. It is not considered reasonable to test all variable approaches to a hybrid approach considering the high number of options this is likely to involve. Reference to the SA findings in support of the consultee's promoted site is noted.
Charterhouse Strategic Land	SA rep 8 – site at Painswick being promoted; appraisal queried in relation to settlement hierarchy	The consultee has referred to the SA findings for the options considered for the approaches to managing development proposals on the edges of towns and villages. The consultee disagreed with the approach to continue with existing settlement development limits and the comment submitted is in agreement with the commentary that option 2 "may benefit housing and economy objectives if residential and commercial developments are able to come forward in wider locations where it can be established that there would not be harm as a result." The land north of Painswick centre is being promoted by the consultee through the representation in question. For each of the Painswick sites (PAI001, 002, etc.) the consultee contests that the sites are assessed highly	Comment noted. The effects recorded for potential sites considered as part of the Emerging Strategy Paper and the Draft Plan are based on the SA assumptions presented in Appendix 4 of this SA Report to achieve a consistent approach to appraisal across a high number of sites. SA objective 16: employment is related to the proximity of sites to different tiers of settlements. As explained in the table in Appendix 4 "The new evidence in relation to changes in tier of settlements was only presented in the Emerging Strategy Paper. As such it was considered appropriate to consider these changes in relation to the appraisal of the potential sites only." The new settlement hierarchy has informed an update to the SA assumptions as detailed by underlined text in Appendix 4 of this SA Report. Appraisal

Consultee	Representation relating to	Comment	SA Team Response
		negatively against SA objective 16: employment on the basis that the site is not within a Tier 1 or Tier 2 settlement. This is stated to be incorrect as Painswick is identified in the Emerging Strategy Paper as a Tier 2 settlement. The comment also states that there is no ranking or specific recommendation arising from the SA which identifies a preference for proposed allocation. From here the consultee goes on to highlight that SA report states the Sustainability Appraisal findings are not the only factor to consider when selecting site options and the reasons for deciding which sites to allocate will need to be recorded in the full SA.	of all sites considered have been revisited to reflect this change to the assumptions. In relation to the consultee's desire to see ranking of sites through the SA process, as paragraph 2.12 of the SA Report for the Emerging Strategy Paper stated that "there will often be an equal number of positive or negative effects identified for each option [in this case site], such that it is not possible to 'rank' them based on sustainability performance in order to select an option". As such it is not the SA Report's purpose to present a ranking of sites or recommendation of sites to be included in the final Local Plan document. The SA report instead forms part of the evidence base for the decision making process in terms of the selection of options from all reasonable alternatives considered. Reasons for taking forward or rejecting sites as potential sites for development as well as policy options in the Emerging Strategy Paper have been provided in Appendix 7 of the SA report which accompanied that paper as well as Appendix 9 of this SA Report.
Hamfallow Parish Council	SA rep 9 - sustainability effects relating to Berkeley Cluster and specific sites in that area	The consultee refers to the findings for the Vision for the Berkeley Cluster at page 101 and compares them with the findings for sites PS33, PS34, PS35 and PS36 in Table 6.8 in the SA report for the Emerging Strategy Paper. The consultee states that in relation to air quality (SA objective 10) the minor negative effect in relation to PS33 and PS35 and significant negative effect in relation to PS34 and PS36 identified are accurate but that the effects recorded in relation to the Berkeley Cluster at page 101 are not reflective of the likely impacts. It is also stated that the consultee disagrees with the employment and economic growth (SA objectives 16 and 17) findings which were scored as significantly positive.	The findings in relation to the Vision for the Berkeley Cluster at page 101 of the SA Report for the Emerging Strategy Paper are reflective of the "aspirational and high level nature" of this portion of the Local Plan document (please see paragraph 6.51 of the SA report and the summary of findings presented in Appendix 6 of this SA Report). The SA findings identify the effect that the vision set out for the cluster may have on developers and decision makers in the area. Conversely the appraisal findings for the sites PS33, PS34, PS35 and PS36 in Table 6.8 of the SA Report for the Emerging Strategy Paper (a summary of which is represented in Appendix of this SA Report) represent the effects of developing the specific land in question without consideration for any potential

Consultee	Representation relating to	Comment	SA Team Response
			mitigation. Therefore, the findings for individual sites are necessarily different from the findings for the overall vision for the Berkeley cluster.
			The site appraisal has been guided by the SA assumptions presented in Appendix 4 (in the SA Report for the Emerging Strategy Paper and this SA Report also), to achieve consistency across the high number of sites appraised. The detailed matrices for sites PS33, PS34, PS35 and PS36, which Table 6.8 of the SA Report for the Emerging Strategy Paper presents a summary of, are presented in Appendix 6 of that SA Report. A summary of those findings are also presented in Appendix 6 of this SA Report. These matrices should be referred to for justification of the scores assigned to each of the individual sites considered.
Linden Homes	SA rep 10 – site being promoted at Kingswood and comments regarding SA findings for emerging strategy	The consultee is promoting land in Kingswood for development. The land corresponds with site KIN001 which was appraised as a reasonable alternative in the SA report for the Emerging Strategy Paper. The site was not included as a potential site for development in the Emerging Strategy Paper but only as an alternative site. The consultee has not directly referenced the findings of the SA report in relation to this site but states that the site is sustainable in the following ways: It would provide 'good' accessibility to local services and facilities. In relation to this, Kingswood should have tier 2 settlement status; The landscape assessment of the land as being of high landscape sensitivity is contested and in any case impacts on the landscape can be mitigated. The consultee agrees with the conclusion of the SA that a hybrid option in relation to the future growth strategy should be considered. However, the individual findings of	The SA report for the Emerging Strategy Paper included an appraisal of site KIN001. All site options appraised through the SA process have been considered against the SA framework and associated SA assumptions (Table 2.2 and Appendix 4 respectively in this SA Report) which allow for a consistent approach to the appraisal work. As such the accessibility of the site to services and facilities has been considered through SA objective 6 for which the site scored a negligible effect as a third tier settlement. It is for the Council to decide if Kingswood should have tier 2 status. If further evidence becomes available to reclassify the settlement as a tier 2 settlement as the consultee has suggested, this would be considered as part of the allocation of sites through the Local Plan process as well as the SA. The site has been assessed as having high/medium sensitivity to development in the Landscape Sensitivity Assessment and this has informed the findings of the SA report in relation to landscape (SA objective 8).

Consultee	Representation relating to	Comment	SA Team Response
		the SA in relation to the more favourable performance of option 1 when compared to options 2 to 4 for SA objectives 7, 9, 11, 12 and 13 are disagreed with by the consultee. The consultee considers that performance against the environmental SA objectives will be similar for all four of the growth strategy options.	The site has therefore been appraised as having a significant negative effect in relation to this SA objective. In relation to the appraisal of the options for the growth strategy for Stroud, the appraisal of the options put forward in a 'policy-off' scenario has been undertaken given that environmental policies have not been worked up yet. Mitigation against any environmental protection policies which the Council works up will be considered at later iterations of SA report. The appraisal of individual potential sites for growth is considered separately. Cumulative effects of the individual potential sites for development and policies in the Emerging Strategy Plan have been presented from paragraph 6.91 of the SA Report and is also included in this SA Report at Appendix 6.
Strutt & Parker and BNP Paribas Real Estate on behalf of redacted	SA rep 11 – sustainability findings for the emerging strategy and promotion of land by Hardwicke	The consultee states that they support the aims of the emerging strategy in seeking to deliver a clear economic strategy to support sustainable economic growth. The SA report for the Emerging Strategy Paper is referred to in that it highlights that the District's strong strategic transport links along the M5 corridor should be made use of appropriately to facilitate future economic growth. The consultee states that it is agreed that option 1 for the Emerging Growth Strategy performs strongly in terms of its sustainability merits as is presented in the SA report for the Emerging Strategy Paper. It is stated that this option is the most likely to help generate developer and public funding to help support infrastructure improvements at Junction 12 of the M5. The client also seeks to promote an additional piece of land on the eastern side of the B4008 Gloucester Road which is in relatively close proximity to the employment sites Quedgeley East (PS31) and South of M5 / J12,	Comment noted. It should be noted that while option 1 was highlighted as performing strongly against the SA objectives the SA report at paragraph 4.33 of the SA Report for the Emerging Strategy Paper concluded that "it may be worth considering a hybrid option which most resembles Option 1: Concentrated development, but perhaps including growth at one or two growth points and/or one or two of the smaller towns and larger villages as well." The Council has considered all known sites which are considered to be deliverable or developable reasonable alternatives as part of the Local Plan preparation and the supporting SA process. Should the Council decide that the land being promoted by the consultee is a reasonable alternative it will be subject to SA in future iterations of the SA report.

Consultee	Representation relating to	Comment	SA Team Response
		(PS32) both of which are in Hackwicke and have been appraised as part of the SA report. The scores of these sites and sites HDF007 and HDF008 are referred to in the representation and it is stated that the consultee's site would be 'highly likely' to score similarly to these sites.	While comparisons to other nearby sites may give an indication of the likely SA effects of the site, effects may not directly correspond. All site options appraised through the SA process have been considered against the SA framework and associated SA assumptions (Table 2.2 and Appendix 4 of the SA Report for the Emerging Strategy Paper and this SA Report respectively) which allow for a consistent approach to the appraisal work. Any new reasonable alternative site would need to be appraised against the same SA assumptions.
Redacted	SA rep 12 – sustainability effects for sites in Dursley	The consultee disputes the capacity for 175 new homes across sites DUR010 to DUR013 which has been included in the SA report. It is stated that the SALA suggests that 138 new homes can be accommodated at the site. The consultee also contests the statement in the SA report that those sites appraised are not to be proposed for development. It is contested that site PS29 is suggested as a potential site for development in the Local Plan. The consultee disagrees with the identification of this site for potential development. The consultee highlights the SA scoping report's reference to the importance of the landscape to the future growth of tourism in the district. It is stated that this has been ignored when appraising site PS29.	The SA report for the Emerging Strategy Paper appraised site DUR010 as having potential to accommodate 50 homes and site DUR013 as having potential to accommodate 100 homes. The total number of homes accommodated across these sites is therefore 150 new homes and is based on site capacity work undertaken by the Council. Should further work relating to site capacity indicate that the capacity for either site needs to be updated, the sites will be appraised taking the new information into consideration. All sites appraised as part of the SA Report for the Emerging Strategy Paper constitute reasonable alternative site options for allocation as part of the Local Plan. The Emerging Strategy Paper contained only potential sites for development and as such no sites are allocated through this document but merely presented as options which the Council are considering to take forward to support for development. Site PS29 comprises part of the potential sites considered for eventual allocation in through the Local Plan once it is adopted. All site options appraised through the SA process have been considered against the SA framework and associated SA assumptions (Table 2.2 and Appendix 4 of the SA

Consultee	Representation relating to	Comment	SA Team Response
			Report for the Emerging Strategy Paper and this SA Report respectively) which allow for a consistent approach to the appraisal work. SA objective 8 relates to the protection of the landscape in that it seeks to appraise elements of the Local Plan document in terms of seeking "To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District." SA objective 17 relates to sustainable economic growth and contains the sub-objective "Does the Plan maintain and enhance the economic vitality and vibrancy of the District's town centres and tourist attractions?"

Table A1.2: Scoping consultation responses and how they have been addressed in this SA Report

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
Historic England	Overview Comment Consideration of the historic environment looks fine and provides an appropriate framework to assess relative sustainability from a heritage perspective.	Comment noted, no action required.
Natural England	Relevant Plans and Programmes Natural England has not reviewed the plans listed in the review of relevant plans and programmes. However, we advise that the following types of plans relating to the natural environment should be considered where applicable to your plan area; Green infrastructure strategies Biodiversity plans Rights of Way Improvement Plans Shoreline management plans Coastal access plans River basin management plans AONB and National Park management plans. Relevant landscape plans and strategies.	 Noted. The relevant documents are already included in the review of plans and policies now set out in Chapter 3 of this report, i.e.: Strategic Framework for Green Infrastructure in Gloucestershire 2015 Gloucestershire Nature Map Stroud District Environment Strategy 2007-2027 2017-2027 Severn Estuary Strategy The Severn Estuary Shoreline Management Plan Review (SMP2) Cotswolds AONB Management Plan 2013-2018 Emerging Cotswolds AONB Management Plan 2018-2023 Severn Estuary Flood Risk Management Strategy The 25 Year Plan to Improve the Environment Gloucestershire Local Flood Risk Management Strategy The policy review will be updated at each forthcoming stage of the SA and any new or updated plans and strategies will be included as relevant.
	Key Sustainability Issues – Biodiversity Natural England recommends that the restoration or enhancement of biodiversity is included in line with the National Planning Policy Framework. This is to be included in addition to the avoidance of damage which is already included.	The Key Sustainability Issues now presented in Table 3.1 of this report have been updated to reflect the need to promote the restoration and enhancement of biodiversity in line with the NPPF.
	SA Framework - Public Health Natural England recommends that while references relating to enhancing provision of recreational resources are included, there are none relating to impacts on existing recreational assets (quality	The assumptions that have been used in the SA of development site options (see Appendix 4) determines that potential significant negative effects are identified where development in a particular location could result in the loss of an existing green infrastructure/recreation asset.

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	and/or extent). It is suggested that the text " avoids impacts on the quality and extent of existing recreational assets, such as formal or informal footpaths?" should be added to address this issue.	
	SA Framework - Ecological Connectivity Natural England recommends that there is a danger that development at land of limited biodiversity value in its own right can lead to the creation of islands of biodiversity, permanently severed from other areas. It is therefore suggested to add a subobjective to SA objective 7 that reads "(Does the Plan) ensure current ecological networks are not compromised, and future improvements in habitat connectivity are not prejudiced?"	SA objective 7.1 has been amended to make reference to the need to avoid damage to ecological networks (see Table 2.2 of this report).
	Monitoring Framework Natural England highlights that the significant environmental effects of implementing the current local plan will need to be monitoring including the indicators relating to the effects of the plan on biodiversity.	Commented noted. The monitoring framework which is now set out in Chapter 7 of this report has drawn on the indicators suggested by Natural England as appropriate.
	Natural England suggests including adopting the following indicators:	
	 Biodiversity: Number of planning approvals that generated any adverse impacts on sites of acknowledged biodiversity importance. Percentage of major developments generating overall biodiversity enhancement. Hectares of biodiversity habitat delivered through strategic site allocations. Landscape: Amount of new development in AONB/National Park/Heritage Coast with commentary on likely impact. 	
	Green infrastructure:	

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	 Percentage of the city's population having access to a natural greenspace within 400 metres of their home. Length of greenways constructed. Hectares of accessible open space per 1000 population. 	
Gloucestershire County Council	Relevant Plans and Programmes - Public Health Stroud DC may wish to consider including the Gloucestershire Health and Wellbeing Strategy in Chapter 2 – this is a statutory document and its priorities are referenced in Chapter 3.	The review of relevant plans and programmes in this SA Report (see Chapter 3) has been updated to include reference to the Gloucestershire Health and Wellbeing Strategy 2012 – 2032.
	Baseline Information - Public Health Paragraph 3.31 refers to priorities identified by Public Health England. These are quoted in the Public Health England document referenced in the Scoping Report but are actually priorities identified locally in the Gloucestershire Health and Wellbeing Strategy.	The review of relevant plans and programmes in this SA Report (see Chapter 3) has been updated to include the priorities identified in the Gloucestershire Health and Wellbeing Strategy 2012 – 2032. Furthermore the part of the baseline information relating to health (see Appendix 2) has been updated to reflect the information provided by Gloucestershire County Council.
	SA Framework - Public Health SA objective 2 could be strengthened by including reference to narrowing health inequalities as this is identified as a key sustainability issue for Gloucestershire and Stroud in Chapter 4 (Table 4.1).	An additional sub-objective has been added to SA objective 2 in the SA framework (see Table 2.2 in this report) in relation to narrowing health inequalities.
	Baseline Information - Ecology At paragraph 3.53 the Scoping Report mentions a particular local Nature Improvement Area (NIA) but it has forgotten to mention the Cotswold Scarp NIA which partly falls within Stroud district too.	The baseline information in this SA report (see Appendix 2) has been updated to include reference to the Cotswold Scarp NIA.

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	Paragraph 3.111 – it may be worth mentioning that land is currently safeguarded in the adopted Stroud Local Plan for two potential new stations at Hunts Grove (south of Gloucester) and Stonehouse Bristol Rd. Policy LTP PD5.1 of the Local Transport Plan sets out to explore with the rail industry the potential to open one or more new stations between Gloucester and Bristol. This will be considered again as part of the forthcoming review of the Local Transport Plan.	The baseline information section in this SA report (see Appendix 2) has been updated to include reference to the potential for the new railway stations at Hunts Grove and Stonehouse Bristol Road as identified in the current Local Plan and the Local Transport Plan.
Highways England	Key Sustainability Issues and SA Framework - Transport Highways England welcomes the inclusion of transport and transport infrastructure in Table 4.1 of the Scoping Report as a 'key sustainability issue' for Stroud, and matters for which Plan policies seek to address. Highways England is however surprised that transport does not form its own SA objective. Instead transport is covered by sub-objectives under SA10 (air quality). These largely seek to promote sustainable transport patterns and reduce the need to travel, particularly in areas of high congestion.	The objectives in the SA framework seek to address issues relating to environmental, social and economic sustainability, and therefore transport is addressed in the context of encouraging sustainable transport use and reducing car use, in relation to the relevant SA objectives. Transport itself is not one of the topics included in the SEA Regulations, and which an integrated SA/SEA is required to address, while 'air' is.
	SA Framework - Transport Highways England believes that the transport objectives of the SA/SEA could be strengthened with a further sub-objective. This could include text that seeks to 'secure appropriate development related transport infrastructure and ensure the operation and safety of the transport network, including the Strategic Road Network.'	As noted above, the objectives in the SA framework seek to address issues relating to environmental, social and economic sustainability, and therefore transport is addressed in the context of encouraging sustainable transport use and reducing car use. Transport itself is not one of the topics included in the SEA Regulations, and which an integrated SA/SEA is required to address.

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
Environment Agency	SA Framework - Environmental Themes	Comment noted, no action required.
	The Environment Agency states that the themes presented appear to incorporate the 'SEA topics' suggested by Annex I(f) of the SEA Directive and appear reasonable to reflect the purpose of the local plan review and its potential environmental effects. The themes include Biodiversity, Air and Water, Flood Risk, Energy and Climate Change, Resource Use/Waste and Recycling.	
	SA Framework - Biodiversity	Comment noted, no action required.
	The Environment Agency states the SA objectives and questions appear reasonable to help create, enhance and connect habitats, species and/or sites of biodiversity interest.	
	Baseline Information - Climate Change	The part of the baseline information relating to climate change (see
	The Environment Agency states that whilst the climate change adaptation and mitigation section makes reference to the relevant sections within the NPPF and the draft revised NPPF, it should be noted that the National Planning Practice Guidance (NPPG) refers to Environment Agency guidance on considering climate change in planning decisions which is available online: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances	Appendix 2 in this report) has been updated to refer to Environment Agency guidance on considering climate change in planning decision as well as fluvial risk.
	In addition the Environment Agency has produced Climate Change Guidance for the local area. For fluvial risk, it should be noted that there is a need to include a different climate change allowance for climate change (peak river flows) to inform the location, impacts and design of a scheme depending on development vulnerability. For example, residential development allocations and proposals will need to consider a 35% and 70% increase for peak river flows, on top of the 1 in 100 year flood level.	

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	SA Framework – Flood Risk The Environment Agency states that SA Sub-Objective 12.1 should refer to "all sources of flooding" to include fluvial, surface water, groundwater, reservoir etc.) in line with the National Planning Policy Framework (NPPF) not just fluvial flood risk and sewer flooding. It welcomes that SA Sub-Objective 12.2 aims to facilitate new development in areas at lower risk of flooding which accords with the sequential approach/NPPG policy aims in terms of avoiding	Sub-objective 12.1 has been amended to read "Does the Plan reduce the risk of flooding from all sources including rivers, watercourses and sewer flooding to people and property?" A new sub-objective 12.4 has been included under SA objective 12 to read "Does the Plan promote flood risk reduction and improvement to the flood regime?' The limitations of the Flood Map are noted and will be acknowledged in the SA as appropriate.
	inappropriate development in areas subject to flood risk. The SA could also look at 'ensuring flood risk reduction/improvement to the flood regime'. For example, options to look at strategic flood risk management and reduction measures could be incorporated, for example flood storage improvements, which can often be linked to other wider environmental benefits such as wet washland provision, or biodiversity enhancement, if planned. Our indicative Flood Map for Planning (Rivers and Sea) does not include climate change allowances and primarily shows potential	Figure A2.7 which maps hydrological constraints includes surface water flooding as part of an overview of flood risk in the District. It is considered that the potential for development to improve or reduce flood risk is addressed under the new sub-objective 12.4.
	flooding from Main Rivers. In considering flood risk data, the limitations of our Flood Map should be acknowledged. In considering other types of flooding a reference should also be made to surface water flooding maps. An additional flood risk question could be 'will it (development) improve and/or reduce flood risk (betterment and flood risk reduction opportunities)? Relevant Plans and Programmes – Sub National The Environment Agency suggests that the current Severn River Basin Management Plan (published February 2016) is included within the review of relevant plans and policies Sub-National listing.	The review of relevant plans and policies has been updated to include the Severn River Basin Management Plan and an overview of its objectives.

22

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	SA Framework – Air and Water The Environment Agency supports the inclusion of SA objectives and questions SA.11 and SA.13, which seek to 'protect and enhance water quality and the condition of water resources' and improve efficiency in land use through the re-use of previously developed land. To strengthen the commitment to the Water Framework Directive, a further question could be 'does the plan seek to ensure development will not result in deterioration or put further pressure on the water environment and compromise the Water Framework Directive?'. The objective could include an indicator on water quality levels within the County's main watercourses.	Sub-objective 11.1 has been amended to read 'Does the Plan seek to avoid deterioration and where possible improve the water quality of the district's rivers and inland water?' An indicator relating to water quality levels is included in the monitoring framework in Chapter 7 of this SA Report.
	Overview Comment The Environment Agency has stated that as part of the local plan review relevant evidence bases will need to be updated, as referred to above. The scoping document should therefore include a line to commit to this.	Paragraph 2.7 of this SA Report refers to the fact that the review of plans, policies and programmes; the baseline information and the key sustainability issues will be updated as appropriate throughout the SA process.
Stonehouse Town Council	Scope of the SA Report Stonehouse Town Council has stated that the scope of the SA seems generally appropriate	Comment noted, no action required.
	Relevant Plans and Programmes Stonehouse Town Council has stated that there are a number of made Neighbourhood Development Plans (NDPS), including the Stonehouse NDP, and other emerging NDPs which are relevant for inclusion.	The review of relevant plans and policies set out in this SA Report (see Chapter 3) has been updated to include reference to Neighbourhood Plans in the District.
	Baseline Information The following updates are suggested by Stonehouse Town Council:	The baseline information (see Appendix 2 in this report) has been updated to reflect the issues raised by Stonehouse Town Council as relevant.

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	 Cotswold Way also runs through Stonehouse and the town is one of the few points where the Cotswold Way can easily be accessed by public transport (train and bus) and this could be of relevance to tourism and economy. Cotswold Canals Partnership project which has recently been awarded a £9 million Heritage Lottery Fund grant to restore the Stroudwater canal from Stonehouse to Saul should be referred to. proposals within Gloucestershire's Local Transport Plan 2015-2031 specifically exploring the most effective approach to station development and stopping patterns on the Bristol/Gloucester route with Stonehouse Bristol Road being a possible location for a new station should be referenced. 	
	Key Sustainability issues Stonehouse Town Council suggests that the issue regarding alternative modes of transport and transport infrastructure should make explicit reference to the rail network and public transport.	The key sustainability issue relating to transport infrastructure has been updated to refer to the current state of the rail network and public transport in the District - see Table 4.1 in this SA Report.
	SA Framework It is also stated that the SA Framework objectives would be improved by including an additional objective on moving towards a more sustainable transport infrastructure.	The SA objectives set out in the Scoping Report address the SEA topics identified in the SEA Regulations (see Table 5.1 in the Scoping Report). Sustainable transport is not included in the SEA Regulations as one of the topics to be covered; however it is relevant to the achievement of some of the SA objectives including in particular SA objective 10 which addresses air quality.
Stroud Town Council	The consultee disputes the assumption of good air quality in Stroud town especially around Beeches Green, Merrywalks, London Road, Cainscross Road, Slad Rd at Gloucester St end and Rowcroft. It is requested that regular air quality monitoring is undertaken in these places. In sub objective 4.1 the assumption of increased car ownership supports the need for monitoring. The reference to the protection of the cycle routes is supported. SA1, 2 and 3 are all supported and it is suggested that greater built	Comment noted. The information presented in the baseline information (see Appendix 2 of this SA Report, and originally presented in the Scoping Report) relating to air quality has been sourced from up-to-date information in the Stroud District Council 2017 Air Quality Annual Status Report. Air quality readings have been taken through the Council's reporting process. It is not the role of the SA process to undertake measurements of air quality. SA objective 10 seeks to ensure that the Local Plan Review through its policies and site allocations will protect air quality in Stroud District. Sub objective 10.1

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	accessibility is added to support SA 3.2 (the growth of older people).	in particular will consider what effect policies and site options would have on local air quality.
	The consultee highlights that SA5. 1, 2, 3, 4, and 5 are fully supported.	It is considered that sub-objective 3.2 already addresses accessibility for older people and no changes are therefore made.
	The commitment to ES1 and ES2 is supported in relation to climate change. However low energy freight delivery for town centres should be added to El14 options. It is highlighted that this would link to 5.1-SA 10.2.	In relation to low energy freight delivery, this issue would be covered under sustainable transport which is addressed through sub objectives 14.3 and 10.2 as the consultee has highlighted. No further changes are therefore made.
South Gloucestershire	Overview Comment	Comment noted, no action required.
Council	South Gloucestershire Council have reviewed the SA Scoping Report document and consider that it meets the requirements of the EU Strategic Environmental Assessment (SEA) Directive and adequately covers the wide range of interests which should be included through the Sustainability Appraisal process.	
Martin Whiteside - Environment and Development Consultant and Green District Councillor Hillside	Overview comment The consultee raises the following issue which he wishes to be recognised through the plan preparation process: The SA scoping report is an extremely useful resource document which is excellent.	Comments noted. The SA framework has been drafted to address the environment, social and economic effects that development proposed through the plan is likely to have. Although each proposal is considered against each SA objective separately, the cumulative effects of the plan are also considered through the SA.
	When doing a sustainability appraisal on any new development (or policy guiding the development) it is essential to take a holistic view of the impact. Just looking at one easy to measure gross (as opposed to net) issue like single dwelling travel outcomes is not sufficient or scientifically robust.	
	New family housing in a rural village will have a theoretically higher transport impact than similar housing in a town centre. However, if you analyse the footprint holistically, the new housing may help keep the village school, pub and shop open. In this case its holistic net impact may be very different as it may prevent a dramatic rise	

25

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	in footprint from the existing community if the school, pub or shop disappears.	
	Clearly this is not easy to judge, but measurement challenges is not a reason for ignoring reality.	
	The danger is that one-dimensional gross sustainability appraisals are mis-used to drive a development pattern that is less rather than more sustainable.	
Tom Low	Relevant Plans and Policies The consultee identifies that under Sub-National relevant plans, paragraph 2.75, the made NDPs of the District have not been included.	The review of plans and policies in Chapter 3 of this SA Report has been updated to include made NDPs in the District.
Persimmon Homes Severn Valley	Relevant Plans and Policies The consultee has highlighted that the draft revised NPPF is expected to be finalised in July 2018 and will therefore provide the relevant national policy guidance for the Stroud Local Plan Review. Key changes include the introduction of a standard methodology for the calculation of housing OAN and the establishment of a housing delivery test. As a result the demonstrated housing needs in Stroud would need to increase by 42% from 448 up to 635 dwellings per annum however, in reality the increase will be higher. The Stroud Local Plan Review therefore has a key role to play in building on existing connections to the rest of the UK provided by the M5 corridor, which makes availability of employment land in this location a key area to attract businesses. Therefore a key sustainability issue is to ensure sufficient housing is located in the same location to support business growth, for example at Cam, which also benefits from access to an existing railway station.	The review of plans and programmes (presented in Chapter 3 of this SA report) has taken the changes proposed through the draft revised NPPF into consideration and will be further updated at such time that the final revised NPPF is published. Reference to the housing delivery test has been included. A key sustainability issue has already been identified in relation to the promotion of alternative modes of transport in the District. The sustainability of different options for locating development is being considered through the SA process, including in relation to providing access to jobs. It is not the role of the SA to determine at the Scoping stage where development should be located; rather the findings of the SA will be one of a range of factor's feeding into the Council's decision making.
	Key Sustainability Issues The consultee has stated that not all locational requirements have the same importance and should not be given the same weight. It is highlighted that for example, it is not necessary to use proximity	It is noted that new development may stimulate the provision of new services and facilities and green space; however proximity to existing facilities is still a relevant issue for consideration through the SA. Where policy requirements state that this provision is to be made as

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	to existing health care facilities as a key locational factor for housing. Health care and open spaces can be provided as part of a development, particularly on strategic sites. In particular, Local Green Space is a designation which should only be used in exceptional circumstances, is very restrictive and does not necessarily enable the provision of active open space facilities.	part of any development (once the Local Plan is further developed), this will be reflected in the SA scoring for that site.
	SA Framework The wording of SA objective 1 is not considered to be appropriate	The wording of SA objective 1 is considered to be appropriate for the SA of a Local Plan and no changes are made.
	or in line with housing needs and requirements. This objective should be more widely worded to refer to housing needs generally rather than the narrower focus of housing to meet local needs. The SA objective should also include a sub-objective to reflect an adequate supply of land for housing which would be in line with SA objective 16 in relation to the provision of employment land. It is also highlighted that high house prices in the area should be reflected as a key social objective.	The key sustainability issues for Stroud have already highlighted that "House prices have increased by the highest percentage within the South West when compared to the other regions of England."
	SA Framework The consultee has stated that the objective to maximise brownfield development is inappropriate in relation to national guidance. NPPF17, bullet point 8 encourages the effective use of land that has been previously developed (brownfield land), provided that it is not of high environmental value. Draft planning policy guidance now proposes the following wording – 'give substantial weight to the value of using brownfield land within settlements for homes and other identified needs and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated and unstable land.' Therefore the guidance encourages making use of brownfield land but not maximising it, with the implication that development on brownfield land could be prioritised over other	Sub-objective SA13.1 has been amended in this SA Report to read: "Does the Plan encourage the appropriate provision of housing development on previously developed land as opposed to greenfield sites?" Sub-objective SA13.3 has been reworded to read: "Does the Plan encourage housing densities which would make efficient use of land?"
	land. Therefore SA13 needs to be reworded to accord with national guidance.	

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	It is also highlighted that maximising housing densities (SA13.3) might not always make the most efficient use of land and may increase the possibility of conflicts with other SA objectives. A more general wording such as 'housing densities should make the most efficient use of land' has been suggested.	
	The consultee has stated that beyond sub-objective SA6.3 which encourages the protection of existing town centres the retail objective in the SA framework is very limited.	SA objective 6: To maintain and improve access to all services and facilities, seeks to protect local existing services and facilities in sustainable locations as per sub-objective 6.2, which will take into consideration retail provisions in locations outside of town centres in the District. Retail issues are also relevant as part of the wider economy under SA objectives 16: employmet and 17: economy.
	It is stated by the consultee that SA8.4 (Does the Plan prevent coalescence between settlements?) is not a sustainability objective but is a policy response and therefore is not appropriate.	SA objective 8 relates to conserving and enhancing the local character and distinctiveness of landscapes and townscapes and providing sustainable access to the countryside. Preventing the coalescence of settlements is relevant to the achievement of this sustainability objective as it will help to protect the distinctiveness of townscapes in the District and local character in general. No changes have therefore been made to this sub-objective.
Gladman Developments	Overview comment The consultee raises the following issues in relation to undertaking SA as part of the plan preparation process: The Council should ensure that the results of the SA process clearly justify its policy choice. In meeting the development needs of the area it should be clear for the results of the assessment why some policy options have been progressed, and others have been rejected. Undertaking a comparative and equal assessment of each reasonable alternative, the Council's decision making and scoring should be robust, justified and transparent. Gladman remind the Council that there have now been a number of instances where the failure to undertake a satisfactory SA has resulted in plans failing the test of legal compliance at Examination or being subjected to legal challenge. There are also numerous	Policy and site options for the Local Plan are being subject to SA and the findings (along with other factors) will inform the Council's decision making at each stage. The reasons for selecting or rejecting options have been recorded in the SA Report at Appendix 7. The SA/SEA is being undertaken in line with the requirements of the SEA Regulations. Table 1.1 in this SA Report signposts where each of the requirements of the SEA Regulations has been met in the report, and this table will be updated and further completed at each stage of the SA to demonstrate legal compliance. The SA process has commenced early in the Local Plan preparation process and will be undertaken iteratively.

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	examples where deficiencies with SAs have led to timely suspensions of EiPs whilst Councils ensure that the SA regulations have been adequately met.	
	Through this brief submission, Gladman would like to take the opportunity to remind the Council how a justified and adequate SA should be undertaken to inform the policies and allocations made through the Local Plan. This should not be a cursory exercise, but should be a fundamental part of the plan preparation process and should help to inform the decisions made by the Council. In light of experiences in other authorities, the Council need to ensure that the policy choices in the Stroud Local Plan are clearly justified by the results of the SA process. Specifically, it should be clear from the SA process why some policy options have been progressed and others rejected.	
	The Planning Practice Guidance (PPG) provides a detailed explanation of the need for sustainability appraisal, its role in the plan making process and what the requirements of the process are (Ref ID: 11-005-201400306 to Ref ID: 11-045-20140306). It explains that SA is integral to the preparation of a Local Plan; and that, its role is to promote sustainable development by assessing the extent to which the emerging plan, when judged against reasonable alternatives, will help to achieve the relevant environmental, economic and social objectives. It is a systematic process that must be carried out during the preparation of a Local Plan. Work on the SA should start at the same time that work starts on developing the plan itself and the process should be taken into account through the development of the timetable within the Local Development Scheme.	
Painswick Valleys Conservation Society	Overview comment	Comment noted, no action required.
conscivation society	The consultee expresses its appreciation for the comprehensiveness of the study in the SA Scoping Report to support the Local Plan Review and also for its opportunity to read it.	

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
Hunter Page Planning on behalf of Greensquare	Baseline and Key Sustainability Issues The consultee is promoting land at Sharpness as a new growth	The consultee's broad support for the methodology and scope of the SA is noted.
Group and Lioncourt Strategic	point. Comments relate to the following: The proposed methodology and scope for the SA is broadly supported by the consultee.	A number of the consultee's suggested changes to the baseline are incorporated in Appendix 2 of this SA report, although not all are considered to be appropriate or necessary.
	 Edits to the baseline information in relation to ecology and biodiversity are suggested by the consultee. A change is also suggested to Figure 3.3 and it is requested that a footnote is added to paragraph 3.58 of the baseline. In relation to employment land, the consultee has stated that the employment land situation in Stroud District is not 	The headings used in Figure 3.3 (Figure A2.3 in this report) have not been amended as it is considered appropriate to categorise the designations as international, national and local. As the consultee has noted, strategic green infrastructure framework areas and SNAs are not designations; therefore these have not been added to this map of designated sites.
	 currently up to date. The ecological sustainability issue as identified in table 4.1 at page 49 is stated by the consultee to not fully reflect the baseline set out at para 3.58 in relation to ecology - the table 	A reference has been added to paragraph 3.58 of the baseline to show the source of the site condition data, in the updated baseline presented in Appendix 3 of this report.
	 only refers to international and nationally protected sites and ignores locally designated biodiversity sites. It is suggested that this issue should also be updated to reflect such sites. Also in relation to biodiversity the consultee has stated that paragraph 109 of the NPPF highlights that biodiversity is in 	The consultee's point relating to the evidence base for employment land needs relates to the preparation of the Local Plan itself and not the SA directly. The SA baseline (see Appendix 2 of this report) refers to the most up-to-date available sources and will continue to be updated throughout the SA process as the evidence base is updated.
	therefore that this issue should be more clearly related to biodiversity enhancement as well as protection. Significant edits are suggested to Table 4.1 in relation to biodiversity and geodiversity. The consultee states that the baseline identifies at paragraph 3.34 that there is deficient access to open space within the	The key sustainability issues for Stroud set out in Table 4.1 of the Scoping Report (and repeated in Table 3.1 of this report) include that "Stroud District contains many areas of high ecological value including sites of international and national importance." The purpose of the table is to summarise the key issues, not to repeat all of the information set out in the baseline. However, the wording of the key issue has been slightly amended as suggested to also refer to local
	District and that the issue of providing new open space is not highlighted within the key sustainability issues. The consultee states that the key sustainability issues for the District relating to transport should recognise that there is	designations. The enhancement of biodiversity is already addressed through the SA framework through SA objective 7, particularly sub-objective 7.2 which states "does the Plan outline opportunities for improvements to
	potential for some sites, such as at Sharpness, which may require significant additional transport infrastructure to open up	the conservation, connection and enhancement of ecological assets, particularly at risk assets?"

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	delivered. It is stated by the consultee that the key sustainability issue which relates to the historic environment relate only to the Industrial Heritage Conservation Area and no mention is made of other elements of the historic environment in Stroud District. It is also disputed in the consultee's response whether or not inclusion of the phrase 'preserved and enhanced' in relation to the heritage assets is appropriate, and it is stated that setting is not a heritage asset its own right.	Some of the edits that the consultee has proposed to make to the table of key sustainability issues are reflected in Table 3.1 in this full SA Report although others are not considered appropriate. The key sustainability issue relating to protecting and enhancing open and green spaces has been amended (see Table 3.1 in this report) to
		also recognise the need to address deficits in open space. It is recognised that some new development sites may require significant transport infrastructure improvements. The role of the SA is to consider sustainability issues, and therefore the SA focuses on the extent to which development locations would enable the use of sustainable modes of transport, rather than requiring significant new road-based infrastructure. The SA framework already includes these considerations.
		Table 4.1 in the Scoping Report (Table 3.1 in this SA Report) includes as one of its key sustainability issues that the "Industrial Heritage Conservation Area (IHCA) is currently one of several heritage assets which are included on Historic England's Heritage at Risk list. Within the District areas of significant built historic importance and aesthetic quality are under pressure due to new development in the District and there is a requirement for them to be preserved and enhanced." This issue therefore focuses on the key issues, as is the purpose of the table, not to repeat the detail of the baseline information.
		In relation to the appropriateness of the terminology 'preserve and enhance', this is considered to be appropriate and Historic England has not objected to this or requested any change in its consultation comment.
		National planning policy acknowledges the importance of protecting the setting of heritage assets (NPPF paragraph 137).
	SA Framework The consultee makes the following suggestions in relation to changes to the SA objectives:	Sub-objective 2.2 has been updated to read 'Does the Plan encourage healthy lifestyles and provide opportunities for sport and recreation, including through the provision of green infrastructure and public open space?'

Consultee	Issues raised in relation to Sustainability Appraisal	Response/how comment has been addressed in this SA Report
	(summarised where appropriate)	
	SA objective 2 - sub objective criteria should also consider whether the plan will protect existing green infrastructure/public open space and facilitate the creation of new green infrastructure/public open space. Change suggested	The proposed new sub-objective under SA objective 5 has not been added - the provision of mixed used development has been considered through SA objective 6 and the amendments suggested may lead to a 'double-counting' of effects.
	 to sub-objective 2.2 "Does the plan encourage healthy lifestyles including providing access to the countryside and appropriate land for leisure and recreation use". SA objective 5 – a new sub-objective is suggested to read "Does the plan promote mixed use developments and encourage multiple benefits form the use of land in urban and 	The changes suggested to SA objective 7 relating to opportunities for net biodiversity gain are already addressed through sub-objective 7.2 which states 'Does the Plan outline opportunities for improvements to the conservation, connection and enhancement of ecological assets, particularly at risk assets?' No further change is therefore made.
	 rural areas, recognising that some open land can perform many functions?" SA objective 7 - sub objective criteria should also consider whether the plan provides opportunities for new habitat creation i.e. net biodiversity gain. SA sub-objective 9 - sub-objective 9.1 currently asks whether 	The changes suggested to SA objective 9 in relation to opportunities for enhancing heritage assets are already addressed through sub-objective 9.2 which states 'Does the Plan outline opportunities for improvements to the conservation, management and enhancement of the District's heritage assets, particularly at risk assets?' No further change is therefore made.
	the plan avoids adverse effects on the District's heritage assets. It is suggested that this is updated to state "Does the Plan preserve or enhance the District's designated and non-designated heritage assets in a manner that is consistent with their significance" in line with the NPPF. • It is suggested that an additional SA objective is added regarding connectivity and sustainable travel e.g. "To achieve a pattern of development which minimises journey lengths and	Issues relating to connectivity and sustainable transport have already been addressed through SA objectives 10 and 14 in the context of air quality and climate change. Improved sustainable transport links may be a plan objective; however it is a method of achieving improved air quality which is the sustainability objective. This approach is in line with updated RTPI guidance on undertaking SEA/SA¹. No additional SA objective is therefore added.
	 encourages the use of sustainable forms of transport (walking, cycling, bus and rail)". A sub objective could then be: "Does the plan provide opportunities to improve and enhance connectivity and sustainable travel?" SA objectives 16 and 17 – it suggested that in relation to encouraging economic growth in the District a sub-objective is 	A new sub-objective 17.5 has been added to SA objective 17 to read: 'Does the Plan help to support increased economic activity throughout the District?'
	added to include "Does the Plan help to support increased	

 $^{^{1}}$ RTPI South East (January 2018) Improving the effectiveness and efficiency of SEA/SA for land use plans

Consultee	Issues raised in relation to Sustainability Appraisal (summarised where appropriate)	Response/how comment has been addressed in this SA Report
	spending and economic activity at settlements within or adjacent to the District."	

Appendix 2Baseline Information

- A2.1 Baseline information provides the basis for predicting and monitoring the likely sustainability effects of a plan and helps to identify key sustainability issues and means of dealing with them.
- A2.2 Annex 1 of the SEA Directive requires information to be provided on:
 - (a) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan;
 - (b) the environmental characteristics of areas likely to be significantly affected;
 - (c) any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC [the `Birds Directive'] and 92/43/EEC [the `Habitats Directive'].
- A2.3 Baseline information was previously collated for the June 2009 Local Development Framework SA Scoping Report and this has been used as the starting point to collate baseline data. This information has been revised and updated to make use of the most recent available information sources, and these sources have been referred to in footnotes. The revised and updated baseline data set out in this section reflects the scope of the Local Plan Review.
- A2.4 Data referred to have been chosen primarily for regularity and consistency of collection, in order to enable trends in the baseline situation to be established, and also subsequent monitoring of potential sustainability effects.

Geography

- A2.5 Stroud District is located in the western part of Gloucestershire and covers an area of approximately 45,325ha. The District is bordered by Forest of Dean District on the other side of the River Severn to the west, Gloucester and Tewkesbury to the north, Cotswold District to the east and South Gloucestershire to the south.
- A2.6 Stroud is made up of 30 wards and 52 parishes. The ten electoral divisions in Stroud District are Bisley and Painswick; Cam Valley; Dursley; Hardwicke and Severn; Minchinhampton; Nailsworth; Rodborough; Stonehouse; Stroud Central; and Wotton-under-Edge. The adopted Stroud District Local Plan has set out eight parish cluster areas which have distinct qualities, issues, constraints and opportunities. These cluster areas are the Gloucester Fringe, Severn Vale, Stonehouse Cluster, Berkeley Cluster, Cotswold Cluster, Wotton Cluster, Stroud Valleys and Cam and Dursley².
- A2.7 The town of Stroud is located approximately 30km to the north east of Bristol. It is located within the centre-north of the District. The Stroud Valleys is the focus of much of the development in Stroud (approximately 40%) as well as a significant portion of its population given that it includes both Stroud and Nailsworth. Other important centres in the District include Cam and Dursley and Stonehouse (all first tier settlements). The Settlement Hierarchy set out in the adopted Local Plan 2015 identifies Berkeley, Frampton on Severn, Hunts Grove, Minchinhampton, Nailsworth and Wotton-under-Edge as second tier Local Service Centres with further smaller settlements spread across the District which offer a more limited level of access to services and facilities.
- A2.8 In addition to connections with the surrounding towns and areas of Gloucestershire, Stroud District has further close links with the West Midlands and South Wales. The M5 runs through the District from north to south, providing links with Birmingham to the north and South Wales (via the M48).
- A2.9 The District's landmass sits on the estuary of the River Severn to the west. The River Frome empties into the estuary after passing through the settlements of Brimscombe, Stroud and Stonehouse from east to west respectively within the District. The District also benefits from the presence of a number of canals which are currently subject to various stages of restoration. The Stroudwater Canal and the Thames and Severn Canal run from east to west through the District

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 $^{^{\}rm 2}$ Stroud District Council (November 2015) Stroud District Local Plan

- and in the past connected the River Severn to the River Thames at Lechlade. Together these canals form the Cotswold Canals. The Gloucester and Sharpness Canal runs along much of the course of the River Severn at the western edge of the District from south to north towards Gloucester.
- A2.10 The Stroudwater Navigation Connected project which is being undertaken by the Stroud District Council and Cotswold Canals Trust has received initial support from the Heritage Lottery Fund (HLF) to connect Stroud and Stonehouse to the nation's inland waterway network by 2024. HLF has committed £842,000 towards the scheme and a further £9 million has set aside should the additional funding criteria be met.

Population

- A2.11 The total resident population in Stroud as per the Office for National Statistics 2018 Population Estimates³ is recorded as 119,000 which makes the District the third most populous in Gloucestershire. At present there are slightly more females (60,500) in the District than males (58,500). The population density for the District is 255 people per square metre as of 2016, which is slightly higher than the figure for Gloucestershire (235 people per square metre) and the wider South West region (231 people per square metre).
- A2.12 The District saw a population change of 0.75% from mid-2017 to mid-2018 with a net internal migration rate of 0.78% and net international migration rate of $0.13\%^4$. The South West region as a whole is expected to see an increase of 363,953 residents up to 2026 which represents a 6.6% increase from 2016 figures. This is slightly higher than the national figure for England of $5.9\%^5$.
- A2.13 The District has a marginally lower proportion of people who are of working age (59.9%) when compared to the South West region (60.6%) and Great Britain as a whole (62.9%). The proportion of work age residents who are economically active (88.8%) is slightly higher than the figure for the wider South West region (81.3%) and the national (78.5%) figure⁶. It is predicted that by 2026 those over 65 will represent 25.1% of the District's population. The population growth in the South West region for those of working age is expected to be less than 2.6% reflecting a trend towards an increasingly ageing population⁷.

Housing

- A2.14 The latest census data in 2011 showed that there were 47,794 households in Stroud District⁸. This represented an increase in household numbers of 7.1% or 3,177 households since 2001⁹. This increase was mainly attributed to a rise in the number of one person households and cohabiting couples. It is expected that this trend is likely to continue in the District.
- A2.15 Household projections show that in 2018 there are approximately 51,230 households in the District. Over the following ten year period up to 2028 projections show that the number of households is set to increase to approximately 56,240¹⁰. Percentage increase of households from 2016 to 2041 is projected to be 21.3%; increase from 49,791 to 100,444¹¹.

³ ONS (March 2018) Population estimates revision tool

⁴ ONS(June 2019) Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2018

⁵ ONS (May 2018) Subnational population projections for England: 2016-based

⁶ Nomis (Accessed July 2019) *Labour Market Profile – Stroud* Online at: https://www.nomisweb.co.uk/reports/lmp/la/1946157376/report.aspx

⁷ ONS (May 2018) Subnational population projections for England: 2016-based

⁸ ONS (March 2011) Census data

⁹ Gloucestershire County Council (March 2016) *Understanding Stroud 2015*

 $^{^{10}}$ ONS (July 2016) Household projections for England and local authority districts

 $^{^{11}}$ ONS (September 2018) Household projections in England: 2016-based

A2.16 Stroud saw an increase of 8.6% in terms of the number of dwellings in the District between the 2001 and 2011 censuses. The growth at national level (8.3%), regional level (9.9%) and county level (9.0%) were comparative to that experienced in Stroud during the same period. The latest available information shows that as of March 2018 there were 53,078 dwellings¹² in the District of which 45,530 were in private ownership. **Table A2.1** below displays the comparative number of dwellings within the District and at County level between 2012 and 2016¹³.

Table A2.1: Number of dwellings by year in Stroud District and Gloucestershire County

Year	Stroud District	Gloucestershire County
2012	50,340	271,090
2013	50,750	273,410
2014	51,220	276,110
2015	51,800	278,940
2016	52,230	281,760

- A2.17 The 2011 census highlighted that there were 14,952 homes with no usual resident household in Gloucestershire in 2011, representing 5.5% of all of the accommodation available for residence in the County which is lower than the average for the South West (6.0%) but higher than the figure for England (4.3%)¹⁴. This is inclusive of derelict properties and those not in use as well as holiday homes.
- A2.18 In terms of housing deprivation measured as part of the 2019 Indices of Multiple Deprivation show that only one area (by Wotton-under-Edge) is within the most 10% deprived nationally for Barriers to Housing and Services, which is a decrease from the figure for 2015.¹⁵.
- A2.19 The existing housing stock in the District is relatively old and the worst housing conditions are most evident in the private rented sector. Of all homes in Stroud 25.5% were built pre-1919. This is slightly above the national average. A smaller proportion of housing stock in Stroud has been built between 1919 and 1964 and a significantly higher proportion of homes than the national average were built post 1980. The average percentage of properties built post-1980 nationally is only 18.5% while in Stroud the figure is 28.6% ¹⁶.
- A2.20 The minimum housing requirement for the period April 2006 to March 2031 as set out in the adopted Local Plan is 11,400 homes. The Stroud District Land Availability¹⁷ reports that there has been a total of 5,684 dwelling completions between 1st April 2006 and 31st March 2019, and at 1st April 2019, a further 5,740 new dwellings are committed. As such, completions and commitments total 11,424 dwellings, 24 above the adopted Local Plan's minimum requirement of 11,400. Of the dwellings completed between 1st April 2006 and 31st March 2018, 63% were on brownfield sites while 37% were on greenfield sites. Commitments at 1st April 2019 are split between 32% on brownfield sites and 68% on greenfield sites, reflecting the large housing allocations identified in the Local Plan.
- A2.21 The Council's Strategic Assessment of Land Availability (SALA)¹⁸ details sites with potential for housing as well as for employment, retail and community uses. The SALA identifies sufficient housing completions, commitments, allocations, SALA sites within settlements and small site windfalls to deliver the Local Plan requirement by 2031 with a surplus of 1,773 additional homes above the minimum requirement. The additional deliverable housing sites identified and promoted through the SALA process means that the deliverable housing supply position for the 2016-2021 period sits at 6.75 years. The SALA has not, however, identified any site specific sources of housing within settlements to meet needs beyond 2031 and therefore there is a requirement to find additional land as part of the Local Plan Review. The SALA identifies sites outside settlement

¹² Stroud District Council (May 2019) Settlement Role and Function Study Update 2018

¹³ Ministry of Housing, Communities & Local Government (March 2018) Number of dwellings by tenure and district, England

¹⁴ Local Authorities of Gloucestershire (March 2014) Strategic Housing Market Assessment Update

 $^{^{15}}$ DCLG (2019) Indices of Deprivation: 2019 and 2015 Available at: http://dclgapps.communities.gov.uk/imd/iod_index.html

¹⁶ Stroud District Council (March 2015) Housing Strategy 2015 – 2019 (New Housing strategy 2019-2024 is under consultation)

¹⁷ Stroud District Council (June 2019) Stroud District Housing Land Availability Residential Commitment in Stroud District as at 1st April

¹⁸ Stroud District Council (May 2017) Strategic Assessment of Land Availability

- development limits with future potential to deliver an additional 6,547 houses for the period 2016-2036 if required.
- A2.22 The adopted Local Plan has also identified a target of 950 additional bedspaces in Class C2 care homes, to meet the needs of elderly people. It is reported in the SHMA that at March 2017 only 107 completions had been made and there were no further commitments identified meaning that a further provision of 843 beds would be required over the plan period.
- A2.23 Gloucestershire's Gypsy and Traveller Accommodation Assessment (GTAA) reported that in Stroud up to 2031 there is no current or future need associated with a household that meets the new planning definition. However there is a requirement for up to seven additional pitches for unknown Gypsy or Traveller households during the period 2021-2031. The requirement for Travelling Showpeople plots for households that meet the planning definition is eight additional plots and for up to four plots for unknown households for the period 2016-2031¹⁹.

Social Inclusion and Deprivation

- A2.24 Using the Index of Multiple Deprivation (IMD) rank of average summary measure, Stroud District ranked 279 out of 317 local authorities in 2019²⁰. This follows the trend of the wider county area given that Gloucestershire is not very deprived, with even the most deprived districts (Gloucester City, and Forest of Dean) ranked 143 and 138 for deprivation out of 317 English authorities respectively²¹.
- A2.25 Stroud itself has no lower super output areas (LSOAs) that rank in the top 20% most deprived in England. There are only three LSOAs in the District (within the Cam West, Dursley and Stonehouse wards) which are within the 30% most deprived LSOAs in England²².
- A2.26 From the 2015 IMD information release to 2019, Stroud's worst ranking domain remains "Barriers to Housing and Services", with 8% of the District's population living within LSOAs ranked in the most deprived national quintile. However, Stroud performs favourably relative to the rest of Gloucestershire in this domain, and has the county's least deprived LSOA at Berkeley (Stroud012C) which ranks 32,232th out of 32,844 nationally. Stroud District has seen a relative improvement in the national rankings since 2015 for "Crime and Disorder". Improvements with regard this indictor 2019have been observed within the Stanleys, Hardwicke, Painswick and Upton²³.
- A2.27 ONS data shows that annual house price rates of change for the year ending December 2018 for all regions of England is highest in the West Midlands (5.2%). For the South West region the rate of change is 2.9%.²⁴. Within Stroud itself house prices are 8.2 times earnings as at 2016, compared to 4.5 times earnings in 1999²⁵. This is in line with the trend across much of the country with housing affordability worsening in all local authority districts. On average, working people could expect to pay around 7.6 times their annual earnings on purchasing a home in England and Wales in 2016, up from 3.6 times earnings in 1997. As such the issue of housing affordability will need to be addressed through planning policy and future affordable housing provision in the District will need to be delivered as part of any development planned for.
- A2.28 The South West region has the highest proportion of fuel poor homes in England with 289,658 homes reported as fuel poor in 2014²⁶. In 2016 10.2% of household in the South West were

¹⁹ Cheltenham, Cotswold, Forest of Dean, Gloucester, Stroud and Tewkesbury Councils (March 2017) *Gloucestershire Gypsy and Traveller Accommodation Assessment*

²⁰ Ministries of Housing, Communities & Local Government (September 2019) *Local Authority District Summaries* Online at: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

²¹ Gloucestershire County Council (March 2016) *Indices of Deprivation 2015 Gloucestershire*

²² DCLG (Accessed September 2019) *Indices of Deprivation 2015 explorer* Online at: http://dclqapps.communities.gov.uk/imd/idmap.html

²³ DCLG (2019) *Indices of Deprivation: 2019 and 2015* Available at: http://dclgapps.communities.gov.uk/imd/iod_index.html

²⁴ ONS (February 2019) *House Price Index, UK: December 2018*

²⁵ ONS (March 2017) Housing affordability in England and Wales: 1997 to 2016

²⁶ Cheltenham Borough Council, Forest of Dean District Council, Gloucester City Council, Stroud District Council and Tewkesbury Borough Council April 2017) *Home Energy Conservation Act Report April 2017- March 2019*

<u>considered fuel poor²⁷.</u> The proportion of households in fuel poverty in Stroud in 2015 was recorded as 10.4%, however, which is marginally lower than the county level at 10.7% and the regional level at $11.4\%^{28}$.

Health

- A2.29 The health of people in Stroud is varied compared with the average for England³¹. Early deaths from heart disease and cancer amongst Stroud's population have seen a steady decline in recent years which is a nationally observed trend. The number of those dying early as a result of illnesses related to these ailments in the District is lower than national average figure. The overall number of men and women dying early from all causes is also lower than the national average figure.
- A2.30 While life expectancy for both men and women is similar to the England average, in the most deprived areas of the District men are expected to live 6.0 years less and women are expected to live 5.0 years less than men and women in the least deprived areas³¹.
- A2.31 Stroud District also performs favourably against many other health-rated indicators in comparison to the English average. While 60% of adults in Stroud have been recorded as being overweight or obese, this figure is lower than the Gloucestershire (64%) and England (64%) average. The percentage of physically inactive adults in Stroud District has also remained below the Gloucestershire and England average in recent years. Figures recorded in relation to the number of hours pupils in year 8 and 9 partook of physical activities also show that those in Stroud participated in physical activity in and out of school more often than those within the other local authority areas of Gloucestershire. 26.1% of pupils were recorded as partaking of physical activities more than 8 hours a week and 29.3% did around 6 hours of physical activity a week²⁹. In Year 6, 15.9% (187) of pupils are classified as obese, better than the average for England³¹.
- A2.32 Stroud District performs 56 times worse than the English average in relation to admission for alcohol specific conditions for those under 18 and 223 hospital stays for self-harm. Local priorities for the area identified by Public Health England are tackling health inequalities; improving health and wellbeing into older age; improving mental health; and reducing obesity and alcohol related harm³⁰. Health and wellbeing priorities at a County level presented in the Gloucestershire Health and Wellbeing Strategy 2012 2032³¹ mirror the priorities for the District.

Culture, Leisure and Recreation

- A2.33 There is a variety of open spaces across Stroud District, including formal parks, gardens, local nature reserves, sports pitches and various informal grass areas. The distribution of notable open spaces in Stroud and the surrounding area is shown in **Figure A2.1: Recreation** at the end of this chapter. Lying to the south of the town of Stroud, Minchinhampton and Rodborough Commons are notable areas of common land covering approximately 335 hectares and are owned and managed by the National Trust. Both areas have been declared Sites of Special Scientific Interest (SSSIs), while Rodborough Common is also a Regionally Important Geological Site (RIGS) and Special Area of Conservation (SAC). Together with nearby Selsley Common (SSSI), the areas are notable examples of grassland commons in the Cotswold area.
- A2.34 At the town of Stroud, Stratford Park is 23ha with a lake and leisure centre complex. Other sizeable open spaces in the town include Old Cemetery on Bisley Road which is also a Nature Reserve, Uplands Allotments off Folly Lane and Daisy Bank park and children's play area.

²⁷ South Gloucestershire Council (September 2018) *Fuel Poverty in South Gloucestershire*

²⁸ Department for Business, Energy and Industrial Strategy (June 2017) Sub-Regional Fuel Poverty England 2017

²⁹ Gloucestershire County Council (March 2016) *Understanding Stroud 2015*

³⁰ Public Health England (July 2018) *Health Profile 2018 Stroud District*

 $^{^{31}}$ Gloucestershire Health and Wellbeing Board (2014) Gloucestershire Health and Wellbeing Strategy 2012 - 2032

- A2.35 The Council undertook an Outdoor Playing Space Survey of Local Provision and Needs in 2013. The survey established that at the time of reporting there was a deficiency of 31.93ha in the District as per Fields in Trust standards. Deficiency was reported in terms of the provision made for youths/adults, playing pitches and equipped children's play areas. Deficiencies in overall provision were also reported at five of the eight clusters which were surveyed (Stroud Valleys, Cam/Dursley, Wotton, Gloucester Fringe and Stonehouse)³². The adopted Stroud District Local Plan (2015) includes objectives of increasing open space provision within these areas given the deficiencies identified³³.
- A2.36 The Open Space, Green Infrastructure, Sport and Recreation Study 2019³⁴ examined current and projected needs of Stroud District and its residents within the context of planned sustainable growth, environmental issues, and the quest to promote active and healthy lifestyles. The report provides recommended quantity, accessibility and quality standards for open space, and key principles for GI. Although the distribution of open space varies across the District, the report identifies shortages of at least 1 typology of open space in all Parishes and clusters/sub areas. It is therefore recommended in the study that priority is placed on protecting those open spaces where there is an existing shortfall of supply. The report also recommends that new development should contribute to protecting, enhancing and creating habitats in order to provide greater ecological connectivity for both people and wildlife, both within the development site as well as the wider surrounding area. In compliance with the relevant policy in the NPPF regarding Biodiversity Net Gain, biodiversity enhancements and nature conservation should be embedded at all stages of development.

Education

- A2.37 Gloucestershire County Council acts as the Local Education Authority in Stroud. It is currently responsible for the education of more than 47,500 pupils at primary level and 38,700 pupils at secondary level as well as a further 1,150 pupils enrolled in special schools³⁵.
- A2.38 The Gloucestershire Council has produced a School Places Strategy for 2018-2023³⁶ that details any identified and potential future capacity issues at primary and secondary schools in the County, and the proposed solutions for accommodating the needs of all pupils.
- A2.39 Across the County Continue monitoring new of housing delivery is to continue in line with the strategy and S106 contributions will be sought by the County Council if appropriate. At Eastcombe in the medium term S106 provision is to be monitored at Brimscombe Port with some expansion at local school potentially required to accommodate the development at this location. At the area surrounding Stroud, Cainscross, Painswick and Stonehouse there is a requirement in the long term to monitor secondary school capacity with potential for low level demand for additional places. The County Council has also identified that in the areas surrounding Dursley and Wotton-under-Edge there will be a medium term need to monitor demand for secondary places with the potential need for bulge classes for 2019 and 2021. In all it is expected that County Council monitoring and contributions sought through S106 will help to address any capacity issues which might emerge. The most notable increases in educational demand are likely to occur at the new settlements at Sharpness and Wisloe, however, the strategy identifies that the amount of growth supported at these locations will allow for the delivery of new facilities to meet this demand.
- A2.40 The county has a total of 297 primary, secondary, and special school facilities (246, 40, 11, respectively). Stroud College of Further Education is located within the town of Stroud and is part of a series of five campuses located in and around North Bristol and Stroud which make up South Gloucestershire and Stroud College.

³² Stroud District Council (September 2013) Outdoor Playing Space A Survey of Local Provision and Needs

³³ Stroud District Council (November 2015) Stroud District Local Plan

³⁴ Stroud District Council (June 2019) Green Infrastructure, Sport and Recreation Study

³⁵ Gloucestershire County Council (October 2018) Summary of School Numbers on Roll by Age

³⁶ Gloucestershire County Council (November 2018) *School Places Strategy (2018-2023)*

A2.41 In Stroud the proportion of those with qualifications equivalent to NVQ4 level and higher (39.1%) is higher than the South West regional level (38.7%) as well as the national level (39.3%). No data is available at the District level in relation to those residents who do not have a qualification; however the proportion of those within the South West region without a qualification (5.3%) is lower than the national figure (7.8%)³⁷.

Crime

- A2.42 In the District it is reported that there have been 33% fewer recorded crimes than the previous 5 years up to 2016.³⁸ Police and crime prevention services are recognised as important assets to local people with 20% of respondents to the 2018 Stroud District Council Budget Consultation³⁹ stating that these services were the most important for their business sector or community.
- A2.43 For the year ending December 2018, the crime rate in Stroud urban area presented through the Home Office statistics was 39.70 recorded crimes per 1,000 population. This figure was recorded as being significantly lower than the average for Gloucestershire force area which was 92.72 recorded crimes per 1,000 population for the same year period.⁴⁰ Shoplifting and criminal damage and arson were the crimes which were most recorded in the District in the most recent reporting period. These offences accounted for 616 and 681 recorded crimes respectively of a total of 4,530 recorded crimes during the 12 month period ending September 2017⁴¹.

Landscape, Biodiversity and Geodiversity

- A2.44 Stroud District sits across three National Character Areas (NCAs). The bulk of land in the District is split between NCA 106 (Severn and Avon Vales) to the west and NCA 107 (Cotswolds) to the east with a small area of land to the west of Wotton-under-Edge lying within NCA 118 (Bristol, Avon Valleys and Ridges). To the west the land is described as being mostly a low lying and open agricultural vale landscape with much of the east defined by a steep scarp crowned by a high, open wold and significant portions of woodland⁴²⁴³.
- A2.45 The most western portion of the District contains part of the Severn Estuary and as such is characterised by the low lying rich estuarine landscape in the Severn Vale. The exception to this low lying character towards the west is found at the hillocks that the River Severn meanders around. Much of the District is rural with lower densities of development towards this location.
- A2.46 The Stroud District Landscape Assessment⁴⁴ identifies a number of landscape character types for the District. These are split between the Cotswold Upland Landscapes to the east and Severn Vale Lowland Landscapes to the west. Each of the landscape character types has a series of key characteristics and key priorities for actions set out for them within the Landscape Assessment.
- A2.47 Within the Cotswold Upland Landscapes the following landscape character types have been identified:
 - Wolds Top;
 - · Rolling Valleys;

³⁷ Nomis (Accessed July 2019) *Labour Market Profile – Stroud* Online at: https://www.nomisweb.co.uk/reports/lmp/la/1946157376/report.aspx

³⁸ Stroud District (Accessed March 2018) Stroud District Community Safety Partnership Strategy 2017-2021 Online at: https://www.stroud.gov.uk/community-and-living/community-safety-and-neighbourhood-wardens/stroud-district-community-safety-partnership-strategy-2017-2021

³⁹ Future Focus Research for Stroud District Council (November 2018) Budget Consultation 2018 Report

⁴⁰Home Office (Accessed July 2019) *Crime in Stroud compared with crime in other similar areas* Online at: https://www.police.uk/gloucestershire/CA1/performance/compare-your-area/?section=timeline#timeline

⁴¹ ONS (January 2018) Recorded crime data at Community Safety Partnership / Local Authority level

⁴² Natural England (March 2015) NCA Profile:107 Cotswolds

⁴³ Natural England (December 2014) NCA Profile:106 Severn and Avon Vales

⁴⁴ Stroud District Council (2000) *Stroud District Landscape Assessment*

- · Secluded Valleys; and
- · Escarpment.
- A2.48 Within the Severn Vale Lowland Landscapes the following landscape character types have been identified:
 - Rolling Agricultural Plain (including Lowland Plain, Escarpment Footslopes and Frome River Valley);
 - Undulating Lowlands (including Little Avon Basin, Little Avon Mid-Valley, Wooded Lowlands and Lowland Ridges);
 - Severn Vale Hillocks;
 - Severn Vale Grazing Marshes;
 - Sandstone Ridge;
 - · Triassic Ridge;
 - · Wooded Cambrian Ridge; and
 - Kingswood Vale (including Kingswood Vale north and Kingswood Vale south).
- A2.49 The adopted Stroud District Plan was supported by a Landscape Sensitivity Appraisal which appraised Potential Locations for growth (housing, mixed-use and employment). Those locations appraised as having the highest potential sensitivity to growth were those at Nortonwood by Nailsworth and to the east of Stonehouse. Locations which were identified as having a potential medium-high sensitivity to growth were those to the west of Cam, east of Rodborough and north of Stroud⁴⁵.
- A2.50 As part of work to support the Council's SALA, landscape sensitivity assessment work was undertaken across the District at locations around the principal settlements. This found that those land parcels within the Cotswolds AONB generally have higher sensitivities than those parcels outside of the designation. As such, many of the locations which have lower sensitivities in terms of landscape were identified at settlements to the west such as at Stonehouse, Eastington, Hardwicke and Cam (north)⁴⁶ in particular.
- A2.51 The eastern portion of the District contains the Cotswolds AONB which covers just over half of its total land area. The boundary of the AONB is drawn to exclude many of the areas which display higher levels of development along the A419 corridor at Stonehouse and Stroud and towards Brimscombe, as well as along the A46 towards Nailsworth and at Cam and Dursley.
- A2.52 The AONB is characterised by its dramatic escarpment and expansive high wolds in particular and contains a number of nationally and internationally designated biodiversity assets. These include Rodborough Common (SAC and SSSI), Minchinhampton and Selsley Commons (SSSI) to the south of Stroud town and the areas of beech woodland which are present towards the boundary with Tewkesbury Borough which contain Cotswold Commons and Beechwoods NNR and SSSI as well as Cotswold Beechwoods SAC⁴⁷. The Cotswolds Beechwoods SAC is recognised as potentially being particularly vulnerable to recreational pressures. The site is close to the city of Gloucester to the north west and is also accessible from the town of Stroud to the south.
- A2.53 The Cotswolds AONB Management Plan 2013-2018 was adopted by the Cotswolds Conservation Board September 20th 2018 to provide a vision for the future management of the area. Together with clear objectives and policies, the main purposes of the Management Plan are to conserve and enhance the natural beauty of the Cotswolds AONB; and to increase the understanding and enjoyment of the special qualities of the AONB over the plan period (2018-2023). Given the close proximity of the AONB to larger towns and cities and the trend towards a growing and ageing population the management plan has identified increasing pressures on the area in terms of the

⁴⁵ URS on behalf of Stroud District Council (July 2013) *Landscape Sensitivity Appraisal*

⁴⁶ Stroud District Council (December 2016) Stroud District Landscape Sensitivity Assessment

⁴⁷ Joint Nature Conservation Committee (January 2016) Natura 2000 - Standard Data Form: Cotswold Beechwoods

- need to provide housing, employment and services. Further pressures which are likely to result relate to recreational pressures associated with such new growth⁴⁸.
- A2.54 The Gloucestershire Nature Map sets out a vision for a robust ecological network in the County. Strategic Nature Areas (SNAs) have been identified through this work as selected landscape-scale areas of land which show where the characteristic habitats which typify the County can be expanded and linked to protect and enhance biodiversity assets. The Nature Map shows that within Stroud District there are important areas for wildlife within SNAs. These include areas for wet grassland (including areas for traditional orchards) mostly to the west towards the River Severn and along parts of a number of the other smaller water bodies (including the Berkeley Pill/Little Avon, River Cam and River Frome) as well as areas for woodland mosaic and lowland calcareous (limestone) grassland mostly towards the east and the edge of the Cotswolds AONB.
- A2.55 The SNAs within the County have been grouped together within Priority Landscapes where appropriate through work by the former Gloucestershire Biodiversity Partnership in 2010. In total six Priority Landscapes which contain important ecosystems and ecological networks have been identified. Within Stroud, Severn Vale has been identified as one of these areas recognising it as part of the "wildlife highway" with an overall aim to restore a continuous expanse of lowland wet grassland and other wetland habitats⁴⁹.
- A2.56 Based on the work to identify the SNAs through the Nature Map the Severn Vale as defined by the flood plain of the River Severn has also been set out as a national Nature Improvement Area (NIA)⁵⁰ as per the direction of Defra's Natural Environment White Paper. Cotswolds Scarp NIA also partly falls within the district boundary towards the east taking in the settled valleys in the District around the town of Stroud up to Ebrington Hill in Cotswold District. Such areas have been identified given that they provide good opportunities for ecological network restoration and improved habitat management.
- A2.57 Where the Severn Estuary passes into the western portion of Stroud, a number of important nationally and internationally designated biodiversity sites have been designated. The area has been declared as a Ramsar site, a SSSI, SAC and Special Protection Area (SPA). The Severn estuary is exceptional in that it has the second largest tidal range in the world. The estuary area has been recognised for importance for habitats including sandbanks, mudflats and sandflats, Atlantic salt meadows, and Reefs⁵¹. Severn Estuary SSSI is generally in favourable condition with 95.88% of the units reported on meeting the criteria for favourable or unfavourable recovering condition⁵².
- A2.58 Habitats Regulations Assessments (HRAs) undertaken by Stroud District Council have concluded that proposed residential growth identified in the existing Local Plan within a defined catchment zone around Rodborough Common SAC and Severn Estuary SAC/SPA/Ramsar could have a likely significant effect in terms of recreation pressures on their areas, in the absence of appropriate mitigation. Stroud District Council has therefore worked with Natural England, landowners and other bodies to develop appropriate avoidance strategies which involve all housing developments within identified catchment zones paying per net additional dwelling to fund alternative recreation provision elsewhere or to mitigate the effects on-site through funding appropriate management activities 5354. A separate Habitats Regulations Assessment for the new Local Plan will also be undertaken and reported on as the Local Plan is prepared.

⁴⁸ Cotswolds Conservation Board (September2018) *Cotswolds AONB Management Plan 2018-2023*

⁴⁹ Gloucestershire Local Nature Partnership (Accessed march 2018) *Priority Landscapes* Online at: http://gloucestershirenature.org.uk/actionplan/priority-landscapes.php

⁵⁰ Gloucestershire Local Nature Partnership (August 2016) Nature Improvement Areas In Gloucestershire

⁵¹ Natural England (February 2016) European Site Conservation Objectives for Severn Estuary

⁵² Natural England (July 2019) SSSI Condition Summary Site: Severn Estuary SSSI online at: https://designatedsites.naturalengland.org.uk/ReportConditionSummary.aspx?SiteCode=S1002284&ReportTitle=Severn%20Estuary%2 0SSSI

⁵³ Stroud District Council (March 2015) Interim Strategy for Avoidance of Likely Significant Effects on Rodborough Common Special Area of Conservation (SAC)

⁵⁴ Stroud District Council (December 2017) Strategy for Avoidance of Likely Significant Adverse Effects on the Severn Estuary SAC,SPA and Ramsar Site

- A2.59 Gloucestershire has some of the most varied geology seen within the U.K. The District of Stroud takes in parts of the Cotswolds escarpment at its eastern edge. Within this portion of the District the rocks evident are from mainly the Quaternary (Alluvium, River Terrace Gravels and Glacial Deposits), and Jurassic periods (Oxford Clay and Kellaway Beds, Great Oolite Group, Inferior Oolite Group, Whitby Mudstone, Marlstone Rock, Dyrham and Charmouth Mudstone). To the west within the portion of the District which falls within Severn Vale there is geological evidence of the Quaternary (Alluvium, River Terrace Gravels and Glacial Deposits), Jurassic (Charmouth Mudstone and Blue Lias), Triassic (Penarth Group, Mercia Mustone Group and Sherwood Sandstone), Permian (Bridgnorth Sandstone), Devonian (Old Red Sandstone), Silurian (Ludlow, Wenlock and Llandovery) and Ordovician periods (Igneous intrusions, Breadstone Shales and Bronsil Shale)⁵⁵.
- A2.60 The Cotswold Hills Geopark which was formed in 2004 takes in areas towards the east of the District. In its entirety the boundaries stretch from Stroud in the south west towards areas outside of the District at the settlements of Tetbury and Cirencester in the south east and Bourton on the Water and Chippin Campden in the east and north east respectively. The geopark extends to include land within the District as far west as Painswick to the north and land around Stroud and Stonehouse as well as Cam and Dursley and Wotton-under-Edge further to the south. It comprises an area of diverse and significant geology; a swathe of land approximately 95km in length. The SSSIs of Rodborough Common, Selsley Common, Woodchester Park and Minchinhampton Common⁵⁶ are all within the geopark having been recognised at least in part for the importance of the geodiversity on display.
- A2.61 Across the entirety of Stroud there are 259 locally designated biodiversity and geodiversity sites. Of these sites 125 are in positive condition. This total is broken down between 122 Key Wildlife Sites which are in positive condition and three RIGSs which are in positive condition. In Gloucestershire 44.84% of the local sites are in positive condition as of March 2017. This represents a small decrease in those sites which were in positive condition from 2010 to 2015 when the figure was 45.17%⁵⁷. Stroud District also contains a number of Priority Habitats, protected species, Priority Species and Ancient Woodland which make a significant contribution to the District's biodiversity.

Historic Environment

- A2.62 Sustaining the high quality of townscapes in Stroud is important to defining the character of the District. Furthermore, preserving the cultural and historic environment benefits communities in additional ways:
 - It provides an essential educational resource for the understanding of the past and its legacy.
 - It contributes to the national and local economy as it promotes tourism and provides jobs.
 - It provides people with a sense of belonging to a unique and special place a sense of identity.
- A2.63 This is particularly true of Stroud where tourism is an important component of the economy. English Heritage (now Historic England) reported that in 2014 in the south west the indirect and induced heritage GVA was £2.53 million and contributed to the employment of 41,300 people⁵⁸.
- A2.64 There are currently 42 Conservation Areas designated in the District. Of these, 15 have adopted Conservation Area Statements. Many of these areas are focussed on the more developed centre of Stroud.

⁵⁵ Gloucestershire Geoconservation Trust (Accessed April 2018) *Gloucestershire Geodiversity* Online at: http://www.glosgeotrust.org.uk/glos_geodiversity.shtml

⁵⁶ Cotswold Hills Geopark Partnership (Accessed April 2018) Cotswold Hills Geopark http://www.cotswoldhillsgeopark.net

⁵⁷ Gloucestershire Local Nature Partnership (Accessed August 2018) *Gloucestershire Local Sites Summary Data 2017* Online at: http://www.gloucestershirenature.org.uk/publications/index.php

⁵⁸ Historic England on behalf of the Historic Environment Forum (September 2017) *Heritage Counts: Heritage and the Economy 2017*

- A2.65 The Industrial Heritage Conservation Area (IHCA) which covers the length of the Cotswold Canals for approximately 23km from Sapperton in the east to Saul in the west is noted as being a particularly large, complex and potentially vulnerable heritage asset. This is one of the largest conservation areas in Britain⁵⁹. The IHCA Conservation Area Statement has been adopted as a Supplementary Planning Document (SPD)⁶⁰ and the IHCA also benefits from an adopted Design Guide⁶¹. The IHCA passes through some 19 'sub areas' identified as having distinct characteristics through the IHCA Conservation Area Statement Volume 2: Character Parts⁶².
- A2.66 Two of the Conservation Areas in the District have remained on Historic England's Heritage at Risk List from 2016 to 2017. These are the IHCA and Stanley Mills Conservation Areas, which both have a trend of 'deteriorating' recorded for them. There is a total of 33 Conservation Areas in the south west on the Heritage at Risk List⁶³ meaning that those in Stroud make up approximately 6% of the figure for the entire south west region.
- A2.67 At present there are 3,457 Listed Buildings in Stroud, with a further 72 Scheduled Monuments and 13 Registered Parks and Gardens also designated⁶⁴. Of the Listed Buildings in the District, 12 are on the Heritage at Risk List. There are a further five Scheduled Monuments on the Heritage at Risk List⁶⁵ at present in the District.
- A2.68 Details of the heritage assets (including Conservation Areas) identified as being at risk and their respective conditions are provided in **Table A2.2** below.

⁵⁹ Stroud District Council (July 2017) A Heritage Strategy for Stroud District

⁶⁰ Stroud District Council (November 2008) *Industrial Heritage Conservation Area Management Proposals SPD*

⁶¹ Stroud District Council (November 2008) *The Industrial Heritage Conservation Area Design Guide*

⁶² Stroud District Council (November 2008) *The Industrial Heritage Conservation Area Volume 2: Character Parts*

⁶³ Historic England (October 2017) Heritage at Risk: South West Register 2018

⁶⁴ Historic England (Accessed July 2019) *National Heritage List for England* online at: https://historicengland.org.uk/listing/the-list

⁶⁵ Historic England (Accessed March 2018) *Heritage at Risk List* online at: https://historicengland.org.uk/advice/heritage-at-risk/search-register

Table A2.2: Heritage assets at risk in Stroud District

Designated Site Name	Heritage Category	Condition
Stanley Mills	Conservation Area	Very bad - deteriorating
Stroud Industrial Heritage (IHCA)	Conservation Area	Poor - deteriorating
Main Building at Stanley Mills	Listed Building Grade I	Fair
The Mansion, Woodchester Park	Listed Building Grade I	Very bad
Church of St Mary the Virgin, Church Lane	Listed Building Grade I	Very bad
Old Mill Building at Longfords Mills	Listed Building Grade II*	Fair
St Marys House, Wing Cottage and Ivy Cottage, London Road	Listed Building Grade II*	Poor
Church of St James, Church Lane	Listed Building Grade II*	Very bad
Church of St Andrew	Listed Building Grade II*	Poor
Congregational Church, Bedford Street	Listed Building Grade II*	Poor
Church of St Mary Magdalene Gates and Wall	Listed Building Grade II*	Poor
Guise Mausoleum to north west of Church of St John the Baptist	Listed Building Grade II*	Very bad
Church of St John the Baptist, B4072	Listed Building Grade II	Poor
Church of St Giles, High Street	Listed Building Grade II	Poor
Bowl barrow 450m south east of Upper Hyde Farm	Scheduled Monument	Extensive significant problems - declining
Gatcombe long barrow, 400m east of Gatcombe Farm	Scheduled Monument	Generally unsatisfactory with major localised problems - declining
Bowl barrow 330m north of Symonds' Hall Farm	Scheduled Monument	Extensive significant problems - declining
Miserden Castle mound	Scheduled Monument	Generally satisfactory but with significant localised problems - declining
Bowl barrow 720m south east of Longwood Farm	Scheduled Monument	Extensive significant problems - declining

Air and Water

- A2.69 The impacts of air quality in the UK are recognised not only in terms of health alone but also associated economic impacts. In England, the total NHS and social care cost due to particulate matter in 2017 was estimated to be £41.20 million (based on data where there is more robust evidence for an association), increasing to £76.10 million when diseases are included (where the evidence is associative or emerging)⁶⁶. Road traffic has been identified as the primary influence on air quality in Stroud and the primary polluter of concern is Nitrogen Dioxide. The air quality in the District for 2018 has been reported as being very good with levels of Nitrogen Dioxide recorded as decreasing slightly over the last year. At the small number of sites where increases in levels of Nitrogen Dioxide were reported, the increases recorded were marginal and well within the accepted variability.⁶⁷.
- A2.70 There are currently no AQMAs declared in the District. An AQMA had previously been established jointly with Tewkesbury District Council for the NO_2 annual mean objective, along the M5 corridor but this was revoked in 2004 following a return of air quality to acceptable limits.
- A2.71 Much of the western portion of the District has been classified by the Environment Agency as Surface Water Nitrate Vulnerable Zones (NVZs) and/or Ground Water NVZs. Such areas are

⁶⁶ Public Health England (May 2018) Estimation of costs to the NHS and social care due to the health impacts of air pollution

⁶⁷ Stroud District Council (June 2018) *2018 Air Quality Annual Status Report*

- designated where land drains into nitrate polluted waters or waters which could become polluted by nitrates⁶⁸.
- A2.72 Much of the eastern portion of the District is classified as a Drinking Water Safeguard Zones (Surface Water) as it has been identified as being at risk of failing the drinking water protection objectives. There are also areas to the east (by Minchinhampton and Nailsworth and to the south of Cam and Dursley) which are also defined as Source Protection Zones given that there is a risk of contamination from any activities that might cause pollution in the area⁶⁹.
- A2.73 Facilities for the treatment of waste water in Stroud fall under the responsibility of Gloucestershire County Council. Gloucestershire Waste Core Strategy provides policies for the safeguarding of such facilities and other waste related objectives and policies up to the year 2027. There are currently 84 operational waste water treatment facilities in Gloucestershire. The two main sewage treatment works for Gloucestershire are located outside of Stroud at Netheridge in Gloucester and Hayden to the south west of Cheltenham respectively⁷⁰.
- A2.74 Water quality at the Severn Estuary is an important indicator of the overall health of the Estuary's ecosystem. This indicator is also an important factor in influencing tourism, recreational activities and the commercial/industrial sectors. In recent years the closure of major industries and the introduction of stricter pollution controls has meant that the levels of most contaminant which the estuary is subject to are much lower than previously. Major industries discharging into the estuary include (or have included until recently) smelters, incinerators, fertiliser and numerous other chemical plants in the Avonmouth area; coal and steel industry, paper mills, chemical and pharmaceutical manufacturers in south Wales; and nuclear power plants at Hinkley, Berkeley and Oldbury. Dissolved oxygen levels are generally high in the estuary, with levels above 8 mg/l throughout the whole Estuary and concentrations above 95% at the seaward end with no widespread severe oxygen depletion reported. Reporting by the Environment Agency also shows that in the waters of the estuary average concentrations of dissolved metals such as cadmium, copper, nickel, lead and zinc are all below Environmental Quality Standards thresholds.
- A2.75 Water abstraction needs to be managed responsibly at the estuary to meet the reasonable needs of water users. Whilst human requirements are important there is a need to ensure that enough water remains in the environment to conserve the water body habitats. Major rivers feeding the Severn Estuary are subject to freshwater abstraction to varying degrees with the large abstraction from the Severn at Gloucester feeding the Gloucester Sharpness Canal, requiring carefully management to prevent the uptake of saline water⁷¹.

Flood Risk

- A2.76 The River Severn and its tributaries are prominent features in the District and as such areas of Stroud particularly to the west display a high risk of fluvial flooding. Areas surrounding the River Severn as well as other larger water bodies such as the River Frome and Nailsworth Stream through Stonehouse, Stroud and Nailsworth as well as the River Cam through Cam and Dursley are within Flood Zone 3. Flood defences are present along much of the length of the River Severn within the District at areas to the west of Berkeley surrounding Berkeley Pill and at the areas surrounding the Gloucester and Sharpness Canal by the wetlands to the west of Slimbridge and to the west of Frampton on Severn. There is a flood storage area within the District to the north of Slimbridge and to the west of the A38.
- A2.77 Flooding events have occurred at the River Severn Estuary where land was reclaimed from high tides since the Roman times and there are records of further historic flooding events occurring

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⁶⁸ Environmental Agency (Accessed July 2019) *Nitrate Vulnerable Zones* Online at: http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=357683&y=355134&scale=1&layerGroups=default&ep=map&textonly=off&lang=_e&topic=nv

 $^{^{69}}$ Environmental Agency (July 2019) Groundwater Protection Zones Online at: http://maps.environmentagency.gov.uk/wiyby/wiybyController?x=531500.0&y=181500.0&topic=groundwater&ep=map&scale=5&location=London,%20City%20 of%20London&lang=_e&layerGroups=default&distance=&textonly=off#x=419032&y=227848&lg=1,10,&scale=4

⁷⁰ Gloucestershire County Council (November 2012) Gloucestershire Waste Core Strategy

⁷¹ Severn Estuary Partnership (Autumn 2011) State of the Severn Estuary Report

across the District. These including records along the River Frome notably in July 1968 around the areas of Whitminster and Ryeford. The area towards the River Severn Estuary at Sharpness Docks was also affected by flooding during this same period. At Stroud adjacent to the Stroudwater Canal and River Frome this event resulted in further flooding. As recent as July 2007, fluvial flooding has been recorded along the Slad Brook along Painswick Stream to the north of the town. Towards the northern part of the District historic flooding events have been recorded at Shorn Brook to the south of Quedgeley.

A2.78 The Environment Agency has produced climate change allowances to support the NPPF. This includes advice on peak river flow by river basin district. **Table A2.3** shows the Environment Agency's⁷² predicted peak river flow allowances for the Severn River Basin which is of relevance in terms of both flood risk assessments and strategic flood risk assessments. These predictions are to be made use of with consideration for the flood zone and the appropriate flood risk vulnerability classification to decide which allowances applies to certain types of development or plans.

Table A2.3 Peak river flow allowances by river basin district (using 1961 to 1990 baseline)

River basin district	Allowance category	Total potential change anticipated for the '2020s' (2015 to 2039)	Total potential change anticipated for the '2050s' (2040 to 2069)	Total potential change anticipated for the '2080s' (2070 to 2115)
Severn	Upper end (90th percentile)	25%	40%	70%
	Higher central (70th percentile)	15%	25%	35%
	Central (50th percentile)	10%	20%	25%

- A2.79 The canal system in Stroud acts to provide flood alleviation in the District. At present water from watercourses within the Stroud District area is pumped into the Gloucester and Sharpness Canal to help manage water levels. Any failure of the canal could potentially cause or exacerbate flooding problems within the District⁷³. The reinstatement of the Stroudwater Canal is part of the current strategy to remove brownfield allocated development sites within the Stroud Valleys out of the floodplain.
- A2.80 Stroud District Council has led on the Stroud Rural SuDS project to use Natural Land Management techniques to reduce flood risk while enhancing water quality and biodiversity in the River Frome Catchment. Such techniques include promoting water attenuation, infiltration and slowing channel flow using woody debris dams⁷⁴. As the Lead Local Flood Authority for the area, Gloucestershire County Council has identified parishes and wards in Stroud and the other local authority areas which are considered to be of priority in terms of alleviating flood risk prioritising residential properties over non-residential. Within Stroud District Arlingham Civil Parish (CP), Brimscombe and Thrupp CP, Cainscross CP, Cam CP, Chalford CP, Dursley CP, Eastington CP, Frampton on Severn CP, Fretherne with Saul CP, Kingswood CP, Minchinhampton CP, Nailsworth CP, Rodborough CP, Slimbridge CP, Stonehouse CP, Stroud CP and Wotton-under-Edge CP all lie within areas which have been identified as having medium-high or high risk of flooding⁷⁵.

⁷² Environment Agency (February 2017) *Flood risk assessments: climate change allowances* Online at: https://www.gov.uk/quidance/flood-risk-assessments-climate-change-allowances

⁷³ Stroud District Council (March 2012) Strategic Flood Risk Assessment for Local Development Framework Level 2

⁷⁴ Gloucestershire County Council (October 2018) *Local Flood Risk Management Strategy Annual Progress and Implementation Plan* 2017/18

⁷⁵ Gloucestershire County Council (November 2017) *Local Flood Risk Management Strategy Annual Progress and Implementation Plan* 2017/18

Energy and Climate Change

- A2.81 Stroud District Energy Strategy has been developed to "improve the energy efficiency across its housing stock portfolio". Within the District it is estimated that approximately 1,700 (30%) of homes will require significant investment to improve energy efficiency given that they are either off the gas network, of solid wall construction, of non-traditional construction, have no loft space and/or are located within restricted locations such as conservation areas or the AONB⁷⁶.
- A2.82 850 Renewable Heat Incentive (RHI) eligible installations were established in Gloucestershire between April 2014 and January 2017. These include heating sources such as biomass boilers, solar water heating and certain heat pumps. Significant proportions (269) of these were established in Stroud during this period. Stroud has the highest rate of heat pump installations in the Country with 1.4% of households having a heat pump.
- A2.83 In terms of renewable electricity, the Feed-in Tariff register shows that Stroud District has the highest number of domestic renewable installations in Gloucestershire with a total of 2,646 comparative to the next highest total for Forest of Dean District which is 1,948. These installations have predominantly been solar photovoltaic which accounted for 2,638 installations giving the District 530 solar photovoltaic installations per 10,000 households. The average number of solar photovoltaic installations per 10,000 households for Gloucestershire is just over 250. During this same period in the District five wind installations and three hydro installations were put in place⁷⁷.
- A2.84 The South West region has the highest number of sites generating electricity from renewable sources of all regions in England at 113,166 out of 682,705. The South West does not, however, produce the highest amount of electricity from renewable sources of all regions considered with 3,948.3GWh out of the total 54,609.6GWh produced throughout England produced in the South West as shown in **Table A2.4** below. Of this total for the region, 2,481.5GWh are produced from solar photovoltaic sources. The highest technology growth in capacity throughout England in 2016 was solar photovoltaic and it is noted that growth in the South-West, driven by large-scale schemes contributed significantly to the overall high level of national growth⁷⁸.

Table A2.4: Installed capacity of sites generating electricity from renewable sources by region, 2016

Region	Generation in GWh
East Midlands	4,780.6
East of England	8,160.0
North East	1,945.6
North West	6,275.0
London	1,048.1
South East	7,450.2
South West	3,948.3
West Midlands	1,685.9
Yorkshire and the Humber	19,315.9
England total	54,609.6

- A2.85 Stroud District has seen a steady fall in CO_2 emissions per capita from 2005 to 2015 with records for these years showing 7.0kt CO_2 and 5.1kr CO_2 respectively for those emissions within the scope of the local authority. Of the total CO_2 emissions within the scope of the local authority (591.8kt CO_2) 169.5kt CO_2 were as a result of transport⁷⁹.
- A2.86 While the overall trend in the District is towards a reduced rate of CO₂ emissions per year from 2011 to 2015, taking into account all sources of transport CO₂ emissions Stroud has seen an

⁷⁶ Stroud District Council (March 2017) *Energy Strategy*

⁷⁷ Cheltenham Borough Council, Forest of Dean District Council, Gloucester City Council, Stroud District Council and Tewkesbury Borough Council April 2017) Home Energy Conservation Act Report April 2017- March 2019

⁷⁸ ONS (September 2017) Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2016

⁷⁹ ONS (June 2017) UK local authority and regional carbon dioxide emissions national statistics: 2005-2015

increase in those CO_2 emissions attributed to journeys made on motorways (231.79kt CO_2 to 247.06kt CO_2), A-roads (67.47kt CO_2 to 68.62kt CO_2) and minors roads (90.78kt CO_2 to 91.34kt CO_2)⁸⁰. The decrease recorded in overall CO_2 emissions in the District is reflective of the national trend with CO_2 emissions recorded as 374mt CO_2 for 2016 which was a decrease of 7% from the previous year. This decrease has been mainly attributed to the decrease in the use of coal for electricity generation⁸¹.

- A2.87 Changes to the climate will bring new challenges to the District's built and natural environments. Hotter, drier summers may have adverse health impacts and may exacerbate the adverse environmental effects of air and water pollution. The UK Climate Projections (UKCP09) show that in 2050 the climate in the South West will be warmer with wetter winters and drier summers than at present⁸². Specifically:
- A2.88 Under medium emissions, the increase in winter mean temperature is estimated to be 2.1°C; it is unlikely to be less than 1.1°C and is very unlikely to be more than 3.2°C.
- A2.89 Under medium emissions, the increase in summer mean temperature is estimated to be 2.7°C; it is unlikely to be less than 1.3°C and is very unlikely to be more than 4.6°C.
- A2.90 A changing climate may place pressure on some native species and create conditions suitable for new species, including invasive non-native species.

Soils

- A2.91 The Agricultural Land Classification (ALC)⁸³ system provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The principal factors influencing agricultural production are climate, site and soil. These factors together with interactions between them form the basis for classifying land into one of five grades, where 1 describes land as 'Excellent' (land of high agricultural quality and potential) and 5 describes land as 'Very Poor '(land of low agricultural quality and potential). Land falling outside of these scores is deemed to be 'primarily in non-agricultural use', or 'land predominantly in urban use'.
- A2.92 Most of the land in Stroud District is classed as Grade 3 (Good to Moderate) Agricultural Land.
 Relatively large areas of Grade 2 (Very Good) Agricultural Land are present in Stroud most
 notably to the west by Slimbridge, Frampton on Severn, Arlingham and the parish of Elmore.
 There are swathes of land which are Grade 4 (Poor) Agricultural Land mostly towards the central
 and eastern parts of the District by the town of Stroud and southerly towards Cam and Dursley.
- A2.93 The Council maintains a list of the previously developed land in the District which is considered appropriate for residential development as per The Town and Country Planning (Brownfield Land Register) Regulations 2017. The Stroud District Brownfield Land Register contains those sites of at least 0.25ha in area and those capable of supporting at least 5 dwellings with further information available relating to those sites which would be considered suitable for a grant of permission in principle for residential development. Many of these sites are located within the more developed locations of the District particularly Stroud and Stonehouse and within the industrial bottoms of the Stroud Valleys. The largest of these brownfield sites which does not have planning permission is the former Standish Hospital site which is 13.07ha at the edge of Standish⁸⁴.

http://ukclimateprojections.metoffice.gov.uk/21708?projections=23679

https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/brownfield-land-register.

⁸⁰ National Atmospheric Emissions Inventory (Accessed March 2018) *Local Authority CO2 interactive maps (2015)*

⁸¹ ONS (March 2017) 2016 UK Greenhouse Gas Emissions, Provisional Figures

 $^{^{82}}$ UK Climate Projections (Accessed March 2018) Maps & key findings Online at:

⁸³ Natural England (December 2012) Agricultural Land Classification: protecting the best and most versatile agricultural land

⁸⁴ Stroud District Council (December 2017) *Stroud District Brownfield Land Register* Online at:

Resource Use/Waste and Recycling

- A2.94 In 2012 Gloucestershire County Council adopted the Gloucestershire Waste Core Strategy to guide future waste management development throughout up to 2027. The Waste Core Strategy should be read injunction with the remaining save policies of the Gloucestershire Waste Local Plan 2002-2012. Most of the County's waste arises in or near to a central corridor set out in the Core Strategy particular at Gloucester and Cheltenham and to a lesser extent Tewkesbury and Stroud. The Waste Core Strategy allocates two strategic sites within the District boundaries at Javelin Park, Harefield and Moreton Valence respectively⁸⁵. The Gloucestershire Waste Core Strategy (WCS) indicates, however, that local capacity is presently sufficient to meet the county's landfill needs through to at least the end of the 2020s.
- A2.95 In Gloucestershire responsibility for waste management is shared between the County Council, which is responsible for waste disposal and the individual District, City and Borough Councils which have responsibility for collecting household waste. The Gloucestershire Waste Partnership is a partnership of all seven District, City and Borough Councils who work together to provide waste management services across the County⁸⁶.
- A2.96 Stroud District Council region was ranked as having the highest household recycling rate in the South West in 2017/18, with 61% of waste being recycled. This is an increase from the previous year of over 10%. Within the South West, 73% of authorities experienced an increase in amount of waste recycled, compared to the national average of 40%⁸⁷.
- A2.97 Gloucestershire County Council has set a target of reducing waste produced by residents to 228kg per person by 2020. Stroud District Council has reported that this target has already been met with waste per resident reduced to 114kg. This has been achieved by increasing household rates of recycling and composting for glass, plastics and cans (from 1.96kg to 2.14kg per person), for paper and cardboard (from 2.34kg to 2.49kg per person) and food composting (2.25kg per person following its introduction)⁸⁸.

Employment and Economic Activity

- A2.98 Between April 2018 and March 2019the percentage of economically active people in Stroud was 87.0% 89. This is above the national average of 78.7%, and the regional average of 81.4%. During the same period, the unemployment rate of 3.0% of the economically active population across the South West region was lower than the national average of 4.1%. The number of people claiming Jobseeker's Allowance as a percentage of the working age resident population as of November 2016 was 0.3% in Stroud which is lower than the regional (0.8%) and national figures (1.1%) for the same period.
 - A2.99 The two main employment sectors within Stroud between April 2018 and March 2019 were associate professional and technical occupations (16.7%) and professional occupations (16.5%). Of the 5,965 enterprises within Stroud in 2018, 89.4% were considered as 'micro' size (0-9 employees), 8.8% were considered to be 'small' (10-49 employees), 1.4% were considered to be 'medium' (50-249 employees) and 0.3% were considered to be 'large' (250+ employees).
- A2.100 In 2018, the average gross weekly pay for residents for aged 16 and above in full time work in Stroud was £574.20. This figure is higher than the regional average (£531.20); and the national average of £570.9 90 . From census data across the individual authorities of Gloucestershire,

⁸⁵ Gloucestershire County Council (November 2012) *Gloucestershire Waste Core Strategy*

 $^{^{86}}$ Gloucestershire Waste Partnership (July 2009) Gloucestershire Waste Partnership - Partnership Agreement

⁸⁷ Department for Environment, Food and Rural Affairs (December 2018) Statistics on waste managed by local authorities in England in 2017/18

⁸⁸ Stroud District Council (March 2017) *Recycling More And Reducing Waste*

 $^{^{89}}$ Nomis (Accessed July 2019) Labour Market Profile – Stroud Online at:

https://www.nomisweb.co.uk/reports/Imp/la/1946157376/report.aspx

⁹⁰ Nomis (Accessed July 2019) *Labour Market Profile – Stroud* Online at: https://www.nomisweb.co.uk/reports/lmp/la/1946157376/report.aspx

Stroud recorded the highest median earned income which was £28,017, comparative to the county figure of £26,012 91 .

A2.101 The District sees large flows of commuters travelling into and out of the District with a daily net flow of 7,239 workers out of the District. The most important employment locations for people in the District which are outside of its boundaries include the areas of Gloucester City, South Gloucestershire, Cotswold, Cheltenham, Tewkesbury and City of Bristol. Stroud has negative commuter flows with all of these areas as recorded in the most recent census and shown in **Table A2.5** below⁹². Internal commuter flows show that the towns of Stroud and Stonehouse and to a lesser extent Cam and Dursley and Nailsworth are important employment centres within the District for residents⁹³.

Table A2.5: Daily commuter flows into and out of Stroud District

Authority area	Number of commuters travelling out of Stroud	Number of commuters travelling into Stroud
Gloucester City	5,492	4,699
South Gloucestershire	3,132	1,568
Cotswold	2,334	957
Cheltenham	1,947	1,191
Tewkesbury	1,791	946
City of Bristol	1,511	630

- A2.102 Stroud District Council is a key local authority stakeholder in the Gloucestershire Local Enterprise Partnership (LEP) which sets out to grow the Gloucestershire economy by £493 million and create 33,909 jobs and protect a further 2,125 jobs from 2015-2021. The LEP strategy and objectives have been set out in the SEP for Gloucestershire⁹⁴. The SEP has identified that there has been a degree of stagnation in economic productivity in Gloucestershire relative to the rest of the UK. GVA per hour worked in Gloucestershire increased from £22.70 in 2004 to £25.70 in 2011; however over the same period, the national increase was from £22.30 to £27.30. The trend towards a degree of stagnation in productivity year-on-year from 2004 up to 2011 is confirmed through data presented in the SEP given that GVA per filled job is approximately 8% lower than at the national level.
- A2.103 ONS figures for the same measure of productivity in terms of GVA per work worked across the County from 2012 up to 2016, however, show that there has been a degree of recovery in terms of the rate of increase in productivity in Gloucestershire. For this period in Gloucestershire an increase of £26.30 to £28.60 was recorded while at the national level an increase from £27.70 to £30.10 95 was recorded over the same time period. Viewing the LEP's relative productivity comparative to the rate for the UK for the period (2012 to 2016) in terms of GVA per hour work indices demonstrates that productivity in the area has been growing almost as fast as that reported at a national level, as is demonstrated in **Table A2.6** below. The table shows that productivity was increasing at a markedly less favourably rate up to 2010-2011 comparative to UK levels. It should be noted that a decrease in the productivity index number of an area does not necessarily mean a decrease in productivity in actual terms but rather that the area has performed relatively worse than the rest of the UK over the period. In other words, its actual productivity level may have improved, but at a slower rate than the UK overall.

Table A2.6: GVA per hour worked indices for Gloucestershire Local Enterprise Partnership comparative to UK

Year	Gloucestershire	UK
2004	100.1	100.0

⁹¹ Local Authorities of Gloucestershire (March 2014) Strategic Housing Market Assessment Update

 $^{^{92}}$ ONS (2011) Census WU03UK - Location of usual residence and place of work by method of travel to work Online at: https://www.nomisweb.co.uk/census/2011/wu03uk/chart

⁹³ ONS (2011) 2011 Census Online at: http://commute.datashine.org.uk

⁹⁴ Gloucestershire LEP (March 2014) Strategic Economic Plan for Gloucestershire

⁹⁵ ONS (February 2018) Subregional Productivity: Labour Productivity (GVA per hour worked and GVA per filled job) indices by UK NUTS2 and NUTS3 subregions

2005	100.2	100.0
2006	99.5	100.0
2007	98.7	100.0
2008	97.1	100.0
2009	96.4	100.0
2010	96.0	100.0
2011	95.7	100.0
2012	95.4	100.0
2013	94.6	100.0
2014	94.5	100.0
2015	94.3	100.0
2016	94.5	100.0

- A2.104 Between 2006 and March 2018 65.95ha of land was developed in Stroud District for employment generating uses. 25.13ha of this land was developed for "B" uses. From a base date of 2006, Stroud District is reported as having a net provision of employment land of about 99.95ha and a net provision of land for "B" uses of about 61.52ha in March 2018. Given that the Local Plan requirement for B class employment land for the period 2006-2031 for Stroud has been set out to be 58.00ha, a total surplus of employment land at April 2018 has been recorded as 3.52ha. Whilst this figure takes account of actual losses to other uses, there are potential losses of existing employment sites mainly to residential uses which have yet to be implemented including at Dudbridge Industrial Estate and Wimberley Mill. Six employment allocations are set out in the adopted Local Plan at Stroud Valleys, West of Stonehouse, North East Cam, Quedgeley East, Sharpness and South of Severn Distribution Park. These sites account for a total area of 51.2ha of employment land⁹⁶.
- A2.105 There are five town centres within the District at Stroud, Cam/Dursley, Nailsworth, Stonehouse and Wotton-under-Edge. In line with national trends the traditional role of high streets in relation to providing for a majority of shopping needs has seen a decline in the District given the rise of eretailing, e-banking and a general shift towards the acquisition of services online. In general the town centres of the District reflect a similar or slightly lower proportion of vacant commercial properties to the national average which is 11% for a similar period (recorded at January 2017) as shown in **Table A2.7** below.

Table A2.7: Total number of commercial properties and vacancy rates in Stroud's town centres (as at end of recording period 2016)

Town centre name	Total number of commercial properties	Proportion of vacant commercial properties
Stroud	320	10%
Nailsworth	116	5%
Dursley	102	9%
Stonehouse	70	9%
Wotton-under-Edge	90	10%

A2.106 Stroud town centre is by far the largest of those in the District as indicated by the number of commercial properties. The town centre, however, has a small food store offer at 4% of town centre commercial properties⁹⁷ and a non-food sector which may be under threat by the potential withdrawal of national retailers⁹⁸. The food store offer through convenience outlets is significantly lower than the national average, which is 13% of town centre commercial properties. The town does not attract a high number of national retailers and access to the centre during the evening has been identified as a barrier to the night time economy. The town does, however, benefit from a well-attended Saturday market.

⁹⁶ Stroud District Council (April 2018) *Employment Land Availability*

⁹⁷ Stroud District Council (August 2017) Future Of Town Centres Stroud, Nailsworth, Stonehouse, Dursley, Wotton-Under-Edge

⁹⁸ Stroud District Council (September 2017) Stroud District Local Plan Review: Issues and Options Paper

- A2.107 The most recent information (December 2016) relating to vacancy rates in the town centre show that 10% of commercial properties are unoccupied which is slightly higher than the previous year (8%) but slightly lower than national vacancy rate (11%) for a comparable period. Future projections relating to the make-up of the town centre suggest that it is likely to experience marked contraction of comparison floorspace as well as a reduction in the number of service units and an increase in the number of vacant commercial properties. The popularity of the market and current lack of convenience floorspace in the town centre may however provide opportunities to limit the level of underutilised space. Other potential strengths and opportunities for the town centre include capitalising on the successful integration of new housing in the town centre for "young professionals" and canal side opportunities.
- A2.108 Nailsworth is the second largest centre in the District being approximately three times smaller than Stroud when considering the overall number of retail properties. It functions as a local centre with a considerable number of existing leisure and tourist uses. The centre, however, has no comparison national retailers of a large scale present but supports a numbers of cafes, independent retailers and gift shops. Vacancy levels in Nailsworth for 2016 were well below the national level at 5%, although it is worth highlighting that this figure saw a notable increase from the previous year's figure which was only 1%.
- A2.109 In Dursley the number of convenience and comparison properties has remained relatively constant from 2005 to 2016. Vacancies in the centre according to the most recent available information in 2016 at 9% are similar to those observed pre-recession. Recent years have seen the number of service units decrease while leisure uses in the centre have increased slightly. Future potential opportunities for the town centre include increasing its tourism potential due to its attractive landscape setting and location on the Cotswolds Way.
- A2.110 Comparison and convenience uses in Wotton-under-Edge have remained relatively constant in recent years, which is similar to the trend identified in Dursley. The trend towards a slight increase in the leisure offer of the town has also been recorded while the number of service uses has fallen reflecting a withdrawal of banking uses from the centre. While there has been a significant increase from the 4% figure for 2005, the percentage of vacant uses in Wotton-under-Edge is broadly in line with smaller towns in the District given that it is recorded as 10% for 2016. As the town sits at the southern historic gateway to the Cotswolds there may be potential to identify potential growth opportunities for its tourism offer.
- A2.111 Stonehouse is the second larger town in the District by population but it has the fewest number of total retail outlets. The proportion of convenience uses in the town have remained relatively constant in recent years while there has been growth in leisure uses and a decrease in the proportion of service uses. This is in line with a number of the other smaller town centres in the District and leisure uses rose from 18% of commercial uses in 2005 to 20% in 2016 in the town while the proportion of service uses fell from 31% in 2005 to 21% in 2016. Options for marketing for the town centre include its promotion as benefiting from strong links to the A38/M5 corridor and as an entrance to the Stroud valleys.
- A2.112 It is expected that new retail commitments outside the District's boundaries will have a further impact on the demand for retail capacity within the town centres of Stroud. These include a new John Lewis store which is to open in Cheltenham and a further 100,000 sqft retail offer which is to be developed in the town. Further retail developments which have the potential to impact on the role of town centres in the District include the expansion of the sub regional shopping centre at Cribbs Causeway and the expansion of the retail offer at Gloucester Docks⁹⁹.
- A2.113 In total, 2640 sqm of convenience goods floorspace capacity and 4840sqm of comparison goods floorspace capacity by 2031 has been forecasted as required for the District by the Town Centres and Retailing Study and Update¹⁰⁰. The majority of this capacity is to be delivered at Stroud where 1,390sqm net additional convenience floorspace capacity and 3,630sqm net additional comparison floorspace capacity are required.

⁹⁹ Stroud District Council (February 2017) Environment Committee Agenda Paper: Future of Town Centres Stroud, Nailsworth, Stonehouse, Dursley, Wotton Under Edge

¹⁰⁰ GVA on behalf of Stroud District Council (July 2013) Stroud Retail Study Update 2013

Transport

- A2.114 The District has motorway access towards its western edge at the M5 junctions 12 (Gloucester) and 13 (Stroud). The A38 runs parallel to this route through the length of the District. These routes run south towards Bristol and the M4 and M48 which then provide access to South Wales. To the north the A38 and M5 provide access to Gloucester as well as Cheltenham and Worcester and further afield towards Birmingham. There are current capacity issues at peak times at junctions 12, 13 and at 14 serving the south of the District within South Gloucestershire.
- A2.115 The town of Stroud is accessible from these routes via the A419 which first passes through Stonehouse. The A419 between the M5 Junction 13 and Stroud currently experiences significant congestion and delays with Gloucestershire County Council considering proposals for improvements to address these issues¹⁰¹. The road network through the Cotswolds AONB to the east is less developed consisting of a network of smaller A-roads, B-roads (most notably the A4173, A46 and portion of the A419 to the east of Stroud) and narrow country lanes many of which converge towards the larger settlements outside the AONB's boundaries at Stroud towards the north and Cam and Dursley to the south.
- A2.116 The District is also served by a railway station at Cam and Dursley on the mainline between Bristol and Birmingham and railway stations at Stonehouse and Stroud linking to Birmingham and to the south via Swindon to the Great Western Mainline which runs westwards from London Paddington to Bristol Temple Meads.
- A2.117 The medium term priorities for Network Rail in Gloucestershire include exploring effective approaches to station development and stopping patterns on the Bristol-Gloucester line, with options for improvements including the development of the existing Cam and Dursley station over the period 2019-2029. Potential new station(s) at Hunt's Grove and/or Stonehouse are to be investigated as long term priorities (i.e. beyond 2029)¹⁰². The currently adopted Local Plan¹⁰³ (Site Allocations Policy SA4) safeguarded land for the provision of a potential future railway station at the Hunts Grove Extension. The adopted Local Plan (Site Allocations Policy SA2) also safeguarded land for a new railway station at Stonehouse Bristol Road.
- A2.118The Local Plan identifies a number of existing cycle routes for protection from harmful development:
 - The Eastington to Chalford cycle route.
 - The Eastington to Nailsworth cycle route.
 - The Cam and Dursley cycle route (and any proposed future extension to Uley).
 - The National Cycle Network Route 41 (Bristol to Stratford) and Route 45 (Salisbury to Chester) which cross the District and connecting routes to and from the Stroud Valleys Pedestrian Cycle Trail and the Cam and Dursley cycle route.
- A2.119 The District is currently served by a network of Public Rights of Way (PRoWs) which provide access to the Cotswolds AONB to the east. The National Trail Cotswold Way which passes along the western edge of the AONB begins at Bath before running into the southern portion of Gloucestershire by Wotton-under-Edge. It provides access by foot to Cam and Dursely and Stonehouse. Stonehouse is one of the few locations can easily be accessed by public transport in the District meaning that it is potentially an important link for tourists making use of this route. The Cotswolds Way passes in close proximity to Cheltenham to the north of the District before finishing at Chipping Campden. A dense network of footpaths and bridleways also provide access by alternative modes of transport beyond this route.
- A2.120 The length of the Stroudwater Navigation is accessible to the public, providing walking and cycling routes along the towpath apart from at two locations. At present a one mile section between Westfield Bridge and Bristol Road Wharf by the M5 motorway and one other much shorter section by the River Severn at Framilode Swing Bridge do not provide access to such

¹⁰¹ Gloucestershire County Council (August 2017) Stonehouse A419 Improvements Full Business Case

¹⁰² Gloucestershire County Council (June 2016) *Gloucestershire's Local Transport Plan 2015-2031 PD 5 - Rail*

¹⁰³ Stroud District Council (November 2015) *Stroud District Local Plan*

- routes. The section of the canal by the M5 motorway is currently subject to plans to be reinstated which would include the provision of a new surfaced towpath.
- A2.121 The strategy for transport provision within the District is set out through Gloucestershire's Local Transport Plan 2015-31 with Gloucestershire County Council acting as the local transport authority. Important development proposals for Stroud (some of which have confirmed funding to proceed) set out in the Local Transport Plan include improvements to the A419 corridor and Berkeley bridges at the A38. Gloucestershire County Council is to produce a Local Cycle and Walking Investment Strategy in roll out phases with phase 2 to cover Stroud and Tewkesbury. Strategic Cycle Highway improvements in the County are targeted for the M5 Growth Zone and are eventually to link Gloucester to Stroud¹⁰⁴. Specific locations within Stroud town which would benefit from improvements for cycle access include the town centre and Cainscross roundabout¹⁰⁵.
- A2.122 Within Gloucestershire approximately 17% of households do not own a car. This is significantly lower than the national average of 26%. At the county level, however, the percentage of those who cycle to work is 4.5% which is above the national average of 2%. It is also reported that across the county much of the population are located within 5km of services, employment opportunities and education which would be accessible by bicycle.
- A2.123 Stroud District Council has recently announced plans to invest in two cycling and walking projects: A cycle track linking Uley, Dursley and Cam with the Cam and Dursley railway station. The Cam, Dursley and Uley Greenway cycle route is currently being worked on by volunteers; and a cycle track from Sustrans national network 41 to Stonehouse Wharf, Ebley, Stroud, Thrupp and Brimscombe Port. The path will also have sections leading to Stonehouse, Stonehouse railway station, Stroud railway station and Nailsworth.
- A2.124 Specific emerging pressures within the Cotswolds AONB relate to increasing traffic volume and vehicle sizes which result in greater air and noise pollution as well as detrimental impacts on tranquillity, roadside verges, drainage. The AONB also faces potential pressures from non-motorised users travelling on foot, by bike or on horse. The good level of access to the AONB from nearby railway stations and international airports of Bristol, Birmingham and Heathrow as well as from military airports of Fairford and Brize Norton and the more local Gloucestershire, Oxfordshire and Cotswolds airports are likely to continue to have both positive and negative impacts on the AONB¹⁰⁶.

Tourism

- A2.125 In Stroud District, business rate figures show that £18,870,666 of income is generated through the service sector. This includes revenue from campsites and hotels as well as licensed premises, markets, restaurants, shops, museums, clubs and community and sports facilities and represents 28% of the total revenue for the District.
- A2.126 Across Gloucestershire, the total visitor related spend for tourists in 2017 was £1,106,843,000. The figure for Stroud District was £135,806,000 for the same period. The estimated number of jobs supported by the tourist trade in the District was 3,020 which accounted for 5% of all employment in Stroud. Day visits in the District were split fairly evenly between both countryside visits (1,366,000) and urban visits (1,301,000) demonstrating the variety of attractions in Stroud. Stroud was, however, the lowest performing of the local authority areas in Gloucestershire County during this period of time in relation to both domestic spend and overseas spend, with the Cotswolds performing mostly strongly in relation to both of these measures as shown below in **Table A2.8**¹⁰⁷.

¹⁰⁴ Gloucestershire County Council (December 2017) Local Transport Plan Implementation Report 2017

 $^{^{105} \ \}text{Gloucestershire County Council (June 2016)} \ \textit{Gloucestershire's Local Transport Plan 2015-2031 Gloucestershire's Cycle Network}$

¹⁰⁶ Cotswolds Conservation Board (February 2018) *Cotswolds AONB Management Plan 2018-2023 2nd Draft for Consultation*

¹⁰⁷ South West Research Company on behalf of Cotswold District Council (January 2018) *The Economic Impact of Gloucestershire's Visitor Economy 2017*

Table A2.8: Stroud - Staying visits in the Gloucestershire County context

Area	Domestic trips (000's)	Overseas trips (000's)	Domestic spend (millions)	Overseas spend (millions)
Cheltenham	316	50	£58	£21
Cotswold	506	66	£104	£33
Forest of Dean	252	36	£42	£21
Gloucester	286	46	£49	£18
Stroud	222	34	£34	£13
Tewkesbury	272	40	£49	£16

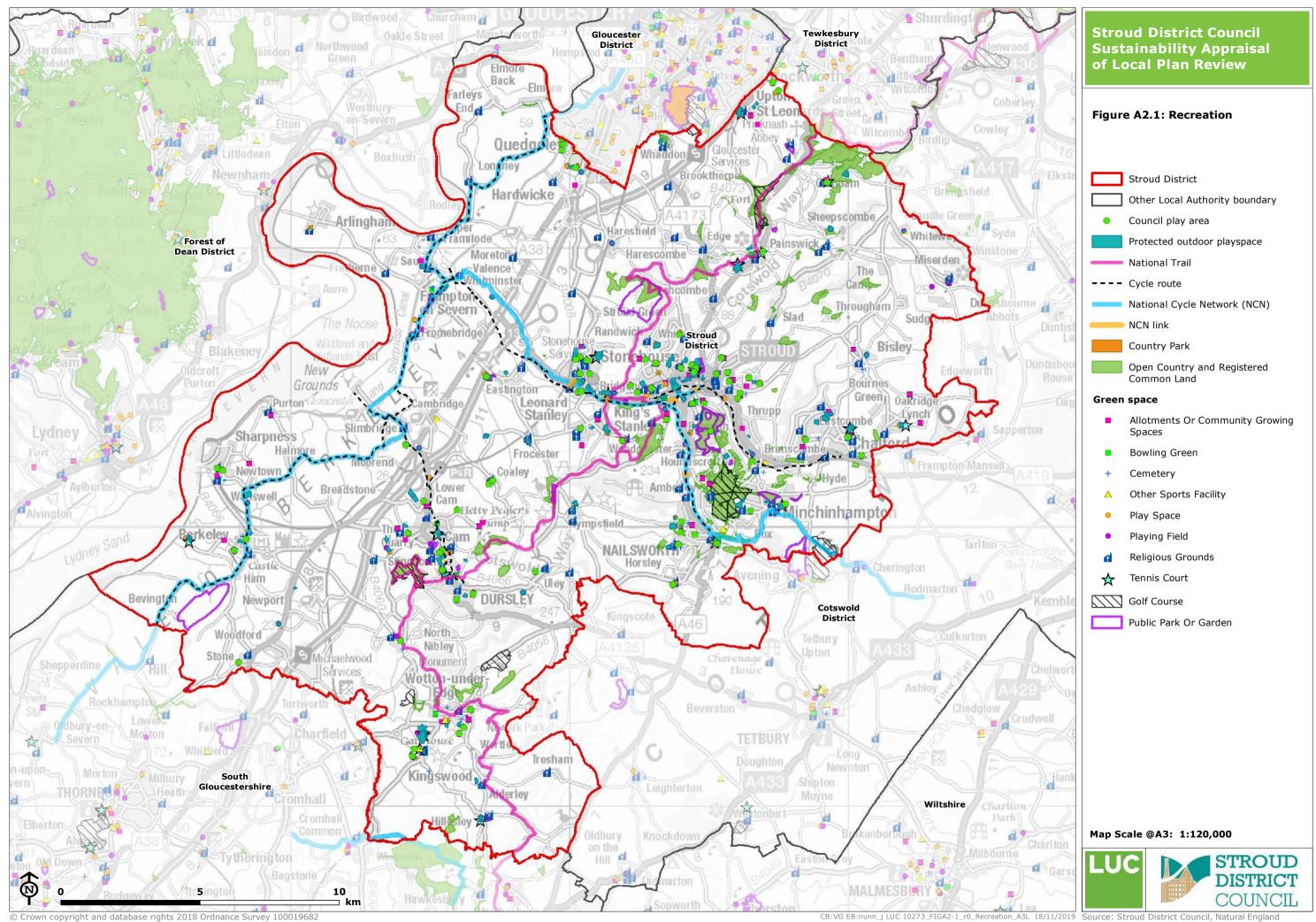
- A2.127 Stroud District Council recognises the importance of the Cotswolds brand as a draw for tourists given its international recognition and reputation. As such, considering that it forms part of the Cotswolds AONB, the District aims to strengthen its position within the Cotswolds for tourism marketing purposes so that it remains an integral part of the tourism offer for the wider area. Research suggests the Cotswolds could be considered a destination for older visitors meaning that there is potentially future need to consider whether the area's core markets should be concentrated on this category of visitor or whether there is requirement to adopt a strategy to promote the District to a younger audience¹⁰⁸.
- A2.128 The updated challenges which town centres in the District face partially reflecting the national trend of the increased importance of e-retail impacts means there are likely to be evolving town centre roles within the District with emerging opportunities for leisure uses and tourism. The Stroud Town Centre Neighbourhood Development Plan 2015 2035¹⁰⁹ identifies the strong traditional market presence, independent shops, cafes and cultural street life and festivals as current strengths and potential opportunities to be built upon for the town centre. A rise in leisure uses has been discernible at all of the town centres in the District up to the end of 2016 most notably at Dursley, Wotton-under-Edge and Stonehouse¹¹⁰. The potential for future tourism growth at The Stroud Valleys, Stonehouse (along the canal), Cam and Dursley and Berkeley, Wotton-under-Edge, Severn Vale and the Cotswolds Cluster is recognised by the Council through the Draft Local Plan¹¹¹. Many of the locations in the District benefit from attractive landscape setting with some providing nearby access on the Cotswolds Way and acting as the gateway to the Cotswolds.

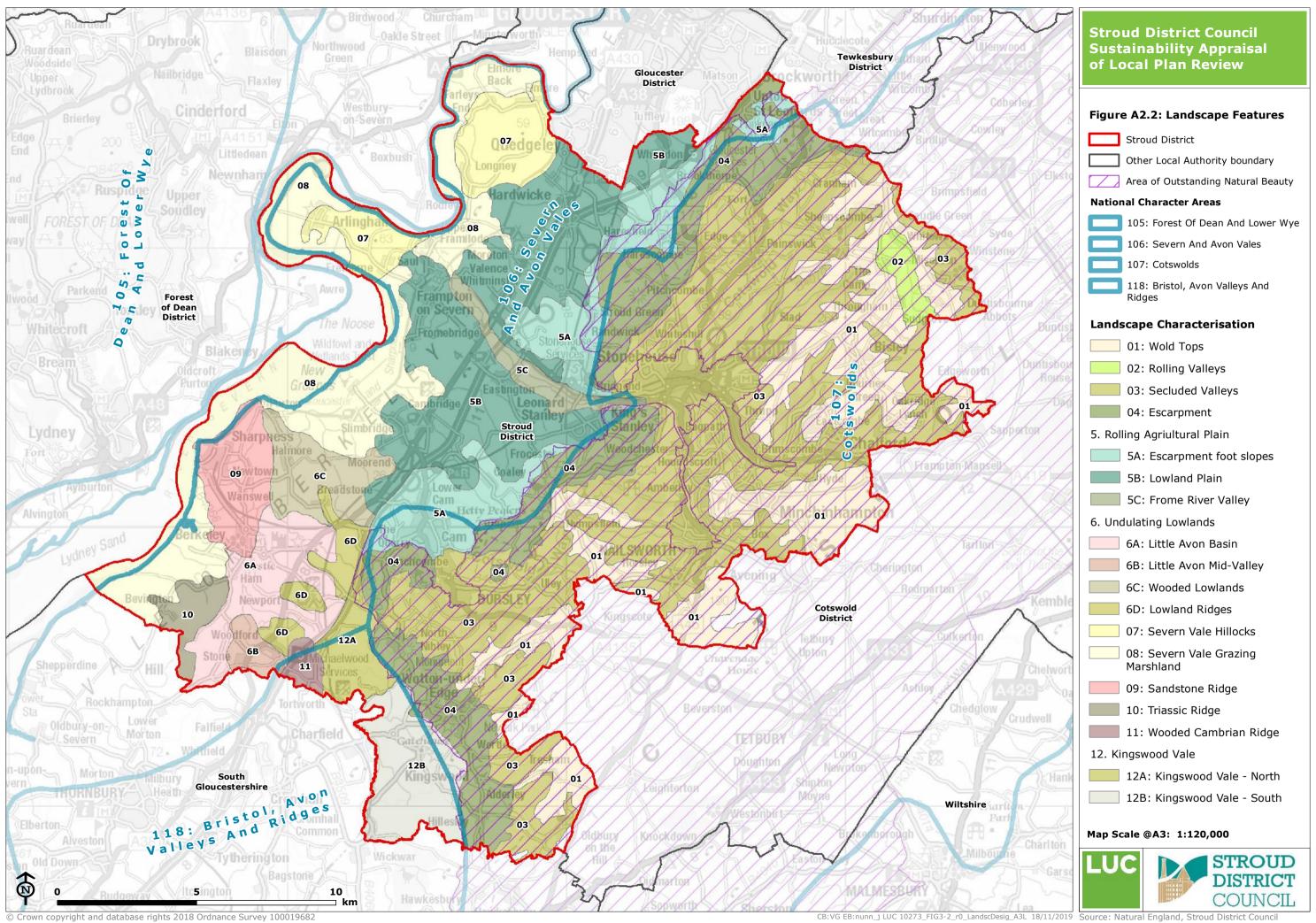
¹⁰⁸ Stroud District Council (March 2017) Community Services And Licensing Committee Information Sheet: Tourism Update

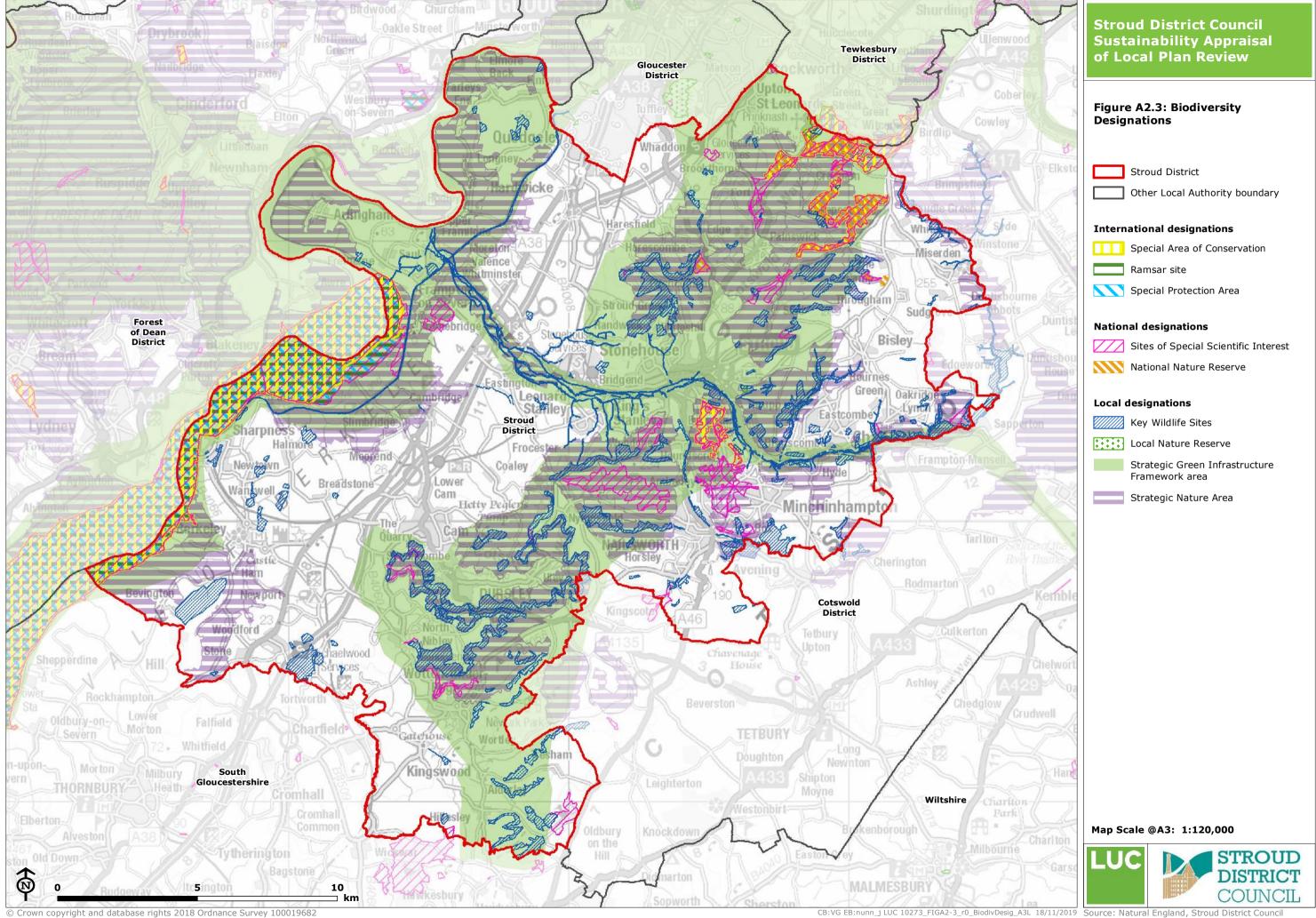
 $^{^{109}}$ Stroud Town Council (October 2016) Stroud Town Centre Neighbourhood Development Plan 2015 – 2035

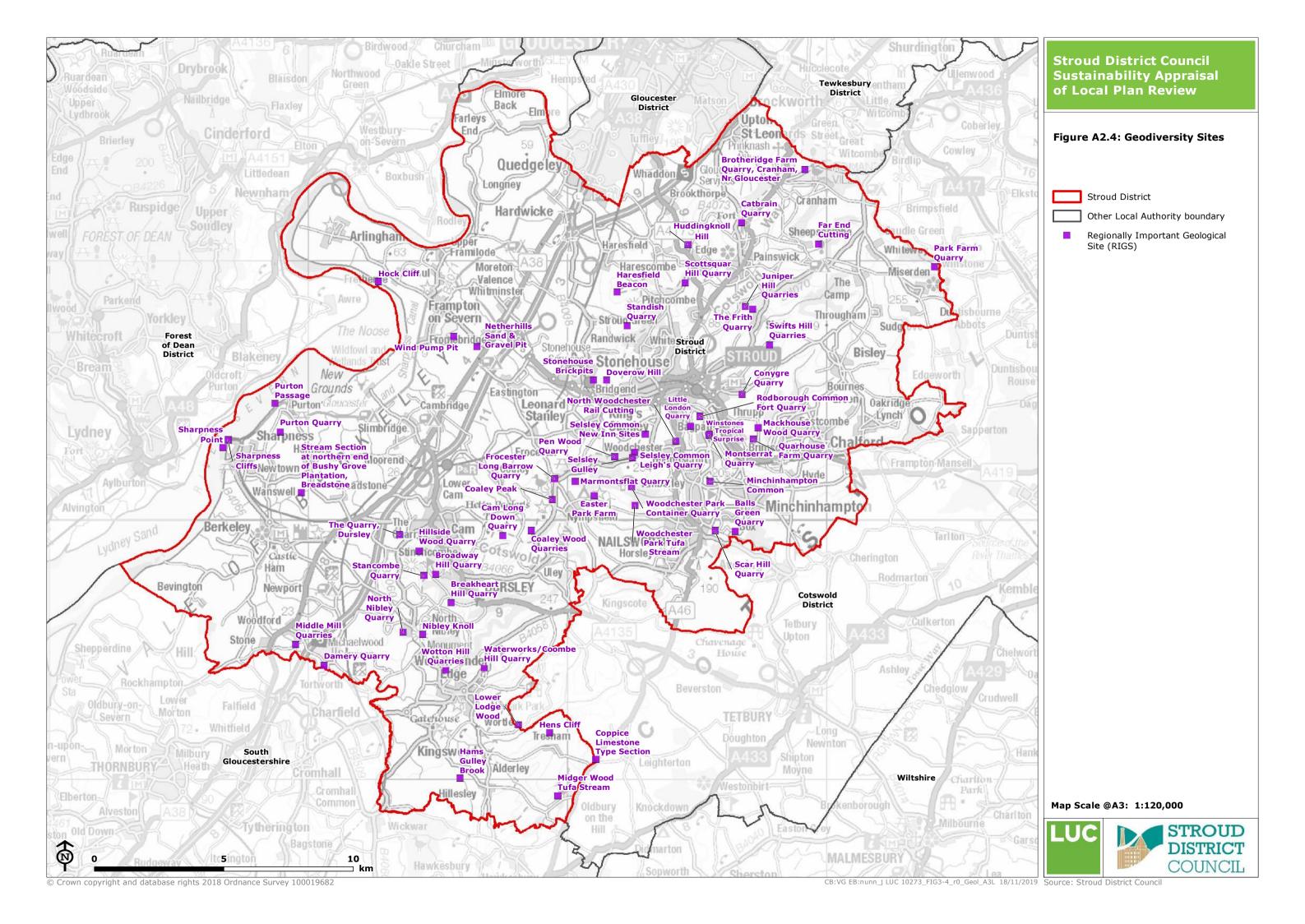
¹¹⁰ Stroud District Council (February 2017) Environment Committee Agenda Paper: Future of Town Centres Stroud, Nailsworth, Stonehouse, Dursley, Wotton Under Edge

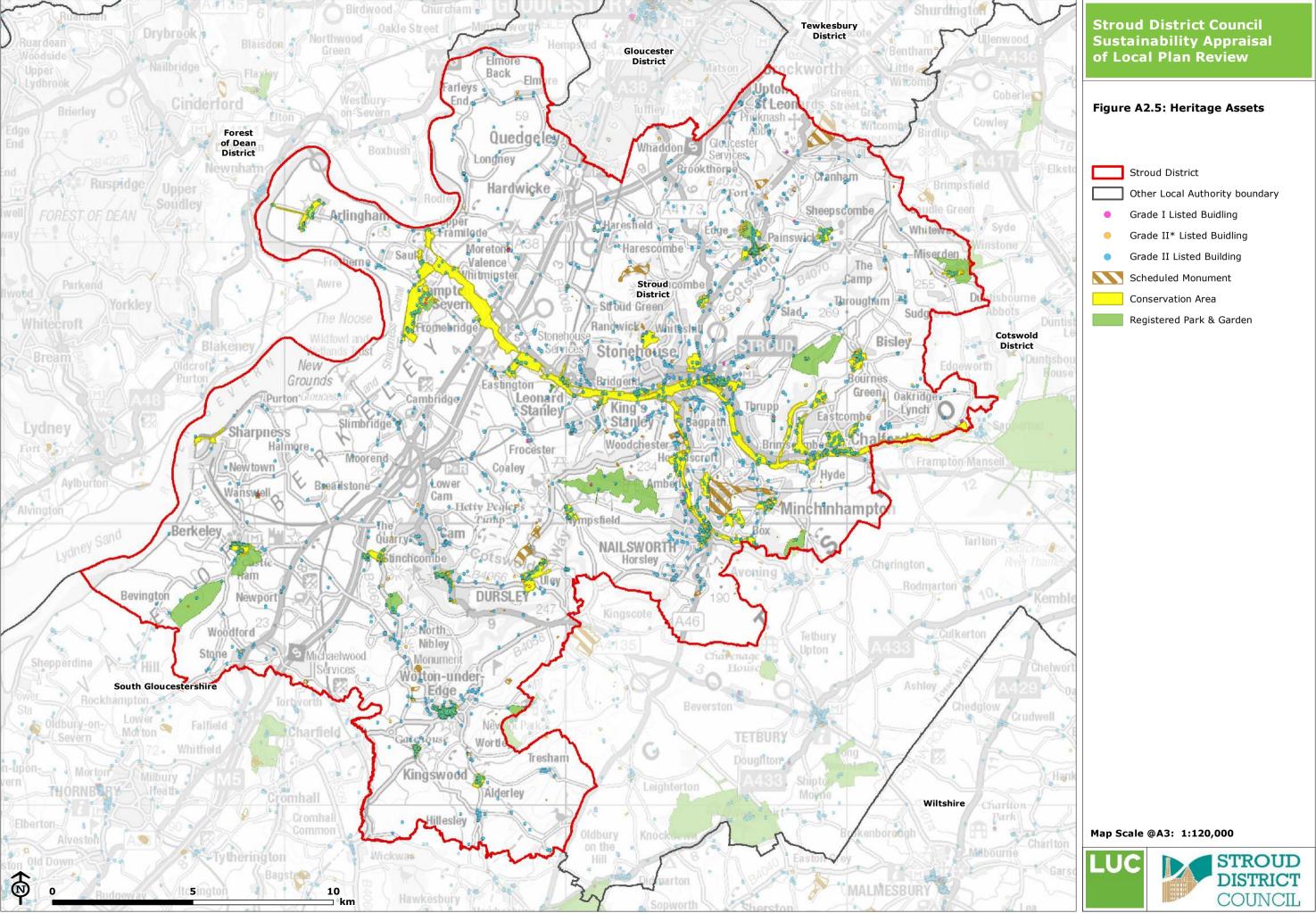
¹¹¹ Stroud District Council (November) Stroud Draft Local Plan

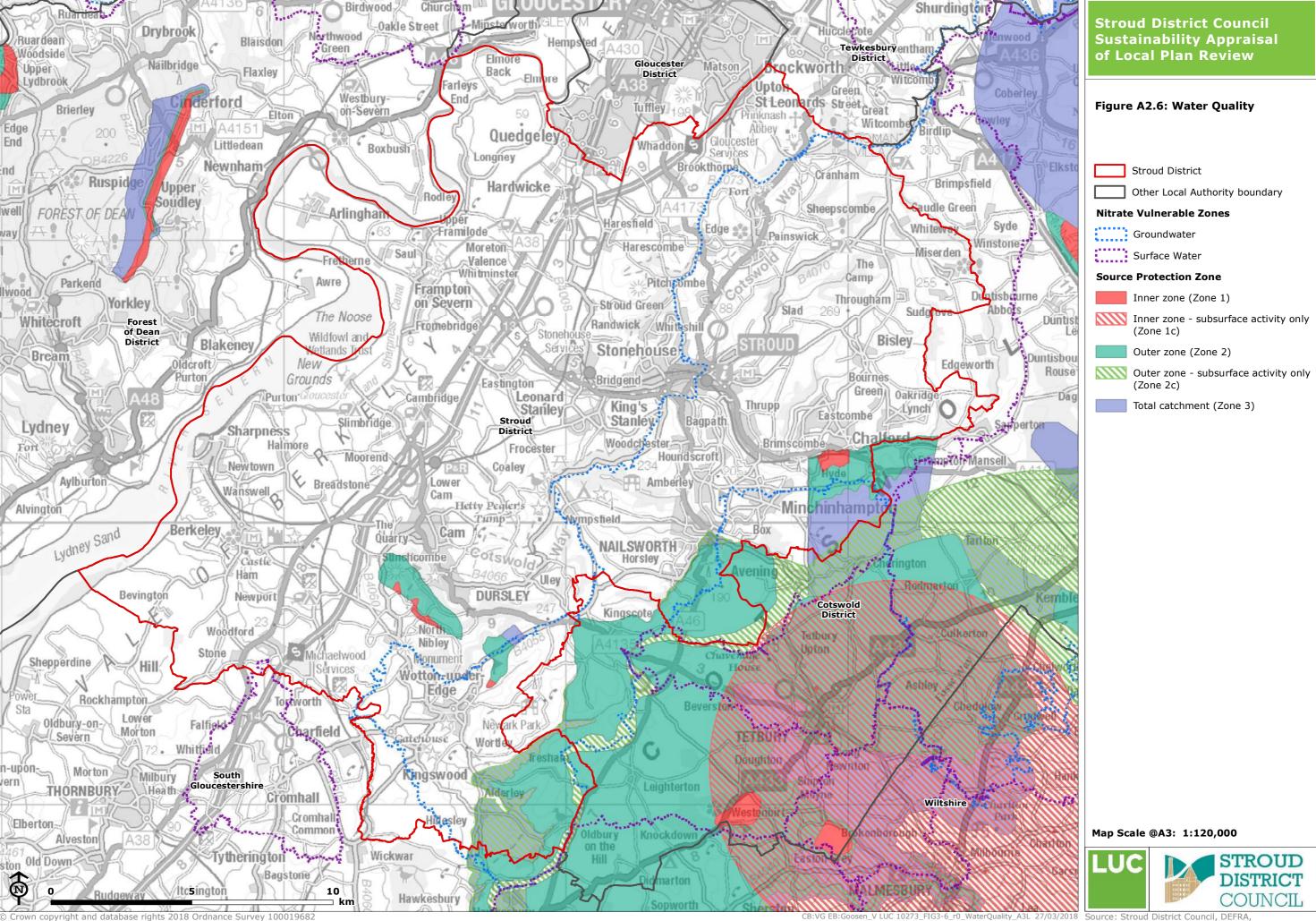






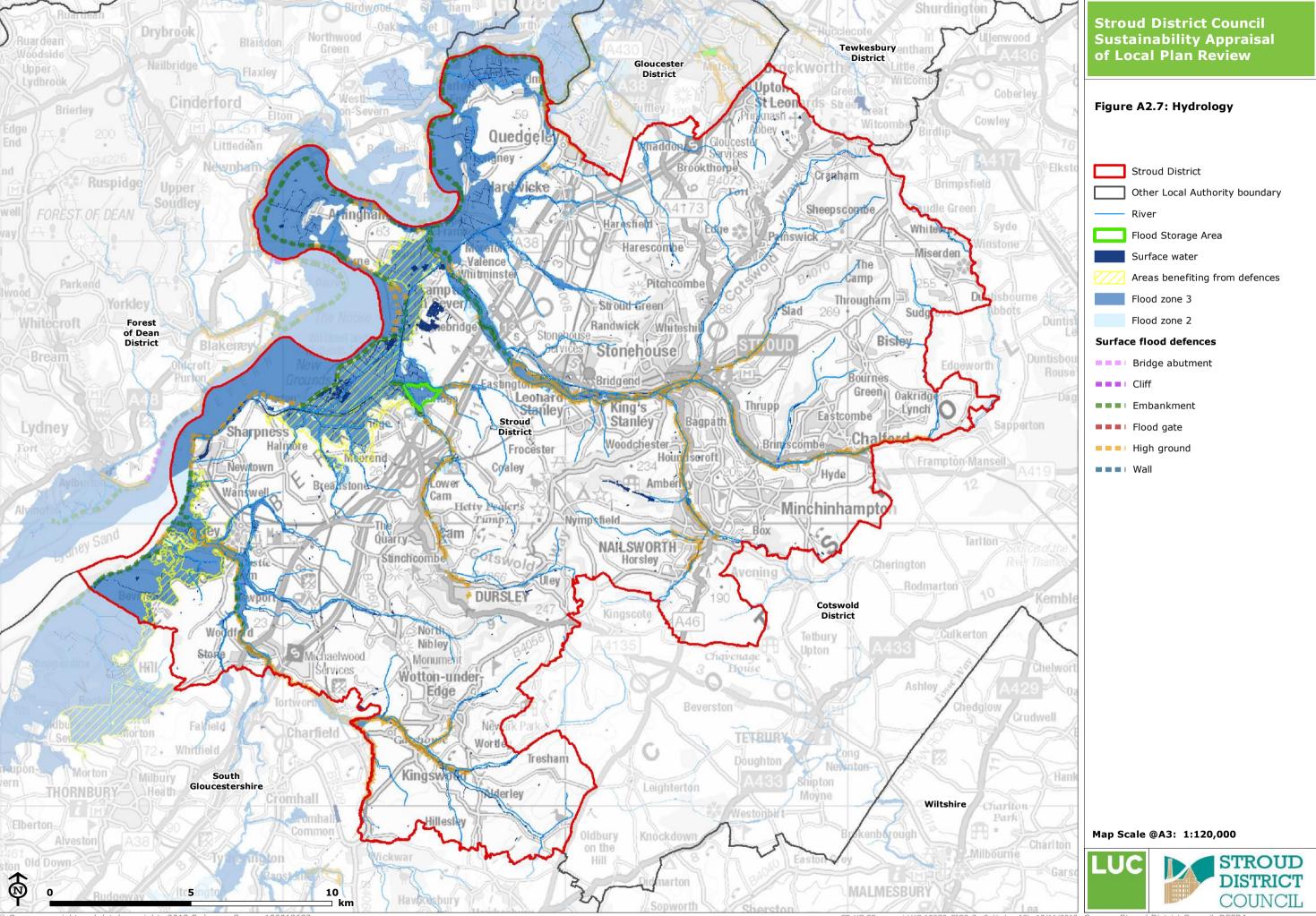






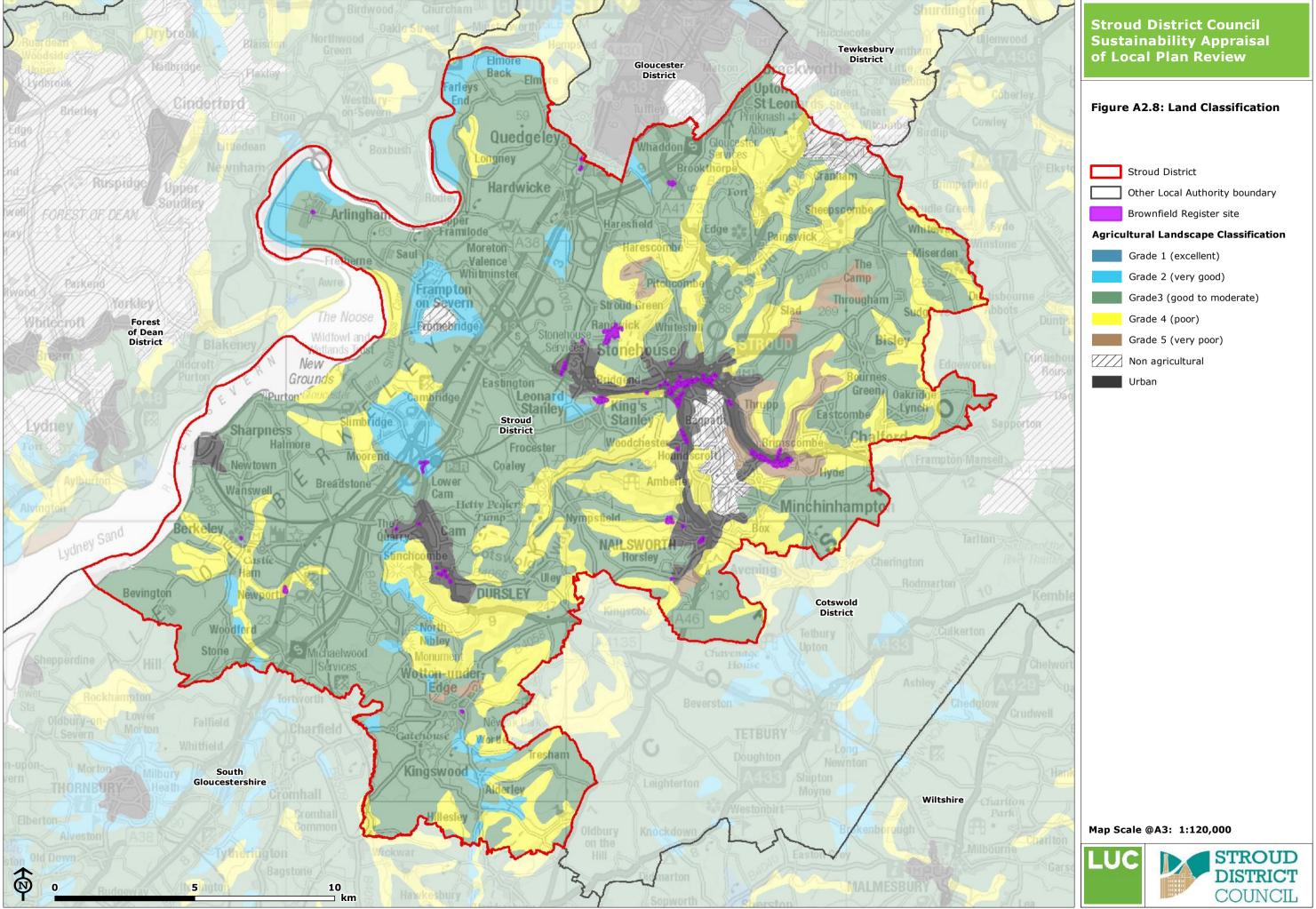
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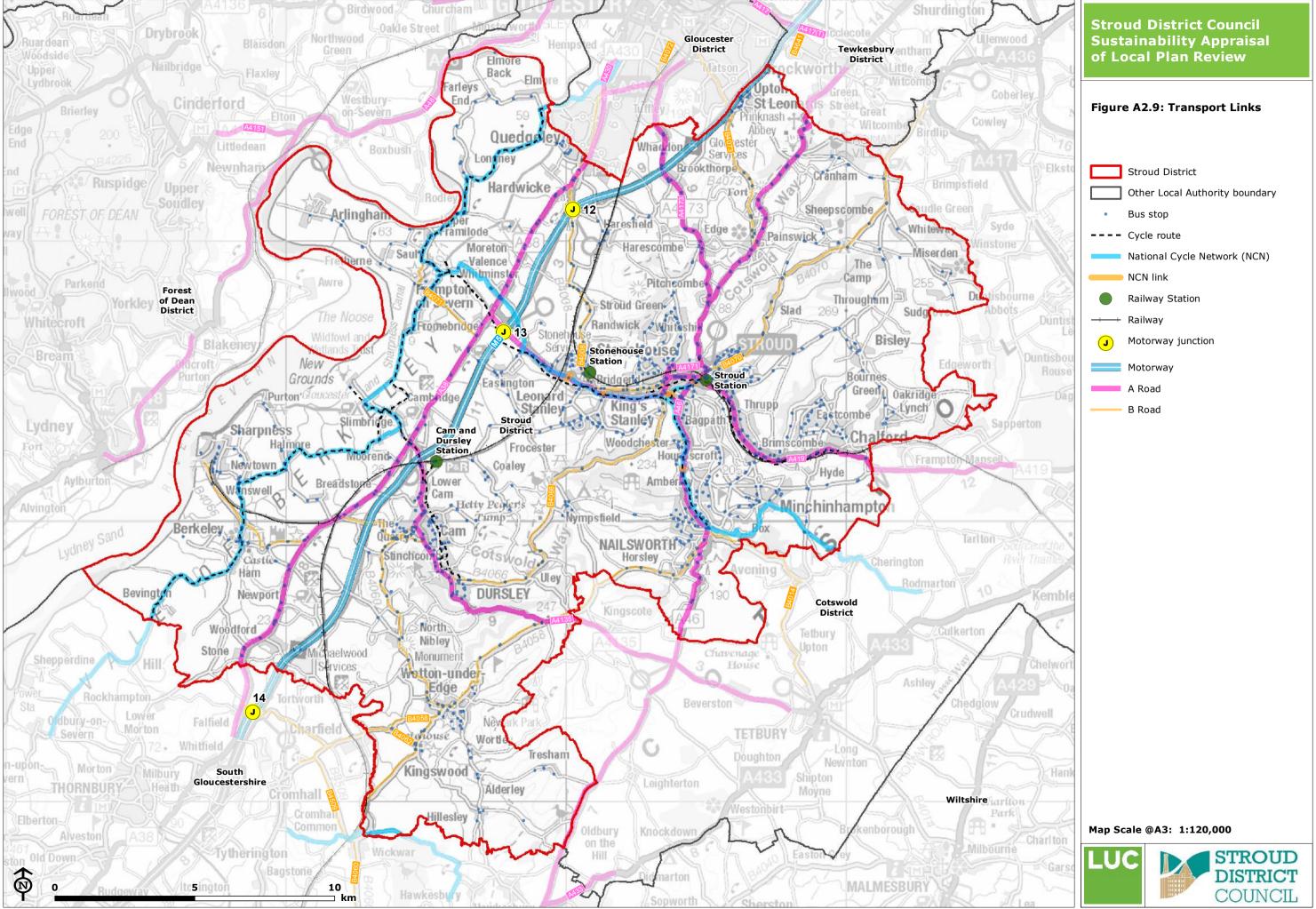
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Appendix 3

SA findings for Policy Options considered at the Issues and Options stage (2017)

Introduction

- A2.129 This appendix presents the SA findings for the policy options that have been considered for the Local Plan Review. These options were initially set out in the Issues and Options consultation paper (October 2017), although some additional work has since been undertaken by the Council to develop some of those options.
- 1.2 The appraisal work set out in this appendix is presented in the same order that the options appeared in the Issues and Options consultation paper.
- 1.3 The SA findings set out were originally presented to Stroud District Council officers in early August 2018, so that the findings could inform the policy approaches included within the Emerging Strategy Paper, and further policy development which took place in the subsequent stage of the Local Plan Review in 2019.

Chapter 1: Key Issues

- 1.4 The first chapter of the Issues and Options consultation paper sets out the key issues facing Stroud District, in relation to economy, affordable housing, environment, health and wellbeing and delivery.
- 1.5 Alternative options are not included in this chapter; therefore no appraisal work in relation to the key issues has been undertaken. However, a review of the key issues was undertaken following preparation of the SA Scoping Report (April 2018) in order to ensure that there are no inconsistencies and that an appropriate range of key issues is identified in the Local Plan. This review did not result in the SA team recommending that any changes should be made to the key issues in the Local Plan.

Chapter 2: Needs

Local Economy and Jobs

1.6 This section of the Local Plan sets out a number of alternative options in relation to the need for economic growth and job creation in the District. While some of the questions posed in the consultation are open ended and do not comprise alternative options that can be appraised, a number of distinct options are identified and the sections below provide a commentary on their likely significant sustainability effects.

Question 2.1c

- Option 1: Locating growth adjacent to M5 junctions.
- Option 2: Continuing expansion of employment land at existing settlements/sites.
- 1.7 The specific nature of these options means that negligible effects would be likely in relation to many of the SA objectives. However, locating more employment development adjacent to the M5 junctions could have minor negative effects on SA objectives 10: air quality and 14: climate change as this approach may result in higher levels of car use for employees commuting to and from the sites, as well as potentially attracting less sustainable, transport-based commercial activities such as logistics. Development adjacent to the M5 junctions would be some distance from the main settlements in the District including Stroud and Cam and Dursley. There may also be minor negative effects on SA objective 16: employment as employment opportunities adjacent to the M5 junctions may not be easily accessible for people without access to a car. A minor negative effect on SA objective 2: health could also result from there being more limited opportunities for people to walk or cycle to work.

- 1.8 Conversely, continuing to expand employment land at existing settlements and sites could have minor positive effects on the SA objectives described above, as more people may be able to make use of existing sustainable transport links to access work opportunities without relying on private cars.
- 1.9 The effects of both options on the environmental objectives, including SA objectives 7: biodiversity, 8: landscape, 9: historic environment and 12: flood risk, would depend on the specific location of employment land allocations under either option, and so cannot be determined at this high level.

Question 2.1d

- Option 1: Increased flexibility to allow other job generating uses on all employment sites.
- Option 2: Increased flexibility allowed on some sites only.
- Option 3: Identify a percentage threshold for non B class employment uses.
- 1.10 Allowing for increased flexibility in terms of the uses permitted at employment sites (Options 1 and 2) could have a positive effect on SA objective 6: **access to services** for employees at those sites, as they would be able to make use of facilities such as retail outlets during breaks and after work. Depending on nature of the other uses, there could also be positive effects on SA objective 2: **health**, i.e. if gyms were located within employment sites alongside Class B uses. Although such effects would be particularly positive under Option 1, which would allow flexibility on all employment sites and not just some (as with Option 2), the positive effects are not likely to be significant under either option as they only relate to employees at the sites concerned, rather than a large number of residents across the District. The likely effects of Option 3 would depend on the percentage threshold for non B class employment uses that is eventually applied, with the potential positive effects on the above SA objectives being greater if the percentage threshold is higher.
- 1.11 However, under all options there is a potential for minor negative effects on SA objective 16:

 employment if allowing a greater mix of employment uses were to result in an overall lower number of jobs being created. Some of the non B class uses that could be located within employment sites, such as retail units and gyms, are not likely to generate significant numbers of well-paid jobs in comparison to other potential B class uses. However, the potential negative effects of this nature are uncertain for all three options depending on the other uses that may eventually come forward and the number of associated jobs. As previously, the potential for negative effects is greater under Option 1 which would allow flexibility for other job generating uses on all, rather than just some, sites.

Question 2.1e

- Option 1: Promote further home working, encourage development of live-work units and coworking facilities.
- 1.12 The option for the Local Plan Review to promote more home working and to encourage the development of live-work units and co-working facilities is likely to have minor positive effects on SA objectives 10: **air quality** and 14: **climate change** as it may lead to lower levels of car use for commuting. There is also likely to be a minor positive effect on SA objective 16: **employment** as this approach should mean that a wider range of job opportunities are available to more people, including those without cars or with restricted working hours. The creation of co-working facilities in particular may also have a minor positive effect on SA objective 17: **economic growth** as it would support business development.
- 1.13 The specific nature of this option means that negligible effects on the other SA objectives are expected.

Question 2.1f

- Option 1: Promote further farm diversification.
- Option 2: Control pattern of rural development more closely.

- 1.14 Promoting further farm diversification under Option 1 could have a minor positive effect on SA objectives 16: employment and 17: economic growth as this approach could offer local employment opportunities and allow farming businesses to respond flexibly to changes in agriculture to ensure that their businesses remain viable. Depending on the nature of diversification that takes place, there may also be minor positive effects on SA objectives 3: health and 6: access to services and facilities if the businesses provide opportunities for physical activity, or add to the range of community services and facilities available in the area. Conversely, Option 2 would involve more close control over rural development, which could have minor negative effects on those SA objectives.
- 1.15 However, Option 1 could have negative effects on some of the environmental SA objectives, in particular SA objective 8: landscape, although this is uncertain depending on the nature and location of diversification activities. Controlling rural development more closely under Option 2 could have a positive effect on that objective.

Our Town Centres

- 1.16 This section of the Issues and Options consultation document sets out a number of 'mix and match' options for improving the town centres of Stroud, Nailsworth, Dursley, Wotton-under-Edge and Stonehouse. As these options are generally aspirational, broadly positive effects on the SA objectives are expected to occur.
- 1.17 In general, improving the District's town centres will have positive effects on SA objectives 5: vibrant communities and 6: access to services. There are also likely to be positive effects on SA objectives 10: air quality and 14: climate change as improvements to the town centres may encourage more people to shop and spend time in those areas, which are generally more accessible via sustainable transport compared to out of town retail parks or other larger centres. Significant positive effects on SA objective 17: economic growth would also be expected as the overall purpose of the options are to maintain and enhance the vitality and viability of the District's town centres. Several of the options for the town centres are associated with marketing the tourism potential of the towns, i.e. promoting the proximity of Stroud and Dursley and so would have positive effects on SA objective 17: economic growth for that reason as well.
- 1.18 Considering the specific options set out in the Issues and Options document, there is, however, potential for some of the options to have a negative effect on SA objectives 10: air quality and 14: climate change where they could be seen to encourage car use. For example, one of the options that is included for both Stroud and Dursley is to improve signage to car parking for motorists while this could benefit the street scene and reduce congestion, it could indirectly encourage car use. The other approach proposed for Dursley, to enhance signage in the town for pedestrians and cyclists, would have more positive effects on those SA objectives. Similarly, one of the options for Wotton-under-Edge is to find a solution for the lack of car and coach parking, including allocating a site this could again have a negative effect on SA objectives 10: air quality and 14: climate change, as could the option for Stroud to relax parking restrictions in the evening and two of the options for Stonehouse that refer to promoting the town's links with the strategic road network.
- 1.19 One of the proposals for Nailsworth, improving the town square, would have a positive effect on SA objective 8: **landscape and townscape**.
- 1.20 The option for Stroud to support new housing in the town centre for young professionals could have a minor positive effect on SA objective 1: **housing**.

A Local Need for Housing

1.21 This section of the Issues and Options consultation document poses a number of open ended consultation questions in relation to the need for housing development in the District, but does not identify alternative options that can be subject to SA. Therefore, no appraisal work has been undertaken in relation to this section. Any potential development sites that have been put forward in response to question 2.3c have been subject to SA along with other site options.

Local Green Spaces and Community Facilities

1.22 This section of the Issues and Options consultation document poses a number of open ended consultation questions in relation to the need for local green spaces and community facilities in the District, but does not identify alternative options that can be subject to SA. Therefore, no appraisal work has been undertaken in relation to this section. A small number of potential open space site options have been subject to SA separately.

Chapter 3: Future Growth Strategy

Future Growth Strategy

- 1.23 In summary, the four strategic growth options being considered for the Stroud Local Plan Review comprise:
 - Option 1: Concentrated development 5,550 dwellings and 30ha B class employment.
 - Option 2: Wider distribution 5,520 dwellings and 30ha B class employment.
 - Option 3: Dispersal -5,695 dwellings and 40ha B class employment.
 - Option 4: Growth Point -6,010 dwellings and 40ha B class employment.
- 1.24 The Council's paper "Local Plan Review: Developing a preferred strategy (revised March 2018)" describes the options in more detail (including how much housing would be delivered in the broad locations making up the option) and has been taken into account during the appraisal, along with four maps prepared by the Council illustrating the broad locations for growth under each option.

Summary of SA findings

- 1.25 **Table 1** at the end of this section summarises the sustainability effects identified for the four future growth strategy options being considered for the Stroud Local Plan. The justification for the sustainability effects identified is provided in the detailed SA matrix in **Appendix 1** at the end of this note.
- 1.26 It is expected that Option 1 would provide new housing and economic growth at locations to achieve the most positive effects as well as having the lowest number of outright significant negative effects. These effects are likely given that this approach would provide the majority of housing and employment development adjacent to the main towns in the district and would be concentrated at a few larger sites.
- 1.27 Option 1 would provide enough housing to ensure the housing stock meets the needs of local people, and the provision of much of this development at a smaller number of larger sites is likely to mean that high levels of affordable housing could be provided without significant impacts on viability. This approach may also provide more opportunities for the incorporation of new infrastructure to support low carbon and renewable energies as well as sustainable waste management practices. This option also provides a high level of new employment land in relatively accessible locations. The concentration of new development across a smaller number of larger sites is also likely to mean that transport connectivity issues which might otherwise adversely affect the accessibility of employment opportunities in the district might be addressed by securing government funding for new infrastructure provision.
- 1.28 It is expected that providing new housing by the larger towns of the district would mean that new residents would be located in close proximity to a range of existing services and facilities which would be to the benefit of promoting modal shift and health and well-being as well as social inclusion. Furthermore, it is likely that this approach would help to improve the vitality and viability of the town centres at the settlements in question, although it recognised that this approach would not directly support the growth of the more rural villages of the district.
- 1.29 Considering the high level of growth required over the plan period it is expected that all options would require development to proceed at large areas of greenfield land. Option 1 may however present increased opportunities to make use of brownfield sites which are more likely to be available at the larger settlements in the district. Option 1 would also provide the majority of new

growth away from the more sensitive biodiversity and geodiversity sites (particularly the Severn Estuary SPA, SAC and Ramsar site) and landscape designations (including the Cotswolds AONB) in the district. Providing development near the large settlements of the district will also help to avoid the areas at most risk of flooding and areas which have been designated as having potential to adversely impact water quality if development was to proceed.

1.30 Conversely Option 2 and Option 3 would result in a greater spread of development throughout the district at the smaller towns and more rural villages. These locations are currently less accessible and provide access to a lower number of key services and facilities. Furthermore the wider dispersal of development through the district would place a higher level of development in close proximity to potentially sensitivity biodiversity and geodiversity designations while also resulting in adverse impacts on the established character of the more rural villages and the AONB. Both of these options would make use of a higher number of smaller development sites meaning that issues relating to viability¹¹² may be more likely to result in relation to the delivery of affordable housing. It is also considered government funding which might otherwise be used to help to address connectivity issues in the district would be less likely to be secured at the smaller sites which these options would put forward.

Table A3.1: Summary of sustainability effects for the Future Growth Strategy Options for Stroud Local Plan

SA Objective	Option 1: Concentrated development	Option 2: Wider distribution	Option 3: Dispersal	Option 4: Focus on a single growth point
SA 1: Housing	++	++/-	++/-	++
SA 2: Health	++/-	+/-	+/	++/?
SA 3: Social inclusion	++/-	+/-	+/	++/?
SA 4: Crime	0	0	0	0
SA 5: Vibrant communities	+/-	+/-	+/-	+/-
SA 6: Services and facilities	++/-	++/-	+/	++/-
SA 7: Biodiversity/geodiversity	-?	?	?	?
SA 8: Landscapes/townscapes	-?	?	?	?
SA 9: Historic environment	+?/?	+?/?	+?/-?	+/-?
SA 10: Air quality	+	+/-	-	+/-
SA 11: Water quality	-			0
SA 12: Flooding	+/-	-		-
SA 13: Efficient land use	+/			
SA 14: Climate change	+	+/-?	-	+/-?
SA 15: Waste	+?	0	0	+?
SA 16: Employment	++/-	++/-	+/	++?/-
SA 17: Economic growth	+/-	+/-	+/-	++?/-

1.31 Option 4 would provide the majority of new development at large scale sites at just three locations in the district; including at the new growth point to the south of Sharpness. It is expected that the new growth point at Sharpness in particular would not provide immediate access to existing services and facilities, meaning that new residents may be required to travel longer distances on a day to day basis. However, the large scale of development concentrated at only three locations is likely to support the incorporation of new services and facilities at these

¹¹² National Planning Practice Guidance (paragraph 031 Reference ID: 23b-031-20161116) refers to the fact that contributions for affordable housing should not be sought from some smaller-scale developments.

- growth points as well as supporting higher levels of affordable housing and the securing of government funding for infrastructure improvements. The latter in particular could be of particular benefit in terms of securing future inward economic investment.
- 1.32 However, large scale development at the three growth point locations in Option 4 is likely to result in the loss of a large amount of greenfield land with reduced focus on the use of brownfield sites. The development to be provided at the Sharpness growth point would be provided at a location which could adversely impact upon the integrity of the Severn Estuary SPA, SAC and Ramsar site in particular. This location by the Severn Estuary also contains areas of Flood Zone 2 and Flood Zone 3 although it is noted that flood defences are in place which would help mitigate the potential for adverse flood risk.

Conclusion

1.33 Option 1 performs slightly better overall in terms of potential positive effects and slightly fewer negative effects. However, there are elements of the other three options that also perform well. In particular, concentrating all the new growth at the three potential growth points could have fewer negative environmental impacts than Options 2 and 3, and would have most of the same significant positive effects as Option 1 for provision of housing, employment opportunities, access to services, health and social inclusion due to the creation of new, mixed-use communities. Option 2 with a slightly wider distribution than Option 1 could have benefits in terms of access to services and employment opportunities for some of the other larger towns and villages in the District. Therefore, it may be worth considering a hybrid option which most resembles Option 1: Concentrated development, but perhaps including growth at one or two growth points and/or one or two of the smaller towns and larger villages as well (although this would need to avoid settlements where negative environmental effects on biodiversity/geodiversity, landscape/townscape, historic environment, water quality and flooding are more likely).

Gloucester's Fringe

1.34 This section of the Issues and Options consultation document identifies a number of broad locations for growth on the fringe of Gloucester. These locations have been subject to SA along with the other site options.

South of the District

1.35 This section of the Issues and Options consultation document considers whether there are broad locations that could be considered for growth in the South of the District. Potential development locations in that area have been subject to SA along with the other site options.

Settlement Hierarchy

1.36 This section of the Issues and Options consultation document presents the settlement hierarchy as it is set out in the adopted Local Plan and asks for comment on that. No alternative options are set out and therefore no appraisal work has been undertaken in relation to the settlement hierarchy.

Settlement Boundaries

1.37 This section of the Issues and Options consultation document identifies three alternative approaches to managing development proposals on the edges of towns and villages:

Question 3.5a

- Option 1: Continue with existing settlement development limits, amended as necessary.
- Option 2: Assess proposals on a case by case basis using broader criteria (e.g. landscape impact; form of settlement, proximity to services, etc.).
- Option 3: Continue with settlement development limits but expand the types of development that are allowed beyond them in the countryside.
- 1.38 A fourth option also asks consultees whether there are any other approaches that should be considered, which cannot be appraised as no other approaches are identified.

- 1.39 The appraisal of these options has been informed by the discussion paper that was prepared by Council officers for the Planning Review Panel, entitled 'Review of Settlement Development Limits'.
- 1.40 Continuing with the current approach of defining stringent settlement development limits (Option 1) is likely to have broadly positive effects on the environmental SA objectives as development outside of settlement limits is strictly controlled. The protection resulting from this approach would have minor positive effects on SA objectives 7: biodiversity, 8: landscape and 13: land use and soils. There may also be minor positive effects on SA objective 10: air quality as focussing development within existing settlement limits, as opposed to permitting more dispersed development, could result in lower levels of car use. In addition, there could be a minor positive effect in relation to SA objective 6: access to services. However, the lack of flexibility associated with this approach could have minor negative effects on SA objectives 1: housing and 16: economy if proposals for development outside of settlement limits that would otherwise benefit these SA objectives are prevented from coming forward. It is possible that this less flexible approach could result in development proposals being refused in locations where there would not actually be adverse impacts on the environment, but the opportunity to consider and assess this on a case-by-case basis is lost.
- 1.41 Option 2 (assessing proposals on a case by case basis using criteria) would allow for more flexibility, which may benefit SA objectives 1: **housing** and 16: **economy** if residential and commercial developments are able to come forward in wider locations where it can be established that there would not be harm as a result. This more flexible approach would not necessarily result in adverse effects in relation to the environmental SA objectives, as there would be criteria that proposals would still be required to meet; however there may be an increased chance of negative effects on SA objectives 7: **biodiversity** and 8: **landscape** in particular if there is less stringent protection compared to Option 1. Effects would depend largely on the criteria that are applied and how stringently they are enforced, as well as whether the Council has available the evidence needed to thoroughly assess proposals, such as Conservation Area appraisals and up to date landscape sensitivity assessments. There may also be minor negative effects on SA objective 6: **access to services** and SA objective 10: **air quality** if this approach were to result in more dispersed development which is likely to be associated with higher levels of car use.
- 1.42 The third option would involve continuing with the current settlement development limits but expanding the types of development that are allowed beyond them in the countryside. This approach would provide the environmental protection of option 1, although not as strongly because certain types of development would not be as tightly controlled in terms of their location and may therefore be more likely to have adverse impacts. As with option 2 however, there could be benefits for SA objectives 1: **housing** and 16: **economy** assuming that the types of developments that might be allowed would be things like live work units and exemplar carbon neutral schemes. There may also be minor negative effects on SA objective 10: **air quality** if more dispersed development under this option were to result in higher levels of car use. In addition, dispersed development could have a negative effect in relation to SA objective 6: **access to services**.
- 1.43 A number of hybrid options are also identified in the discussion paper referred to above and the effects of these would be a mixture of the positives and negatives described above for the three options in the Issues and Options document. For example, one hybrid option could be a combination of Options 1 and 2 removing settlement development limits for large settlements but retaining them for small villages with few facilities in sensitive locations. This approach would have some of the more positive social and economic effects described above for Option 2, while still providing some of the environmental protection associated with Option 1.

Broad Locations and Potential Sites

1.44 Reasonable alternative locations for development have been subject to SA and the findings are presented separately. This includes the site options set out in the Issues and Options consultation document as well as other reasonable alternative options that have been considered previously by the Council or that have come forward since the Issues and Options consultation.

Chapter 4: Background Studies

1.45 This final section of the Issues and Options consultation document describes the background studies that are being prepared to inform the Local Plan Review and asks consultees whether any others are considered necessary. No alternative options suitable for appraisal are included in this section.

Appendix 4

Assumptions Informing the Appraisal of Site Options

Table A4.1: Assumptions for the appraisal of residential site options

SA Objective	Assumption	Data Source
SA 1: To provide affordable, sustainable and decent housing to meet local needs.	All of the residential site options are expected to have positive effects on this objective, due to the nature of the proposed development. Larger sites will provide opportunities for the development of a larger number of homes and so would have significant positive effects. • Sites with capacity for more than 600 homes will have a significant positive (++) effect. • Sites with capacity for fewer than 600 homes will have a minor positive (+) effect.	Stroud District Council site options
SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.	Residential sites that are within close proximity of existing healthcare facilities (i.e. GP surgeries) will ensure that residents have good access to healthcare services. If a number of sites are allocated within close proximity of one another, this could lead to existing healthcare facilities becoming overloaded. If at any point information becomes available regarding the capacity of existing healthcare facilities, this will be taken into account in the SA. It is also recognised that new development could stimulate the provision of new healthcare facilities, but this cannot be assumed at this stage. Public health will also be influenced by the proximity of sites to open spaces, walking and cycle paths, easy access to which can encourage participation in active outdoor recreation. Therefore:	GIS data: GP surgeries Council play areas Cycle routes National cycle network Green spaces Country parks National trails Protected outdoor playspaces
	 Sites that are within 400m of a GP surgery will have a significant positive (++) effect. Sites that are within 400-800m of a GP surgery will have a minor positive (+) effect. Sites that are not within 800m of a GP surgery will have a minor negative (-) effect. 	
	 In addition, which could lead to mixed effects overall¹¹³: Sites that are within 800m of an area of open space and within 400m of a walking or cycle path will have a significant positive (++) effect. Sites that are within 800m of an area of open space or within 400m of a walking or cycle path (but not both) will have a minor positive (+) effect. Sites that are more than 800m from an area of open space and more than 400m from a walking or cycle path will have a minor negative (-) effect. 	

¹¹³ In all cases, if the two parts of a score are the same type of effect, e.g. positive and negative, then a best or worst case scenario will be recorded, i.e. a score comprising `+' and `++' would be recorded as `++', while a score comprising `-` and `--` would be recorded as `-'. Mixed effects will only be recorded where a score comprises both positive and negative effects e.g. `+/-` or `++/--`.

SA Objective	Assumption	Data Source
	• Sites that contain an existing area of open space or a walking or cycle path which could therefore be lost as a result of new development could have a significant negative (?) effect, although this is uncertain depending on whether the development of the site would in fact result in the loss of that facility.	
SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population	The location of residential development will not affect the achievement of this objective (proximity to services and facilities is considered under SA objective 6 below). The likely effects of all residential site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 4: To reduce crime, antisocial behaviour and disorder and the fear of crime.	The effects of new residential development on levels of crime and fear of crime will depend on factors such as the incorporation of green space within development sites which, depending on design and the use of appropriate lighting, could have an effect on perceptions of personal safety, particularly at night. However, such issues will not be influenced by the location of residential development; rather they will be determined through the detailed proposals for each site. Therefore, the effects of all of the residential site options on this SA objective will be negligible (0).	Stroud District Council site options
SA 5: To create and sustain vibrant communities.	The location of residential development will not have a significant effect on the achievement of this objective – effects will depend largely on the detailed proposals for sites and their design, which are not known at this stage. However, residential development on brownfield land could be seen as promoting regeneration. Sites that are on brownfield land will have a minor positive (+) effect. Sites that are on greenfield land will have a negligible (0) effect.	Satellite imagery
SA 6: To maintain and improve access to all services and facilities.	Sites that are located at the larger settlements within the District will generally have better access to a wider range of existing services and facilities compared to sites located at smaller settlements. While new services and facilities may be provided in association with new residential development, particularly at larger sites, this cannot be assumed at this stage. The settlement hierarchy set out in the adopted Stroud Local Plan is to be updated as part of the Local Plan Review.	GIS data: • Settlement locations Stroud District Settlement Hierarchy (with consideration for the updates included as part of the Local Plan Review and the Settlement Role and

SA Objective	Assumption	Data Source
	New evidence presented in the Settlement Role and Function Study Update 2018 ¹¹⁴ has informed this update and has identified a number of changes to the settlement hierarchy for the District. This evidence has resulted in the reclassification of any fifth tier settlements (as defined in the adopted Local Plan) as fourth tier settlements. The fourth tier settlements classification is split between Tier 4a (which may be unable to meet residents' day to day requirements but are relatively well-connected and accessible settlements) and Tier 4b (which lack the range of services to meet day to day requirements and are generally inaccessible with significant environmental constraints) settlements. The previously identified third tier settlements have been now classified as either Tier 3a or Tier 3b settlements. Tier 3a settlements are those which have been identified as providing access to a good range of local services and facilities. Tier 3b settlements have been identified as providing access to a more basic level of services and facilities. Therefore: Sites that are located at a first tier settlement would have a significant positive (+) effect. Sites that are located at a Tier 3a settlement would have a minor positive (+) effect. Sites that are located at a Tier 3b settlement would have a minor negative (-) effect. Sites that are located at a fourth tier settlement would have a minor negative (-) effect. Sites that are located in the open countryside would have a significant negative (-) effect.	Function Study Update 2018)
SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.	Development sites that are within close proximity of an international, national or local designated conservation site have the potential to affect the biodiversity or geodiversity of those sites/features, e.g. through habitat damage/loss, fragmentation, disturbance to species, air pollution, increased recreation pressure etc. Conversely, there may be opportunities to promote habitat connectivity if new developments include green infrastructure. Therefore, while proximity to designated sites provides an indication of the potential for an adverse effect, uncertainty exists, as appropriate mitigation may avoid adverse effects and may even result in beneficial effects. In addition, the potential impacts on biodiversity present on each site, or undesignated habitats and species adjacent to the potential development sites, cannot be determined at this strategic level of assessment. This would be determined once more specific proposals are developed and submitted as part of a planning application.	GIS data: Ramsar sites SPAs SACs SSSIs NNRs Key wildlife sites Green spaces Country parks Protected outdoor playspaces

¹¹⁴ Stroud District Council (May 2019) Settlement Role and Function Study Update 2018

SA Objective	Assumption	Data Source
	 Residential sites that are within 250m of one or more internationally or nationally designated biodiversity or geodiversity sites may have a significant negative (?) effect. Residential sites that are between 250m and 1km of one or more internationally or nationally designated biodiversity or geodiversity sites, or that are within 250m of a locally designated site may have a minor negative (-?) effect. In addition, residential sites that are within 250m-3km from Rodborough Common SAC or 250m-7.7km from the Severn Estuary SAC/SPA/Ramsar site could have a minor negative effect as these are existing zones of recognised recreational impact from residential development. Sites that are more than 1km from any internationally or nationally designated biodiversity or geodiversity sites, or that are over 250m from a locally designated site could have a negligible (0?) effect. In addition: 	
	• Residential sites that contain an existing green infrastructure asset that could be lost as a result of new development may have a significant negative effect (?) although this is currently uncertain as it may be possible to conserve or even enhance that asset through the design and layout of the new development.	
SA 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.	 A Landscape Sensitivity Assessment was carried out for Stroud District Council in December 2016 by White Consultants. It assessed the sensitivity of parcels of land located around the Tier 1, 2 and 3 settlements in the District. Residential development in more sensitive locations could have adverse impacts on the character and quality of the landscape, although effects will be uncertain as they will also depend on factors such as the design of the development. Sites that are in an area of low sensitivity could have a negligible (0?) effect. Sites that are in an area of medium/low or medium sensitivity could have a minor negative (-?) effect. Sites that are in an area of medium/high or high sensitivity could have a significant negative (?) effect. Sites in locations that are not covered by the Landscape Sensitivity Assessment would have an uncertain (?) effect. 	GIS data: • AONB Landscape Character Assessment
	In addition, proximity to the Cotswolds AONB can provide an indication of the potential for development to have adverse impacts on that designated landscape. • Sites that are within the AONB could have a significant negative (?) effect.	

SA Objective	Assumption	Data Source
	• Sites that are not within the AONB, but that are within 500m of it, could have a minor negative (-?) effect.	
SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's	Residential site options for the Stroud District Local Plan Review have been subject to a heritage assessment as part of the SALA process. Each site option has been attributed a score based on its sensitivity with respect to the historic environment.	SALA heritage assessment
historic environment.	 Sites that were screened out of the SALA heritage assessment because they have no heritage impacts, or sites that were assessed but scored '1' (i.e. that have no significant heritage constraints) would have a negligible (0) effect. Sites that are scored '2' (i.e. that have some impact on heritage interest) would have a minor negative (-) effect. 	
	 Sites that are scored '3' or '4' (i.e. that have significant or very significant heritage constraints) would have a significant negative () effect. Sites that were not included in the SALA heritage assessment would have uncertain (?) effects. 	
	For some sites, the SALA identified opportunities for sites to have potential for heritage benefits as a result of development. For these sites, a potential but uncertain minor positive (+?) effect is identified. This could result in mixed effects overall.	
SA 10: To ensure that air quality continues to improve.	There are no existing Air Quality Management Areas in Stroud District. The effects of new residential development on this objective will therefore largely depend on the extent to which their location facilitates walking or the use of sustainable transport in place of car travel.	SALA Transport Accessibility Assessment
	The proximity of development sites to sustainable transport links will affect the extent to which people are able to make use of non-car based modes of transport although the actual use of sustainable transport modes will depend on people's behaviour. Furthermore, the proximity of sites to town/district/local centres and employment sites as well as services and facilities (for example such as schools, supermarkets and community facilities) will reduce the need for residents to travel long distances on a regular basis.	
	It is possible that new transport links such as bus routes or cycle paths may be provided as part of new developments, particularly at larger sites, but this cannot be assumed. It is also recognised that many cyclists will travel on roads as well as dedicated cycle routes, and that the extent to which people choose to do so will depend on factors such as the availability of cycle storage facilities at their end destination, which are not determined by the location of	

SA Objective	Assumption	Data Source
	development sites. How safe or appealing particular roads are for cyclists cannot be determined at this strategic level of assessment.	
	An assessment of the accessibility of each site option was undertaken by Gloucestershire County Council on behalf of Stroud District Council as part of the SALA. This work rated each site option in terms of its accessibility to town/district/local centres, employment sites and services and facilities that people may be required to access on a regular basis. Sites were assessed in terms of accessibility to 14 such features by walking, by car and by bus (including walking journey time to the relevant bus stop). The assessment assigned a score of 1, 2 or 3 to sites for each method of transport where it was located within 15 minutes, between 15-30 minutes or over 30 minutes of each of the 14 features respectively. These scores were then added to given a total score for each site. Even though the assessment took car use into account, scores were lower where journeys would be shorter; therefore a lower score is still an indication of lower likely overall emissions from traffic. Therefore:	
	 Sites achieving a score of below 50 in the SALA Transport Accessibility Assessment work are likely to have a significant positive (++) effect. Sites achieving a score of between 50-60 in the SALA Transport Accessibility Assessment work are likely to have a minor positive (+) effect. Sites achieving a score of between 60-70 in the SALA Transport Accessibility Assessment work are likely to have a negligible (0) effect. Sites achieving a score of between 70-80 in the SALA Transport Accessibility Assessment work are likely to have a minor negative (-) effect. Sites achieving a score of over 80 in the SALA Transport Accessibility Assessment work are likely to have a significant negative () effect. 	
SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.	Levels of water consumption within new development will be determined by its design and onsite practices, rather than the location of the site. However, the location of residential development could affect water quality during construction depending on its proximity to Drinking Water Safeguarding Zones and Source Protection Zones ¹¹⁵ . The extent to which water quality is affected would depend on construction techniques and the use of sustainable drainage systems (SuDS) within the design, therefore effects are uncertain at this stage.	GIS data:Drinking Water Safeguard ZonesSource Protection Zones

¹¹⁵ As the consideration of Nitrate Vunerable Zones (NVZs) is most appropriate for agricultural related development it was not considered appropriate to include the proximity of residential development to these areas within the assumptions.

SA Objective	Assumption	Data Source
	 Development within Drinking Water Safeguarding Zones and Source Protection Zones could result in significant negative (?) effects on water quality although this is uncertain at this stage of assessment. Development outside of Drinking Water Safeguarding Zones and Source Protection Zones would have a negligible (0) effect. 	
SA 12: To manage and reduce the risk of flooding and resulting detriment to public wellbeing, the economy and the environment.	The effects of new development on this SA objective will depend to some extent on its design, for example whether it incorporates SuDS, which is unknown and cannot be assessed at this stage. Where site options are located in areas of high flood risk, it could increase the risk of flooding in those areas (particularly if the sites are not previously developed) and would increase the number of people and assets at risk from flooding. Therefore, to reflect comments made by the Environment Agency regarding flood risk in their consultation response to the SA Report for the Local Plan Review: Emerging Strategy Paper:	GIS data: • Flood Zones Satellite imagery
	 Sites that are entirely or mainly (i.e. >50%) on greenfield land that is within flood zones 3a or 3b or mainly on brownfield within flood zones 3a or 3b are likely to have a significant negative () effect. Sites that are either entirely or mainly on greenfield outside of flood zones 3a and 3b, are likely to have a minor negative (-) effect. Sites that are on brownfield land outside of flood zones 3a and 3b are likely to have a negligible (0) effect. 	
SA 13: To improve efficiency in land use and protection of soil quality through the reuse of previously developed land and existing buildings and encouraging urban renaissance.	 Development on brownfield land represents more efficient use of land in comparison to the development of greenfield sites. Therefore: Residential sites that are relatively large in size (they would provide more than 600 homes) and that are mainly or entirely (i.e. >50%) on greenfield land would have a significant negative () effect. Residential sites that are relatively small in size (they would provide fewer than 600 homes) and that are mainly or entirely on greenfield land would have a minor negative (-) effect. Residential sites that are relatively small in size (they would provide fewer than 600 homes) and that are mainly or entirely on brownfield land would have a minor positive (+) effect. 	Stroud District Council site options Satellite imagery

SA Objective	Assumption	Data Source
	 Residential sites that are relatively large in size (they would provide more than 600 homes) and that are mainly or entirely on brownfield land would have a significant positive (++) effect. In addition: Sites that are on greenfield land classed as high quality agricultural land (Grades 1, 2 or 3a) would have a significant negative () effect regardless of size. This will be uncertain (?) if the site is within Grade 3 land, as only Grade 3a is classed as high quality but the GIS data available does not distinguish between Grades 3a and 3b. 	
SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.	The location of residential development will not affect the achievement of this objective – effects will depend largely on the detailed proposals for sites and their design, which are not known at this stage. The extent to which the location of residential sites would facilitate the use of sustainable modes of transport in place of cars is considered under SA objective 10 above. The likely effects of all residential site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 15: To 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, and achieve the sustainable management of waste.	The effects of new residential development on waste generation will depend largely on resident's behaviour. However, where development takes place on previously developed land there may be opportunities to reuse onsite buildings and materials, thereby reducing waste generation. Therefore: • Sites that are on brownfield land could have a minor positive (+?) effect on reducing waste generation although this is uncertain. • Sites that are on greenfield land would have a negligible (0) effect on reducing waste generation.	Satellite imagery
SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.	The location of residential sites will influence the achievement of this objective by determining how easily residents would be able to access job opportunities at existing employment sites. As part of the SALA work, the Council has assessed the proximity of residential site options to key employment sites. In addition, proximity to a Tier 1 or 2 settlement could indicate good access to employment opportunities, as they tend to be focussed mainly at the larger settlements: • Sites that are within 600m of a key employment site and that are at a Tier 1 or 2 settlement would have a significant positive (++) effect.	GIS data: • Settlement locations Stroud District Settlement Hierarchy List of sites currently in employment use

SA Objective	Assumption	Data Source
	 Sites that are within 600m of a key employment site or that are at a Tier 1 or 2 settlement (but not both) would have a minor positive (+) effect. Sites that are within 600m-1km of a key employment site but that are not at a Tier 1 or 2 settlement would have a minor negative (-) effect. Sites that are more than 1km from a key employment site and that are not at a Tier 1 or 2 settlement would have a significant negative () effect. In addition, if a residential site option would result in the loss of an existing employment site, a negative effect would occur in relation to the protection of existing employment sites. Therefore (which could result in mixed effects overall): Sites that are currently in employment use would have a significant negative () effect. 	
SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/skilled workforce and support the long term competitiveness of the District.	The specific location of residential sites within the District will not influence sustainable economic growth. The effects of residential sites on the educational element of this objective will depend on the access that they provide to existing educational facilities, although there are uncertainties as the effects will depend on there being capacity at those schools to accommodate new pupils. New residential development could stimulate the provision of new schools/school places, particularly larger sites, but this cannot be assumed at this stage. Therefore: Sites that are within 800m of at least one existing primary school and at least one existing secondary school may have a significant positive (++?) effect.	GIS data: • Secondary schools • Primary schools
	 Sites that are within 800m of one of either an existing primary or an existing secondary school (but not both), may have a minor positive (+?) effect. Sites that are not within 800m of an existing school may have a minor negative (-?) effect. 	

Table A4.2: Assumptions for the appraisal of employment site options

SA Objective	Assumption	Data Source
SA 1: To provide affordable, sustainable and decent housing to meet local needs.	The location of employment site options will not have a direct effect on this objective, due to the nature of the development proposed. All employment site options will therefore have negligible (0) effects.	Stroud District Council site options
SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.	 Employment sites that are within close proximity of walking or cycle paths may offer good opportunities for people to travel to work via active modes of transport, benefitting health. In addition, proximity to open spaces may benefit employee's health as a result of being able to access outdoor recreation opportunities during breaks. Therefore: Employment sites that are within 800m of an area of open space and 400m of a walking or cycle path will have a significant positive (++) effect. Employment sites that are within 800m of an area of open space or 400m of walking or cycle path (but not both) will have a minor positive (+) effect. Employment sites that are more than 800m from an area of open space and 400m from a walking or cycle path will have a minor negative (-) effect. Employment sites that contain an existing area of open space or a walking or cycle path could result in the loss of those facilities and so may have a significant negative (?) effect, although this is uncertain depending on whether the development of the site would in fact result in the loss of that facility. 	GIS data: Council play areas Cycle routes National cycle network Green spaces Country parks National trails Protected outdoor playspaces
SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population	The location of employment development will not affect the achievement of this objective (proximity to services and facilities is considered under SA objective 6 below). The likely effects of all employment site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 4: To reduce crime, antisocial behaviour and disorder and the fear of crime.	The effects of new employment development on levels of crime and fear of crime will depend on factors such as the incorporation of green space within development sites which, depending on design and the use of appropriate lighting, could have an effect on perceptions of personal safety, particularly at night. However, such issues will not be influenced by the location of employment development; rather they will be determined	Stroud District Council site options

SA Objective	Assumption	Data Source
	through the detailed proposals for each site. Therefore, the effects of all of the employment site options on this SA objective will be negligible (0).	
SA 5: To create and sustain vibrant communities.	The location of employment development will not have a significant effect on the achievement of this objective – effects will depend largely on the detailed proposals for sites and their design, which are not known at this stage. However, employment development on brownfield land could be seen as promoting regeneration. Sites that are on brownfield land will have a minor positive (+) effect. Sites that are on greenfield land will have a negligible (0) effect.	Satellite imagery
SA 6: To maintain and improve access to all services and facilities.	The location of employment development will not affect the achievement of this objective as employees would generally be at the sites for work purposes, rather than seeking to access nearby services and facilities. The likely effects of all employment site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.	Development sites that are within close proximity of an international, national or local designated conservation site have the potential to affect the biodiversity or geodiversity of those sites/features, e.g. through habitat damage/loss, fragmentation, disturbance to species, air pollution, increased recreation pressure etc. Conversely, there may be opportunities to promote habitat connectivity if new developments include green infrastructure. Therefore, while proximity to designated sites provides an indication of the potential for an adverse effect, uncertainty exists, as appropriate mitigation may avoid adverse effects and may even result in beneficial effects. In addition, the potential impacts on biodiversity present on each site, or undesignated habitats and species adjacent to the potential development sites, cannot be determined at this strategic level of assessment. This would be determined once more specific proposals are developed and submitted as part of a planning application.	GIS data: Ramsar sites SPAs SACs SSSIs NNRs Key wildlife sites Green spaces Country parks Protected outdoor playspaces
	 Employment sites that are within 250m of one or more internationally or nationally designated biodiversity or geodiversity sites may have a significant negative (?) effect. Employment sites that are between 250m and 1km of one or more internationally or nationally designated biodiversity or geodiversity sites, or that are within 250m of a locally designated site may have a minor negative (-?) effect. Employment sites that are more than 1km from any internationally or nationally designated biodiversity or geodiversity sites, or that are over 250m from a locally designated site could have a negligible (0?) effect. 	

SA Objective	Assumption	Data Source
	 Sites that contain an existing green infrastructure asset that could be lost as a result of new development may have a significant negative effect (?) although this is currently uncertain as it may be possible to conserve or even enhance that asset through the design and layout of the new development. 	
SA 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the	A Landscape Sensitivity Assessment was carried out for Stroud District Council in December 2016 by White Consultants. It assessed the sensitivity of parcels of land located around the Tier 1, 2 and 3 settlements in the District. Employment development in more sensitive locations could have adverse impacts on the character and quality of the landscape, although effects will be uncertain as they will also depend on factors such as the design of the development.	GIS data: • AONB Landscape Character Assessment
District.	 Sites that are in an area of low sensitivity could have a negligible (0?) effect. Sites that are in an area of medium/low or medium sensitivity could have a minor negative (-?) effect. Sites that are in an area of medium/high or high sensitivity could have a significant negative (?) effect. Sites in locations that are not covered by the Landscape Sensitivity Assessment would have an uncertain (?) effect. 	
	 In addition, proximity to the Cotswolds AONB can provide an indication of the potential for development to have adverse impacts on that designated landscape. Sites that are within the AONB could have a significant negative (?) effect. Sites that are not within the AONB, but that are within 500m of it, could have a minor negative (-?) effect. 	
SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's historic environment.	 Employment site options for the Stroud District Local Plan Review have been subject to a heritage assessment as part of the SALA process. Each site option has been attributed a score based on its sensitivity with respect to the historic environment. Sites that were screened out of the SALA heritage assessment because they have no heritage impacts, or sites that were assessed but scored '1' (i.e. that have no significant heritage constraints) would have a negligible (0) effect. Sites that are scored '2' (i.e. that have some impact on heritage interest) would have a minor negative (-) effect. 	SALA heritage assessment

SA Objective	Assumption	Data Source
	 Sites that are scored '3' or '4' (i.e. that have significant or very significant heritage constraints) would have a significant negative () effect. Sites that were not included in the SALA heritage assessment would have uncertain (?) effects. For some sites, the SALA identified opportunities for sites to have potential for positive heritage benefits as a result of development. For these sites, a potential but uncertain minor positive (+?) effect is identified. This could result in mixed effects overall. 	
SA 10: To ensure that air quality continues to improve.	There are no existing Air Quality Management Areas in Stroud District. The effects of new employment development on this objective will therefore largely depend on the extent to which their location facilitates the use of sustainable transport in place of private cars for commuting. While some commercial activities could have adverse impacts on air quality, the specific nature of employment uses that may come forward at each site option is not yet known.	GIS data: Railway stations Bus stops
	The proximity of employment sites to sustainable transport links will affect the extent to which people are able to make use of non-car based modes of transport to commute, although the actual use of sustainable transport modes will depend on people's behaviour. It is possible that new transport links such as bus routes or cycle paths may be provided as part of new developments, particularly at larger sites, but this cannot be assumed. It is also recognised that many cyclists will travel on roads as well as dedicated cycle routes, and that the extent to which people choose to do so will depend on factors such as the availability of cycle storage facilities at their end destination, which are not determined by the location of sites. How safe or appealing particular roads are for cyclists cannot be determined at this strategic level of assessment. However, the proximity of employment site options to existing cycle routes can be taken as an indicator of how likely people are to commute by bicycle.	
	 Employment sites that are within 1km of a railway station and 400m of a bus stop (regardless of proximity to cycle routes) are likely to have a significant positive (++) effect. Employment sites that are within either 1km of a railway station or 400m of a bus stop, but not both, (regardless of proximity to cycle routes) are likely to have a minor positive (+) effect. Employment sites that are more than 1km from a railway station and 400m from a bus stop but that have an existing cycle route within 200m of the site could have a minor negative (-?) effect although this is uncertain depending on whether the nearby cycle route(s) could be used for the purposes of commuting. 	

SA Objective	Assumption	Data Source
	• Employment sites that are more than 1km from a railway station and 400m from a bus stop and that do not have an existing cycle route within 200m of the site are likely to have a significant negative () effect.	
SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.	Levels of water consumption within new development will be determined by its design and onsite practices, including the nature of the commercial activities onsite, rather than the location of the site. However, the location of employment development could affect water quality during construction depending on its proximity to Drinking Water Safeguarding Zones and Source Protection Zones ¹¹⁶ . The extent to which water quality is affected would depend on construction techniques and the use of sustainable drainage systems (SuDS) within the design; therefore effects are uncertain at this stage.	 GIS data: Drinking Water Safeguard Zones Source Protection Zones
	 Development within Drinking Water Safeguarding Zones and Source Protection Zones could result in significant negative (?) effects on water quality although this is uncertain at this stage of assessment. Development outside of Drinking Water Safeguarding Zones and Source Protection Zones would have a negligible (0) effect. 	
SA 12: To manage and reduce the risk of flooding and resulting detriment to public wellbeing, the economy and the environment.	The effects of new development on this SA objective will depend to some extent on its design, for example whether it incorporates SuDS, which is unknown and cannot be assessed at this stage. Where site options are located in areas of high flood risk, it could increase the risk of flooding in those areas (particularly if the sites are not previously developed) and would increase the number of people and assets at risk from flooding. Therefore, to reflect comments made by the Environment Agency regarding flood risk in their consultation response to the SA Report for the Local Plan Review: Emerging Strategy Paper: Sites that are entirely or mainly (i.e. >50%) on greenfield land that is within flood zones 3a or 3b or mainly on brownfield within flood zones 3a or 3b are likely to have a significant negative () effect. Sites that are either entirely or mainly on greenfield outside of flood zones 3a and 3b, are likely to have a minor negative (-) effect. Sites that are on brownfield land outside of flood zones 3a and 3b are likely to have a negligible (0) effect.	GIS data: • Flood Zones Satellite imagery

¹¹⁶ As the consideration of Nitrate Vunerable Zones (NVZs) is most appropriate for agricultural related development it was not considered appropriate to include the proximity of residential development to these areas within the assumptions.

SA Objective	Assumption	Data Source
SA 13: To improve efficiency in land use and protection of soil quality through the reuse of previously developed land and existing buildings and encouraging urban renaissance.	 Development on brownfield land represents more efficient use of land in comparison to the development of greenfield sites. Therefore: Employment sites that are relatively large in size (they would provide more than 10ha of employment land) and that are mainly or entirely (i.e. >50%) on greenfield land would have a significant negative () effect. Employment sites that are relatively small in size (they would provide more than 10ha of employment land) and that are mainly or entirely on greenfield land would have a minor negative (-) effect. Employment sites that are relatively small in size (they would provide more than 10ha of employment land) and that are mainly or entirely on brownfield land would have a minor positive (+) effect. Employment sites that are relatively large in size (they would provide more than 10ha of employment land) and that are mainly or entirely on brownfield land would have a significant positive (++) effect. In addition: Sites that are on greenfield land classed as high quality agricultural land (Grades 1, 2 or 3a) would have a significant negative () effect regardless of their size. This will be uncertain (?) if the site is within Grade 3 land, as only Grade 3a is classed as high quality but the GIS data available does not distinguish between Grades 3a and 3b. 	Stroud District Council site options Satellite imagery
SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.	The location of employment development will not affect the achievement of this objective – effects will depend largely on the detailed proposals for sites and their design, which are not known at this stage. The extent to which the location of employment sites would facilitate the use of sustainable modes of transport in place of cars is considered under SA objective 10 above. The likely effects of all employment site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 15: To 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, and	The effects of new employment development on waste generation will depend largely on people's behaviour while using the new development, as well as the nature of commercial activities onsite which is not yet known. However, where employment development takes place on previously developed land there may be opportunities to reuse onsite buildings and materials, thereby reducing waste generation. Therefore:	Satellite imagery

SA Objective	Assumption	Data Source
achieve the sustainable management of waste.	 Sites that are on brownfield land could have a minor positive (+?) effect on reducing waste generation although this is uncertain. Sites that are on greenfield land would have a negligible (0) effect on reducing waste generation. 	
SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.	All of the employment site options are expected to have positive effects on this objective, due to the nature of the proposed development. Larger sites will provide opportunities for the creation of more new jobs and so would have significant positive effects. Therefore: • Sites that are more than 10ha in size will have a significant positive (++) effect. • Sites that are smaller than 10ha in size will have a minor positive (+) effect.	Stroud District Council site options
SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/skilled workforce and support the long term competitiveness of the District.	All of the employment site options are expected to have positive effects on this objective, as they may provide opportunities for work-based training and skills development, and would help to contribute to sustainable economic growth and competitiveness of the District. • Sites that are more than 10ha in size will have a significant positive (++) effect. • Sites that are smaller than 10ha in size will have a minor positive (+) effect.	Stroud District Council site options

Table A4.3: Assumptions for the appraisal of mixed use site options

SA Objective	Assumption	Data Source
SA 1: To provide affordable, sustainable and decent housing to meet local needs.	All of the mixed use site options that would incorporate residential development are expected to have positive effects on this objective, due to the nature of the proposed development. Larger sites will provide opportunities for the development of a larger number of homes as part of the mixed use development and so would have significant positive effects. • Sites with capacity for more than 600 homes will have a significant positive (++) effect. • Sites with capacity for fewer than 600 homes will have a minor positive (+) effect.	Stroud District Council site options
SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.	Mixed use sites (incorporating residential development) that are within close proximity of existing healthcare facilities (i.e. GP surgeries) will ensure that residents have good access to healthcare services. If a number of sites are allocated within close proximity of one another, this could lead to existing healthcare facilities becoming overloaded. If at any point information becomes available regarding the capacity of existing healthcare facilities, this will be taken into account in the SA. It is also recognised that new development could stimulate the provision of new healthcare facilities, but this cannot be assumed at this stage. Public health will also be influenced by the proximity of sites to open spaces, walking and cycle paths, easy access to which can encourage participation in active outdoor recreation, both for residents and employees at mixed use sites. Therefore:	GIS data: GP surgeries Council play areas Cycle routes National cycle network Green spaces Country parks National trails Protected outdoor playspaces
	 Sites that are within 400m of a GP surgery will have a significant positive (++) effect. Sites that are within 400-800m of a GP surgery will have a minor positive (+) effect. Sites that are not within 800m of a GP surgery will have a minor negative (-) effect. 	
	In addition, which could lead to mixed effects overall ¹¹⁷ :	
	• Sites that are within 800m of an area of open space <u>and</u> within 400m of a walking or cycle path will have a significant positive (++) effect.	

¹¹⁷ In all cases, if the two parts of a score are the same type of effect, e.g. positive and negative, then a best or worst case scenario will be recorded, i.e. a score comprising '+' and '++' would be recorded as '++', while a score comprising '-' and '--' would be recorded as '-'. Mixed effects will only be recorded where a score comprises both positive and negative effects e.g. '+/-' or '++/--'.

SA Objective	Assumption	Data Source
	 Sites that are within 800m of an area of open space or within 400m of a walking or cycle path (but not both) will have a minor positive (+) effect. Sites that are more than 800m from an area of open space and more than 400m from a walking or cycle path will have a minor negative (-) effect. Sites that contain an existing area of open space or a walking or cycle path which could therefore be lost as a result of new development could have a significant negative (?) effect, although this is uncertain depending on whether the development of the site would in fact result in the loss of that facility. 	
SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population	The location of mixed use development will not affect the achievement of this objective (proximity to services and facilities is considered under SA objective 6 below). The likely effects of all mixed use site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 4: To reduce crime, antisocial behaviour and disorder and the fear of crime.	The effects of new mixed use development on levels of crime and fear of crime will depend on factors such as the incorporation of green space within development sites which, depending on design and the use of appropriate lighting, could have an effect on perceptions of personal safety, particularly at night. However, such issues will not be influenced by the location of mixed use development; rather they will be determined through the detailed proposals for each site. Therefore, the effects of all of the mixed use site options on this SA objective will be negligible (0).	Stroud District Council site options
SA 5: To create and sustain vibrant communities.	The location of mixed use development will not have a significant effect on the achievement of this objective – effects will depend largely on the detailed proposals for sites and their design, which are not known at this stage. However, mixed use development on brownfield land could be seen as promoting regeneration. Sites that are on brownfield land will have a minor positive (+) effect. Sites that are on greenfield land will have a negligible (0) effect.	Satellite imagery
SA 6: To maintain and improve access to all services and facilities.	Sites that are located at the larger settlements within the District will generally have better access to a wider range of existing services and facilities compared to sites located at smaller settlements. While new services and facilities may be provided as part of new mixed use development, this cannot be assumed at this stage. The settlement hierarchy set out in the adopted Stroud Local Plan is to be updated as part of the Local Plan Review.	GIS data: • Settlement locations Stroud District Settlement Hierarchy (with consideration for the

SA Objective	Assumption	Data Source
	New evidence presented in the Settlement Role and Function Study Update 2018 ¹¹⁸ has informed this update and has identified a number of changes to the settlement hierarchy for the District. This evidence has resulted in the reclassification of any fifth tier settlements (as defined in the adopted Local Plan) as fourth tier settlements. The fourth tier settlements classification is split between Tier 4a (which may be unable to meet residents' day to day requirements but are relatively well-connected and accessible settlements) and Tier 4b (which lack the range of services to meet day to day requirements and are generally inaccessible with significant environmental constraints) settlements. The previously identified third tier settlements have been now classified as either Tier 3a or Tier 3b settlements. Tier 3a settlements are those which have been identified as providing access to a good range of local services and facilities. Tier 3b settlements have been identified as providing access to a more basic level of services and facilities. Therefore: Sites that are located at a first tier settlement would have a significant positive (+) effect. Sites that are located at a Tier 3a settlement would have a minor positive (+) effect. Sites that are located at a Tier 3b settlement would have a negligible (0) effect. Sites that are located at a fourth tier settlement would have a minor negative (-) effect. Sites that are located in the open countryside would have a significant negative (-) effect.	updates included as part of the Local Plan Review and the Settlement Role and Function Study Update 2018)
SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.	Development sites that are within close proximity of an international, national or local designated conservation site have the potential to affect the biodiversity or geodiversity of those sites/features, e.g. through habitat damage/loss, fragmentation, disturbance to species, air pollution, increased recreation pressure etc. Conversely, there may be opportunities to promote habitat connectivity if new developments include green infrastructure. Therefore, while proximity to designated sites provides an indication of the potential for an adverse effect, uncertainty exists, as appropriate mitigation may avoid adverse effects and may even result in beneficial effects. In addition, the potential impacts on biodiversity present on each site, or undesignated habitats and species adjacent to the potential development sites, cannot be determined at this strategic level of assessment. This would be determined once more specific proposals are developed and submitted as part of a planning application.	GIS data: Ramsar sites SPAs SACs SSSIs NNRs Key wildlife sites Green spaces Country parks Protected outdoor playspaces

¹¹⁸ Stroud District Council (May 2019) Settlement Role and Function Study Update 2018

SA Objective	Assumption	Data Source
	 Mixed use sites that are within 250m of one or more internationally or nationally designated biodiversity or geodiversity sites may have a significant negative (?) effect. Mixed use sites that are between 250m and 1km of one or more internationally or nationally designated biodiversity or geodiversity sites, or that are within 250m of a locally designated site may have a minor negative (-?) effect. In addition, mixed use sites that are within 250m-3km from Rodborough Common SAC or 250m-7.7km from the Severn Estuary SAC/SPA/Ramsar site could have a minor negative effect as these are existing zones of recognised recreational impact from residential development. Mixed use sites that are more than 1km from any internationally or nationally designated biodiversity or geodiversity sites, or that are over 250m from a locally designated site could have a negligible (0?) effect. In addition: 	
	• Mixed use sites that contain an existing green infrastructure asset that could be lost as a result of new development may have a significant negative effect (?) although this is currently uncertain as it may be possible to conserve or even enhance that asset through the design and layout of the new development.	
SA 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.	A Landscape Sensitivity Assessment was carried out for Stroud District Council in December 2016 by White Consultants. It assessed the sensitivity of parcels of land located around the Tier 1, 2 and 3 settlements in the District. Mixed use development in more sensitive locations could have adverse impacts on the character and quality of the landscape, although effects will be uncertain as they will also depend on factors such as the design of the development.	GIS data: • AONB Landscape Character Assessment
	 Sites that are in an area of low sensitivity could have a negligible (0?) effect. Sites that are in an area of medium/low or medium sensitivity could have a minor negative (-?) effect. Sites that are in an area of medium/high or high sensitivity could have a significant negative (?) effect. Sites in locations that are not covered by the Landscape Sensitivity Assessment would have an uncertain (?) effect. 	
	In addition, proximity to the Cotswolds AONB can provide an indication of the potential for development to have adverse impacts on that designated landscape.	
	Sites that are within the AONB could have a significant negative (?) effect.	

SA Objective	Assumption	Data Source
	Sites that are not within the AONB, but that are within 500m of it, could have a minor negative (-?) effect.	
SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's historic environment.	Mixed use site options for the Stroud District Local Plan Review have been subject to a heritage assessment as part of the SALA process. Each site option has been attributed a score based on its sensitivity with respect to the historic environment.	SALA heritage assessment
	 Sites that were screened out of the SALA heritage assessment because they have no heritage impacts, or sites that were assessed but scored '1' (i.e. that have no significant heritage constraints) would have a negligible (0) effect. Sites that are scored '2' (i.e. that have some impact on heritage interest) would have a minor negative (-) effect. Sites that are scored '3' or '4' (i.e. that have significant or very significant heritage constraints) would have a significant negative () effect. Sites that were not included in the SALA heritage assessment would have uncertain (?) effects. 	
	For some sites, the SALA identified opportunities for sites to have potential for positive heritage benefits as a result of development. For these sites, a potential but uncertain minor positive (+?) effect is identified. This could result in mixed effects overall.	
SA 10: To ensure that air quality continues to improve.	There are no existing Air Quality Management Areas in Stroud District. The effects of new mixed use development on this objective will therefore largely depend on the extent to which their location facilitates walking and the use of sustainable transport in place of car travel. By nature, mixed use developments should promote higher levels of walking and reduced car travel, by co-locating residential and other types of development.	SALA Transport Accessibility Assessment
	The proximity of development sites to sustainable transport links will affect the extent to which people are able to make use of non-car based modes of transport, although the actual use of sustainable transport modes will depend on people's behaviour. Furthermore, the proximity of sites to town/district/local centres and employment sites as well as services and facilities (for example such as schools, supermarkets and community facilities) will reduce the need for residents to travel long distances on a regular basis.	
	It is possible that new transport links such as bus routes or cycle paths may be provided as part of new developments, particularly at larger sites, but this cannot be assumed. It is also recognised that many cyclists will travel on roads as well as dedicated cycle routes, and that the extent to which people choose to do so will depend on factors such as the availability of cycle storage facilities at their end destination, which are not determined by the location of	

SA Objective	Assumption	Data Source
	development sites. How safe or appealing particular roads are for cyclists cannot be determined at this strategic level of assessment.	
	An assessment of the accessibility of each site option was undertaken by Gloucestershire County Council on behalf of Stroud District Council as part of the SALA. This work rated each site option in terms of its accessibility to town/district/local centres, employment sites and services and facilities that people may be required to access on a regular basis. Sites were assessed in terms of accessibility to 14 such features by walking, by car and by bus (including walking journey time to the relevant bus stop). The assessment assigned a score of 1, 2 or 3 to sites for each method of transport where it was located within 15 minutes, between 15-30 minutes or over 30 minutes of each of the 14 features respectively. These scores were then added to given a total score for each site. Even though the assessment took car use into account, scores were lower where journeys would be shorter; therefore a lower score is still an indication of lower likely emissions from traffic. Therefore:	
	 Sites achieving a score of below 50 in the SALA Transport Accessibility Assessment work are likely to have a significant positive (++) effect. Sites achieving a score of between 50-60 in the SALA Transport Accessibility Assessment work are likely to have a minor positive (+) effect. Sites achieving a score of between 60-70 in the SALA Transport Accessibility Assessment work are likely to have a negligible (0) effect. Sites achieving a score of between 70-80 in the SALA Transport Accessibility Assessment work are likely to have a minor negative (-) effect. Sites achieving a score of over 80 in the SALA Transport Accessibility Assessment work are likely to have a significant negative () effect. 	
SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.	Levels of water consumption within new development will be determined by its design and onsite practices, rather than the location of the site. However, the location of mixed use development could affect water quality during construction depending on its proximity to Drinking Water Safeguarding Zones and Source Protection Zones ¹¹⁹ . The extent to which water quality is affected would depend on construction techniques and the use of sustainable drainage systems (SuDS) within the design; therefore effects are uncertain at this stage.	GIS data: • Drinking Water Safeguard Zones Source Protection Zones

¹¹⁹ As the consideration of Nitrate Vunerable Zones (NVZs) is most appropriate for agricultural related development it was not considered appropriate to include the proximity of residential development to these areas within the assumptions.

SA Objective	Assumption	Data Source
	 Development within Drinking Water Safeguarding Zones and Source Protection Zones could result in significant negative (?) effects on water quality although this is uncertain at this stage of assessment. Development outside of Drinking Water Safeguarding Zones and Source Protection Zones would have a negligible (0) effect. 	
SA 12: To manage and reduce the risk of flooding and resulting detriment to public wellbeing, the economy and the environment.	The effects of new development on this SA objective will depend to some extent on its design, for example whether it incorporates SuDS, which is unknown and cannot be assessed at this stage. Where site options are located in areas of high flood risk, it could increase the risk of flooding in those areas (particularly if the sites are not previously developed) and would increase the number of people and assets at risk from flooding. Therefore, to reflect comments made by the Environment Agency regarding flood risk in their consultation response to the SA Report for the Local Plan Review: Emerging Strategy Paper:	GIS data: • Flood Zones Satellite imagery
	 Sites that are entirely or mainly (i.e. >50%) on greenfield land that is within flood zones 3a or 3b or mainly on brownfield within flood zones 3a or 3b are likely to have a significant negative () effect. Sites that are either entirely or mainly on greenfield outside of flood zones 3a and 3b, are likely to have a minor negative (-) effect. Sites that are on brownfield land outside of flood zones 3a and 3b are likely to have a negligible (0) effect. 	
SA 13: To improve efficiency in land use and protection of soil quality through the reuse of previously developed land and existing buildings and encouraging urban renaissance.	 Development on brownfield land represents more efficient use of land in comparison to the development of greenfield sites. Therefore: Mixed use sites that are relatively large in size (i.e. they could accommodate more than 600 homes or more than 10ha of employment land) and that are mainly or entirely (i.e. >50%) on greenfield land would have a significant negative () effect. Mixed use sites that are relatively small in size (i.e. they could accommodate fewer than 600 homes and less than 10ha of employment land) and that are mainly or entirely on greenfield land would have a minor negative (-) effect. Mixed use sites that are relatively small in size (i.e. they could accommodate fewer than 600 homes and less than 10ha of employment land) and that are mainly or entirely on brownfield land would have a minor positive (+) effect. 	Stroud District Council site options Satellite imagery

SA Objective	Assumption	Data Source
	 Mixed use sites that are relatively large in size (i.e. they could accommodate more than 600 homes or more than 10ha of employment land) and that are mainly or entirely on brownfield land would have a significant positive (++) effect. In addition: Sites that are on greenfield land classed as high quality agricultural land (Grades 1, 2 or 3a) would have a significant negative () effect regardless of size. This will be uncertain (?) if the site is within Grade 3 land, as only Grade 3a is classed as high quality but 	
	the GIS data available does not distinguish between Grades 3a and 3b.	
SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.	The location of mixed use development will not affect the achievement of this objective – effects will depend largely on the detailed proposals for sites and their design, which are not known at this stage. The extent to which the location of mixed use sites would facilitate the use of sustainable modes of transport in place of cars is considered under SA objective 10 above. The likely effects of all mixed use site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 15: To 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, and achieve the sustainable management of waste.	The effects of new mixed use development on waste generation will depend largely on resident's behaviour, as well as the nature of any commercial activities onsite. However, where development takes place on previously developed land there may be opportunities to reuse onsite buildings and materials, thereby reducing waste generation. Therefore: • Sites that are on brownfield land could have a minor positive (+?) effect on reducing waste generation although this is uncertain. • Sites that are on greenfield land would have a negligible (0) effect on reducing waste generation.	Satellite imagery
SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.	 Mixed use sites that incorporate both residential and employment development will have positive effects on this objective due to the nature of the development which would involve co-locating housing and job opportunities. Larger sites will have particularly positive effects. Therefore: Sites that would deliver more than 600 homes and 10ha of employment land will have a significant positive (++) effect. Sites that would deliver fewer than 600 homes and/or less than 10ha of employment land will have a minor positive (+) effect. 	GIS data: • Settlement locations Stroud District Settlement Hierarchy List of sites currently in employment use

SA Objective	Assumption	Data Source
	New mixed used development at sites which currently accommodate some form of employment use may result in the loss of employment opportunities in the District, depending on the proportion of employment development which is to be provided at the mixed used sites which is unknown at this stage. As such, the effects of mixed use sites which are currently in employment use are uncertain.	
SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/skilled workforce and support the long term competitiveness of the District.	The effects of mixed use sites on this objective will depend partly on the access that they provide to existing educational facilities for residents of the site, although there are uncertainties as the effects will depend on there being capacity at those schools to accommodate new pupils. New development could stimulate the provision of new schools/school placed, particularly larger sites, but this cannot be assumed at this stage. Therefore: Sites that are within 800m of at least one existing primary school and at least one existing secondary school may have a significant positive (++?) effect. Sites that are within 800m of one of either an existing primary or an existing secondary school (but not both), may have a minor positive (+?) effect. Sites that are not within 800m of an existing school may have a minor negative (-?) effect.	GIS data: • Secondary schools • Primary schools Stroud District Council site options
	In addition, the provision of employment development as part of mixed use sites could have positive effects on this objective as a result of providing new opportunities for work-based learning and skills development. This will particularly be the case at larger mixed use sites which could incorporate more commercial development. Therefore, which could lead to mixed effects overall:	
	 Sites that would deliver more than 10ha of employment land will have a significant positive (++) effect. Sites that would deliver less than 10ha of employment land will have a minor positive (+) effect. 	

Table A4.4: Assumptions for the appraisal of retail/community use site options

SA Objective	Assumption	Data Source
SA 1: To provide affordable, sustainable and decent housing to meet local needs.	The location of retail/community use sites will not have an effect on this SA objective; therefore all site options will have a negligible (0) effect.	Stroud District Council site options
SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.	The location of retail/community use sites will not have an effect on this SA objective; therefore all site options will have a negligible (0) effect unless the site is proposed for a relevant use such as a healthcare facility, in which case a minor (+) or significant positive (++) effect will be identified as appropriate.	Stroud District Council site options
SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population	All sites proposed for retail and community uses will have a minor positive (+) effect on this SA objective regardless of their location, due to the nature of the proposed development.	Stroud District Council site options
SA 4: To reduce crime, antisocial behaviour and disorder and the fear of crime.	The effects of new development on levels of crime and fear of crime will depend on factors such as the incorporation of green space within development sites which, depending on design and the use of appropriate lighting, could have an effect on perceptions of personal safety, particularly at night. However, such issues will not be influenced by the location of development; rather they will be determined through the detailed proposals for each site. Therefore, the effects of all of the retail/community use site options on this SA objective will be negligible (0).	Stroud District Council site options
SA 5: To create and sustain vibrant communities.	All sites proposed for retail and community uses will have a minor positive (+) effect on this SA objective regardless of their location, due to the nature of the proposed development.	Stroud District Council site options
SA 6: To maintain and improve access to all services and facilities.	Most sites proposed for retail and community uses will have a minor positive (+) effect on this SA objective, due to the nature of the proposed development. Sites within town centres will have particularly positive effects as they will help to protect and enhance the vitality and	GIS data: Town centre locations

SA Objective	Assumption	Data Source
	viability of those areas. Town centres are also generally accessible for more people via public transport. Therefore:	Stroud District Council site options
	 Sites that are within a town centre will have a significant positive (++) effect. Sites that are not within a town centre will have a minor positive (+) effect. 	
SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.	Development sites that are within close proximity of an international, national or local designated conservation site have the potential to affect the biodiversity or geodiversity of those sites/features, e.g. through habitat damage/loss, fragmentation, disturbance to species, air pollution, increased recreation pressure etc. Conversely, there may be opportunities to promote habitat connectivity if new developments include green infrastructure. Therefore, while proximity to designated sites provides an indication of the potential for an adverse effect, uncertainty exists, as appropriate mitigation may avoid adverse effects and may even result in beneficial effects. In addition, the potential impacts on biodiversity present on each site, or undesignated habitats and species adjacent to the potential development sites, cannot be determined at this strategic level of assessment. This would be determined once more specific proposals are developed and submitted as part of a planning application.	GIS data: Ramsar sites SPAs SACs SSSIs NNRs Key wildlife sites Green spaces Country parks Protected outdoor playspaces
	 Retail/community use sites that are within 250m of one or more internationally or nationally designated biodiversity or geodiversity sites may have a significant negative (?) effect. Retail/community use sites that are between 250m and 1km of one or more internationally or nationally designated biodiversity or geodiversity sites, or that are within 250m of a locally designated site may have a minor negative (-?) effect. Retail/community use sites that are more than 1km from any internationally or nationally designated biodiversity or geodiversity sites, or that are over 250m from a locally designated site could have a negligible (0?) effect. 	
	In addition:	
	• Retail/community use sites that contain an existing green infrastructure asset that could be lost as a result of new development may have a significant negative effect (?) although this is currently uncertain as it may be possible to conserve or even enhance that asset through the design of the new development.	
SA 8: To conserve and enhance the local character	A Landscape Sensitivity Assessment was carried out for Stroud District Council in December 2016 by White Consultants. It assessed the sensitivity of parcels of land located around the	GIS data:

SA Objective	Assumption	Data Source
and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.	 Tier 1, 2 and 3 settlements in the District. Development in more sensitive locations could have adverse impacts on the character and quality of the landscape, although effects will be uncertain as they will also depend on factors such as the design of the development. Sites that are in an area of low sensitivity could have a negligible (0?) effect. Sites that are in an area of medium/low or medium sensitivity could have a minor negative (-?) effect. Sites that are in an area of medium/high or high sensitivity could have a significant negative (?) effect. Sites in locations that are not covered by the Landscape Sensitivity Assessment would have an uncertain (?) effect. In addition, proximity to the Cotswolds AONB can provide an indication of the potential for development to have adverse impacts on that designated landscape. Sites that are within the AONB could have a significant negative (?) effect. Sites that are not within the AONB, but that are within 500m of it, could have a minor 	AONB Landscape Character Assessment
SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's historic environment.	 Retail/community use site options for the Stroud District Local Plan Review have been subject to a heritage assessment as part of the SALA process. Each site option has been attributed a score based on its sensitivity with respect to the historic environment. Sites that were screened out of the SALA heritage assessment because they have no heritage impacts, or sites that were assessed but scored '1' (i.e. that have no significant heritage constraints) would have a negligible (0) effect. Sites that are scored '2' (i.e. that have some impact on heritage interest) would have a minor negative (-) effect. Sites that are scored '3' or '4' (i.e. that have significant or very significant heritage constraints) would have a significant negative () effect. Sites that were not included in the SALA heritage assessment would have uncertain (?) effects. For some sites, the SALA identified opportunities for sites to have potential for positive heritage benefits as a result of development. For these sites, a potential but uncertain minor positive (+?) effect is identified. This could result in mixed effects overall. 	SALA heritage assessment

SA Objective	Assumption	Data Source
SA 10: To ensure that air quality continues to improve.	There are no existing Air Quality Management Areas in Stroud District. The effects of new retail/community use sites on this objective will therefore largely depend on the extent to which their location facilitates the use of sustainable transport in place of car travel. Town centres are generally accessible for more people via public transport. Therefore: Sites that are within a town centre will have a significant positive (++) effect. Sites that are not within a town centre will have a minor positive (+) effect.	GIS data: • Town centre locations
SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.	Levels of water consumption within new development will be determined by its design and onsite practices, rather than the location of the site. However, the location of development could affect water quality during construction depending on its proximity to Drinking Water Safeguarding Zones and Source Protection Zones ¹²⁰ . The extent to which water quality is affected would depend on construction techniques and the use of sustainable drainage systems (SuDS) within the design; therefore effects are uncertain at this stage. • Development within Drinking Water Safeguarding Zones and Source Protection Zones could result in significant negative (?) effects on water quality although this is uncertain at this stage of assessment. • Development outside of Drinking Water Safeguarding Zones and Source Protection Zones would have a negligible (0) effect.	GIS data: • Drinking Water Safeguard Zones • Source Protection Zones
SA 12: To manage and reduce the risk of flooding and resulting detriment to public wellbeing, the economy and the environment.	The effects of new development on this SA objective will depend to some extent on its design, for example whether it incorporates SuDS, which is unknown and cannot be assessed at this stage. Where site options are located in areas of high flood risk, it could increase the risk of flooding in those areas (particularly if the sites are not previously developed) and would increase the number of people and assets at risk from flooding. Therefore, to reflect comments made by the Environment Agency regarding flood risk in their consultation response to the SA Report for the Local Plan Review: Emerging Strategy Paper:	GIS data: • Flood Zones • Satellite imagery

¹²⁰ As the consideration of Nitrate Vunerable Zones (NVZs) is most appropriate for agricultural related development it was not considered appropriate to include the proximity of residential development to these areas within the assumptions.

SA Objective	Assumption	Data Source
	 Sites that are entirely or mainly (i.e. >50%) on greenfield land that is within flood zones 3a or 3b or mainly on brownfield within flood zones 3a or 3b are likely to have a significant negative () effect. Sites that are either entirely or mainly on greenfield outside of flood zones 3a and 3b, are likely to have a minor negative (-) effect. Sites that are on brownfield land outside of flood zones 3a and 3b are likely to have a negligible (0) effect. 	
SA 13: To improve efficiency in land use and protection of soil quality through the reuse of previously developed land and existing buildings and encouraging urban renaissance.	 Development on brownfield land represents more efficient use of land in comparison to the development of greenfield sites. However, retail/community use sites are likely to be relatively small in scale. Therefore: Retail/community use sites that are mainly or entirely (i.e. >50%) on greenfield land classed as Grade 1 or 2 agricultural land would have a significant negative () effect. Retail/community use sites that are mainly or entirely (i.e. >50%) on greenfield land classed as Grade 3 agricultural land may have a significant negative (?) effect although this is uncertain depending on whether the land is Grade 3a or 3b which cannot be determined at this stage. Retail/community use sites that are mainly or entirely on greenfield land classed as Grade 4 or 5 agricultural land, or urban land, would have a minor negative (-) effect. Retail/community use sites that are mainly or entirely on brownfield land would have a minor positive (+) effect. 	Satellite imagery
SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.	The location of retail/community use sites will not affect the achievement of this objective – effects will depend largely on the detailed proposals for sites and their design, which are not known at this stage. The likely effects of all retail/community use site options on this objective are therefore negligible (0).	Stroud District Council site options
SA 15: To 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	The effects of new development on waste generation will depend largely on people's behaviour. However, where development takes place on previously developed land there may be opportunities to reuse onsite buildings and materials, thereby reducing waste generation. Therefore:	Satellite imagery

SA Objective	Assumption	Data Source
residual material, and achieve the sustainable management of waste.	 Sites that are on brownfield land could have a minor positive (+?) effect on reducing waste generation although this is uncertain. Sites that are on greenfield land would have a negligible (0) effect on reducing waste generation. 	
SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.	Retail/community use site options are expected to provide some employment opportunities, although these are unlikely to be significant in scale. Therefore, the likely effects of all site options, regardless of their location, will be minor positive (+).	Stroud District Council site options
SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/skilled workforce and support the long term competitiveness of the District.	Retail/community use site options are expected to provide some employment opportunities which could have associated opportunities for work-based learning and skills development, although these are unlikely to be significant in scale. Therefore, the likely effects of all site options, regardless of their location, will be minor positive (+).	Stroud District Council site options

Table A4.5: Assumptions for the appraisal of open space site options

SA Objective	Assumption	Data Source
SA 1: To provide affordable, sustainable and decent housing to meet local needs.	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options
SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.	The provision of new open space sites will benefit public health by providing areas for active outdoor recreation; therefore all open space site options will have a minor positive (+) effect.	Stroud District Council site options
SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options
SA 4: To reduce crime, antisocial behaviour and disorder and the fear of crime.	The effects of open space allocations on levels of crime and fear of crime will depend on factors such as design and the use of appropriate lighting, which could have an effect on perceptions of personal safety, particularly at night. However, such issues will not be influenced by the location of open spaces. Therefore, the effects of all of the open space site options on this SA objective will be negligible (0).	N Stroud District Council site options
SA 5: To create and sustain vibrant communities.	The allocation of new open space will benefit residential amenity and should enhance peoples' satisfaction with their neighbourhoods. Therefore, all open space site options will have a minor positive (+) effect.	Stroud District Council site options
SA 6: To maintain and improve access to all services and facilities.	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options

SA Objective	Assumption	Data Source
SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.	The allocation of new open space sites will benefit biodiversity by creating new habitat, avoiding habitat fragmentation and potentially improving habitat connectivity. Open space allocations will also prevent those areas being used for built development, which could otherwise have adversely impacted on biodiversity. Therefore, all open space site options will have a minor positive (+) effect.	Stroud District Council site options
SA 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.	The allocation of new open space sites may benefit the landscape by improving the setting of built development. However, effects will be uncertain depending on the nature of the open space and the setting. Open space allocations will also prevent those areas being used for built development, which could otherwise have adversely impacted on the landscape. All open space site options could therefore have a minor positive (+?) effect.	Stroud District Council site options
SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's historic environment.	The allocation of new open space sites could benefit the historic environment by improving the setting of built heritage. However, effects will be uncertain depending on the nature of the open space and their proximity to heritage features. Open space allocations will also prevent those areas being used for built development, which could otherwise have adversely impacted on cultural heritage. All open space site options could therefore have a minor positive (+?) effect.	Stroud District Council site options
SA 10: To ensure that air quality continues to improve.	Although provision of open space may help to mitigate air pollution if trees are provided within the open space, the location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options
SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.	Although provision of open space could benefit water quality and water retention if permeable surfaces are provided, or if SuDS are included in the design of the open space, the location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options
SA 12: To manage and reduce the risk of flooding and resulting detriment to public wellbeing, the	The allocation of new open space sites could benefit flood risk by increasing the area of permeable surfaces and facilitating infiltration, particularly where they are in areas of higher flood risk.	GIS data: • Flood Zones

SA Objective	Assumption	Data Source
economy and the environment.	 Open space site options within flood zones 3a or 3b will have a significant positive (++) effect. Open space site options outside of flood zones 3a and 3b will have a minor positive (+) effect. 	
SA 13: To improve efficiency in land use and protection of soil quality through the reuse of previously developed land and existing buildings and encouraging urban renaissance.	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options
SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options
SA 15: To 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, and achieve the sustainable management of waste.	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options
SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options

SA Objective	Assumption	Data Source
SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/skilled workforce and support the long term competitiveness of the District.	The location of open space allocations will not have an effect on this SA objective; therefore all open space site options will have a negligible (0) effect.	Stroud District Council site options