ED.3.11

UE ASSOCIATES

Sustainability Appraisal of the Stratford-on-Avon Core Strategy

Part 2 Options SA Report

November 2011

Sustainability Appraisal of the Stratford-on-Avon Core Strategy

Part 2 Options SA Report

Client:	Stratford-on-Avon District Council
Report No.:	UE-0094_Part 2 Options SA Report_4_141111NCB
Version:	1
Status:	Draft for Client Comment
Date:	14th November 2011
Author:	NCB
Approved:	NJD

Contents

Abbreviations

CLG   (Department of) Communities and Local Government

PPS   Planning Policy Statement

RSS   Regional Spatial Strategy

SA   Sustainability Appraisal

SDC   Stratford-on-Avon District Council

SEA   Strategic Environmental Assessment

SFRA   Strategic Flood Risk Assessment

SuDS   Sustainable Drainage Systems

1   Introduction

1.1   Purpose of this Report

1.1.1   This Part 2 Options SA Report has been prepared for Stratford-on-Avon District Council (SDC) as part of the Sustainability Appraisal (SA) process for the Stratford-on-Avon Core Strategy. This SA report has been prepared to appraise the latest round of Development Plan Document (DPD) options for the district. This stage of options preparation follows the first phase of options appraisal carried out earlier in 2011. For this reason, this report is called Part 2.

1.1.2   SA is the process of informing and influencing the evolution of the Core Strategy to maximise the sustainability value of the plan. In this context this report should be considered through the ongoing development of the Core Strategy.

1.2   Appraisal of Initial Options and Housing Development Options for the Core Strategy

1.2.1   The Part 1 Options Report (UE Associates, October 2011) presented an appraisal of two sets of broad development options which had been previously been considered as part of the development of earlier versions of the Core Strategy. This included: a) an assessment of the Locational Options for Future Development which were originally considered as part of the development of the 2008 Core Strategy; and b) an assessment of the Housing Development Options put forward by the 2010 Core Strategy, which were designed to determine the most appropriate distribution of the housing levels in the district proposed by the RSS Phase Two Revision Panel Report

1.2.2   The Part 1 Options Report presents the appraisal of these two sets of options and can be accessed at the following weblink:

http://www.stratford.gov.uk/planning/planning-3811.cfm .

1.3   Development of Further Options for the Core Strategy

1.3.1   In June 2011, GLHearn prepared a Housing Options Study for SDC (GLHearn, 2011). The study assesses housing need and demand in Stratford-on-Avon, taking account of population and economic dynamics, and considers land availability and strategic infrastructure constraints to identify options for housing provision in the district over the plan period.

1.3.2   Three Housing Requirement Options were put forward by the Study, which present different levels of housing provision in the district to 2028. These are as follows:

▸   Option 1: Main Trend-Based Projection

▸   Option 2: Economic-Led Projection

▶   Option 3: 25% Reduction in Net In-migration

1.3.3   The appraisal of these options is presented in this Part 2 Options SA Report.

1.4   How to Use this Document

1.4.1   This Part 2 Options SA Report should be considered alongside the Part 1 Options SA Report to provide sustainability context. It should be noted that this report is not the equivalent of an Environmental Report in line with the SEA Directive; this will be published later in the process. The information presented herein is a key part of the assessment of alternatives and will be documented in the Environmental Report.

1.4.2   Whilst an Options SA Report is not a requisite part of the CLG SA Guidance (CLG, 2009a), this document follows the intentions of PPS12 (CLG, 2008). In this context, the Part 2 Options SA Report presents sustainability issues for consideration alongside the proposed options for the Core Strategy.

1.4.3   The Part 2 Options SA Report is structured as follows:

Chapter 2 and **Appendix A** sets out the methodology for the assessment of the three Housing Requirement Options proposed for the district.

Chapter 3 presents the findings of the appraisal of the Housing Requirement Options and discusses the assessment of the three options proposed. This is presented through a set of assessment matrices, commentary and an accompanying summary which compares the sustainability performance of each of the options in relation to the SA Objectives developed during scoping.

1.4.4   The final chapter of the report (**Chapter 4**) presents a number of conclusions linked to the appraisal carried out on the options and sets out the next steps for the SA process.

2   Assessment Methodology

2.1   Introduction

2.1.1   This chapter sets out the approach to the appraisal of the Housing Requirement Options discussed in the previous chapter. It also discusses how the findings of the appraisal have been presented to inform the development of the Core Strategy.

2.2   Assessment of the Housing Requirement Options

2.2.1   As discussed in **section 1.3**, three Housing Requirement Options have been considered through the GLHearn Report. These are as follows:

Table 2.1: Housing Requirement Options assessed through the Part 2 appraisal

Initial Options	
Option 1: Main Trend-Based Projection	Based on continuation of long-term migration trends, but a reduction in migration of 15% on short-term migration trends (2004-9). Delivery of 10,300 homes is required over the 20 year plan period (515 per annum). This is marginally above averages rates of development in the District between 2000-2010 (480 per annum) but broadly consistent with development rates in the pre-recession period.
Option 2: Economic Led Projection	Based on expected employment growth across Warwickshire and a continuation of existing commuting patterns where there is some net in commuting to Stratford-on-Avon District to work. It assumes that the labour market performs in relative terms quite strongly through the recession. Delivery of 13,000 homes is required over the 20 year plan period (650 per annum).
Option 3: 25% Reduction in In-migration	Represents planning for a 25% reduction in net migration relative to long-term migration trends (1999-2009). Delivery of 8,200 dwellings is required over the 20 year plan period (410 per annum).

2.2.2   The assessment of the Housing Requirement Options has engaged a strategic level assessment technique which uses the SA Framework, the SA evidence baseline and the review of plans, programmes and policies to assess each alternative option. Findings are presented in matrix format and are accompanied by a commentary on and summary of identified effects.

2.2.3   The Housing Requirement Options have been appraised against the SA Framework of objectives and indicators developed through the scoping stage of the SA. Through this approach the appraisal has evaluated the likely sustainability performance of the options against each of the 15 SA Objectives included in the SA Framework, as follows.

Table 2.3: SA Objectives

SA Objective	
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.
3	Protect, enhance and manage biodiversity and geodiversity.
4	Reduce the risk of flooding.
5	Minimise the district's contribution to climate change.
6	Plan for the anticipated levels of climate change.
7	Protect and conserve natural resources.
8	Reduce air, soil and water pollution.
9	Reduce waste generation and disposal, and promote the waste hierarchy of reduce, reuse, recycle/compost, energy recovery and disposal.
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.
11	Reduce barriers for those living in rural areas.
12	Protect the integrity of the district's countryside.
13	Provide affordable, environmentally sound and good quality housing for all.
14	Safeguard and improve community health, safety and well being.
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.

2.2.4   The full SA Framework, including objectives, decision making criteria, targets and indicators has been reproduced in **Appendix A**.

2.2.5   The findings of the assessment of the Housing Requirement Options, including the appraisal matrices and commentary, have been presented in **Chapter 3**. These findings have been discussed through the 15 SA Objectives. This enables the reader to establish and to directly compare the likely sustainability performance of each of the options in relation to the full the range of sustainability issues considered through the SA process.

3 Appraisal Findings: Housing Requirement Options

3.1 Strategic Assessment of the Housing Requirement Options: Summary

3.1.1 **Table 3.1** presents an appraisal matrix summarising the assessment carried out on the Housing Requirement Options examined through the GL Hearn study. This is accompanied by a commentary discussing and comparing the options' sustainability performance in relation to each of the SA Objectives.

Table 3.1: Summary of the assessment of the three Housing Requirement Options

	SA Objective	Housing Requirement Options		
		Option 1	Option 2	Option 3
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	-	--	-
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	-	--	-
3	Protect, enhance and manage biodiversity and geodiversity.	-	--	-
4	Reduce the risk of flooding.	+/-	+/-	+/-
5	Minimise the district's contribution to climate change.	-	--	-
6	Plan for the anticipated levels of climate change.	+/-	+/-	+/-
7	Protect and conserve natural resources.	+/-	+/-	+/-
8	Reduce air, soil and water pollution.	-	--	-
9	Reduce waste generation and disposal, and promote the waste hierarchy of reduce, reuse, recycle/compost, energy recovery and disposal.	-	--	-

	SA Objective	Housing Requirement Options		
		Option 1	Option 2	Option 3
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	+/-	+/-	+/-
11	Reduce barriers for those living in rural areas.	+	++	+
12	Protect the integrity of the district's countryside.	+/-	+/-	+/-
13	Provide affordable, environmentally sound and good quality housing for all.	+	++	+
14	Safeguard and improve community health, safety and well being.	+/-	+/-	+/-
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	+	++	+

Key, scorings:	
Likely strong positive effect	++
Likely positive effect	+
Neutral/no effect	0
Likely adverse effect	-
Likely strong adverse effect	--
Uncertain effects	+/-

Key, Housing Requirement Options:	
Option 1	Main Trend-Based Projection
Option 2	Economic Led Projection
Option 3	25% Reduction in In-migration

3.2   Appraisal Commentary

SA Objective 1: Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance and SA Objective 2: Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities

3.2.1   The commentary below considers the findings of the assessment for SA Objectives 1 and 2 together. This approach has been taken due to the close link and interdependence between the district's historic environment and landscape/townscape resource.

3.2.2   In terms of the sustainability performance of the three options in terms of their likely effect on landscape and townscape quality and the historic environment, the effect of the three options is influenced by the proposed levels of housing to be taken forward through the Core Strategy. In this context. Option 2, through promoting a larger degree of housing development in the district (13,000 homes) than Option 1 (10,300 homes) has more potential to lead to impacts on landscape quality, the quality of the public realm and the setting and fabric of historic environment assets.

3.2.3   Similarly, Option 3, which seeks to deliver a lower level of housing in the district than Options 1 and 2, is less likely to lead to effects on landscape and townscape quality and the historic environment. This includes through limiting the built footprint of the new development required to take forward the Core Strategy on landscape and townscape. It also will help limit potential effects on landscape and townscape quality and the integrity of historic environment assets by limiting traffic growth arising from new housing development in the district.

3.2.4   The effect of the three options depend on the location and layout of new housing development in terms of its proximity to sensitive landscape, townscape and historic environment features, and the quality and design of new development. Effects will also depend on the thematic policies introduced for the Core Strategy which will influence the setting and fabric of Stratford-on-Avon's rich historic environment resource and the integrity of the district's high quality townscape and landscape. These include relating to design considerations, sustainable transport provision, green infrastructure enhancements and the quality of neighbourhoods.

3.2.5   New development in the district should therefore reflect the aims of PPS5: *Planning for the Historic Environment* and its companion *Practice Guide* (DCLG, March 2010). These seek to ensure that policies and decisions concerning the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term.

3.2.6   PPS5 and its companion guide also seek to ensure that heritage assets are conserved in a manner appropriate to their significance by ensuring that: decisions are based on the nature, extent and level of that significance, investigated to a degree proportionate to the importance of the heritage asset; wherever possible, heritage assets are put to an appropriate and viable use that is consistent with their conservation; the positive contribution of such heritage assets to local character and sense of place is recognised and valued; and consideration of the historic

environment is integrated into planning policies, promoting place-shaping. The considerations should be central to new development taken forward through the Core Strategy.

SA Objective 3: Protect, enhance and manage biodiversity and geodiversity

3.2.7   The effect of the Housing Requirement Options on the district's biodiversity and geodiversity resource will depend on the location, layout and design of new development. It will also depend on the incorporation of improved green infrastructure provision and the extent to which new development has due regard to the aims of PPS9, the biodiversity duty placed on local authorities by the Natural Environment and Rural Communities Act (HM Government, 2006) and the Natural Environment White Paper (HM Government, 2011).

3.2.8   Option 3, which proposes the development of 8,200 dwellings in the district is likely to lead to fewer impacts on biodiversity habitats, species and networks than Options 1 and 2, which seek to deliver 10,300 and 13,000 dwellings over the 20 year plan period. This is due to a reduced requirement for new land to deliver the proposed housing through the option, and a limitation of effects linked to habitat loss, disturbance, road kills, the severance of networks and other linked effects. It should be noted that all options have the potential to lead to biodiversity gains locally if appropriate green infrastructure enhancements and design and layout which support biodiversity networks are promoted by the Core Strategy.

3.2.9   To Core Strategy should therefore seek to reflect the aims of the recently introduced Natural Environment White Paper, The Natural Choice: Securing the Value of Nature (HM Government, June 2011). The White Paper is a wide ranging document, with a close focus on promoting high quality natural environments, expanding multifunctional green infrastructure networks and initiating landscape scale action to support ecological networks.

3.2.10   The White Paper specifically seeks to: protect core areas of high nature conservation value; promote corridors and 'stepping stones' to enable species to move between key areas; and initiate Nature Restoration Areas, where ecological functions and wildlife can be restored. Of close relevance to the district, the White Paper also focuses on new 'Local Green Area' designations, which are designed to allow local people to protect the green areas that are important to them, and biodiversity offsetting, which are conservation activities designed to deliver biodiversity benefits in compensation for losses elsewhere in a measurable way. Biodiversity improvements in the district should therefore be made in the context of these aims and support sub-regional and national biodiversity initiatives.

3.2.11   The White Paper is supported by the recently released Biodiversity Strategy for England, Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (Defra, August 2011). The Strategy's main aim is: "to halt overall biodiversity loss, support healthy, well functioning ecosystems and establish coherent ecological networks with more and better places for nature for the benefit of wildlife and people." A strong focus of the Strategy is also to encourage more people to become involved in conservation in their local areas. To support these aims biodiversity improvements in Stratford-on-Avon should be carried out in conjunction with local organisations and community groups with an interest in biodiversity in the district. The Core Strategy should also seek to actively support community awareness of and involvement in nature conservation and the safeguarding of biodiversity in the area. In this

context biodiversity improvements in the district should be carried out in conjunction with the Local Nature Partnerships put forward by the Natural Environment White Paper and the Biodiversity Strategy to strengthen local action. The Biodiversity Strategy for England also proposes introducing a new designation for Local Green Areas to enable communities to protect places that are important to them. The consideration of such designations in the Core Strategy should therefore be considered as part of a wider biodiversity strategy for district.

3.2.12   Both the White Paper and the Biodiversity Strategy have a strong focus on improving ecological networks through the development of high quality Green Infrastructure networks. The proposals in the district's green infrastructure study (UE Associates, 2011) should therefore be considered as a starting point for a more detailed consideration of how enhancements to local ecological networks can be secured whilst achieving the wider multifunctional benefits of a high quality district-wide green infrastructure network.

SA Objective 4: Reduce the risk of flooding

3.2.13   Flood risk from fluvial flooding is major issue for the district, and affects many of the district's main settlements. For example the recent July 2007 flood event led to: 110 properties being flooded in Alcester; 60 properties being flooded in Bidford-on-Avon; 100 properties being flooded in Shipton-on-Stour; 10 properties being flooded in Southam; 75 properties being flooded in Stratford-upon-Avon; 70 properties being flooded in Wellesbourne; and 100 properties being flooded in Henley-in-Arden[1]. Flooding from surface water is also an issue in many settlements.

3.2.14   The significance of flood risk for many settlements in the district is highlighted in **Figure 3.1.**

---

[1] Source, Environment Agency, Summary of July 2007 Flood Event, available on:
http://www.warwickshire.gov.uk/Web/corporate/pages.nsf/Links/2CCEECB3DF671CB9802575EF0033B573/$file/Warwickshire.pdf
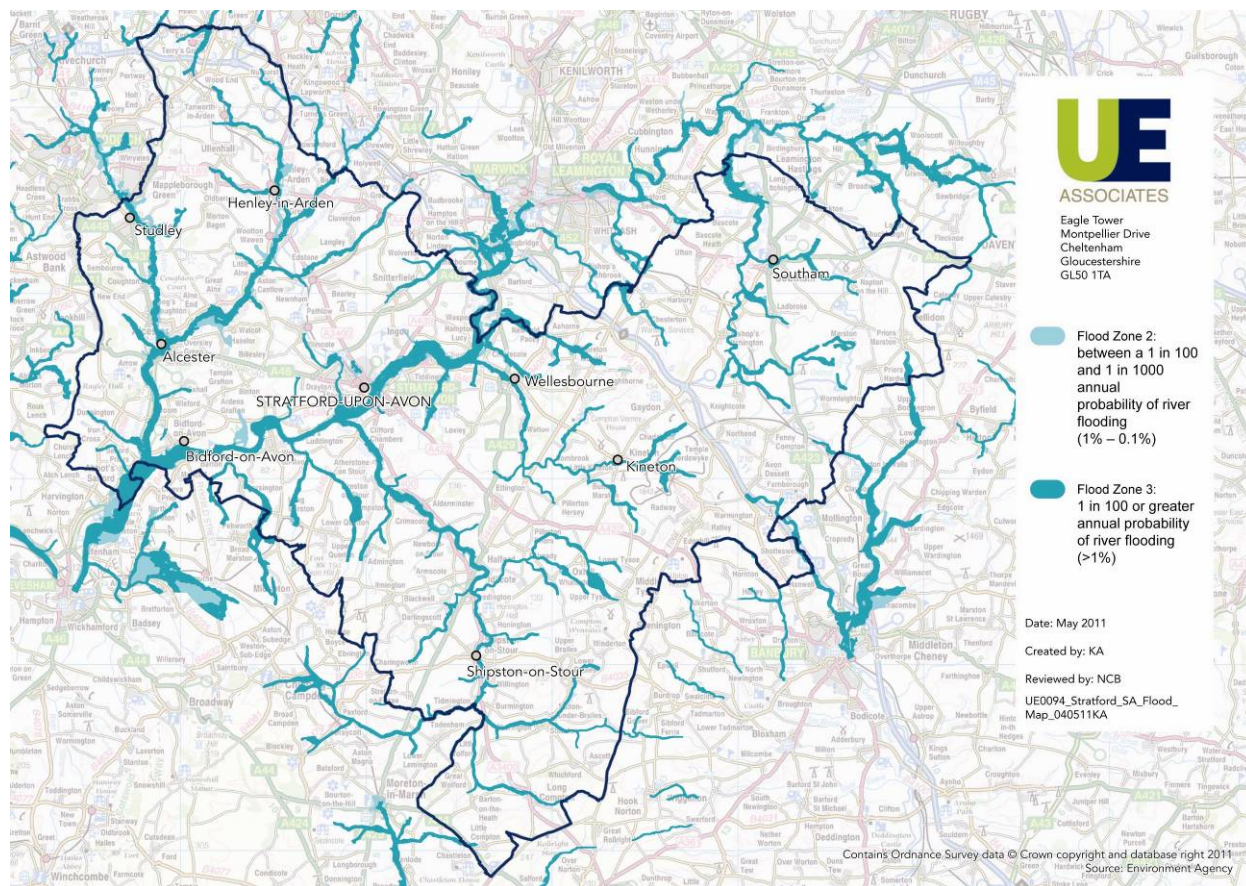
Figure 3.1: *Flood Risk Zones in Stratford-on-Avon district*

3.2.15   Due to the district-wide presence of flood risk, each of the Housing Requirement Options have the potential to lead to development in flood risk areas if appropriate locational policies are not promoted by the Core Strategy. The effect of the options on the risk of flooding therefore largely depend on the location of development in conjunction with existing areas of flood risk and the likely changes in flood risk that are likely to arise as a result of the effects of climate change.

3.2.16   In this context the extent to which the Core Strategy ensures that the Strategic Flood Risk Assessment which has been carried out for the district (Halcrow, 2008) is a central consideration for deciding the location of new development will determine the extent to which the Core Strategy supports a reduction of flood risk in the district. This should seek to reflect the aims of *PPS25, Development and Flood Risk* (DCLG, 2010) through demonstrating how the sequential test has been applied, and if appropriate, the exception test.

3.2.17   Similarly the extent to which the Core Strategy encourages the use of sustainable drainage systems, deculverting and other measures to limit flood risk from surface water run off will also determine how effectively growth taken forward through the Core Strategy will address flooding from extreme weather events.

SA Objective 5: Minimise the district's contribution to climate change

3.2.18   The Housing Requirement Options, through setting out three different levels of housing to be taken forward to the plan period, will have varying degrees of effects on increasing greenhouse gas emissions.

3.2.19   Effects from housing growth on climate change mitigation include from traffic growth (significant as transport road transport is by far the biggest contributor to greenhouse gas emissions in Stratford-on-Avon, contributing to almost half, or 46% of the district's total emissions, compared to 26% for industry and commercial and 26% for domestic sources); an increase in the built footprint from new housing, and an associated increase in employment and service provision from a growth in the district's population. In this context, Option 3, which proposes the development of 8,200 dwellings in the district, is likely to stimulate a more limited increase in greenhouse gas emissions than Options 1 and 2, which seek to deliver 10,300 and 13,000 dwellings over the 20 year plan period.

3.2.20   To gain a clearer understanding of the effect of the options on climate change mitigation, the spatial distribution of growth, and accompanying policies which may limit the effect of housing growth in the district on increases of greenhouse gas emissions will be the key determinants.

SA Objective 6: Plan for the anticipated levels of climate change

3.2.21   The effects of climate change in the district are likely to include the following: decreasing summer rainfall and increasing winter rainfall; more extreme heat events such as that seen in the summer of 2003; fewer snowfall events; increased wind speeds and an increase in storm events; average annual temperature increase of between 1°C and 2.5°C; drier (up to 30%) warmer summers and wetter (up to 20%) and warmer winters; and drier soils in summer and higher soil moisture levels in winter increasing the probability of flooding (source: UK Climate Change Impacts 09). The Core Strategy will play a key role in deciding how successfully Stratford-on-Avon adapts to these effects.

3.2.22   The Housing Requirement Options present three housing growth scenarios for the district, focussed on different levels of housing provision in the district. On aspects such as: flooding, the urban heat island effect (where, due to heat retention, built up areas become warmer than the surrounding countryside), landscape change, impacts on biodiversity and the other aspects linked to the likely effects of climate change on the district, the effect of each of the options will depend on the detailed location, layout and design of development. In particular the extent to which the Core Strategy encourages development which utilises design and layout which supports adaptation to climate change will be key to this SA Objective. This can include through: new and enhanced green infrastructure provision, appropriate shading and planting, solar control, increased ventilation, improved drainage (and where appropriate, SuDS), green roofs, management of flood pathways, rain harvesting and storage, grey water recycling and a range of other approaches. In this context the Housing Requirement Options do not provide sufficient detail to determine the extent to which different levels of housing growth in the district will support effective adaptation to the effects of climate change.

SA Objective 7: Protect and conserve natural resources

3.2.23   In terms of the efficient use of land, Option 3, through proposing a smaller degree of housing development in the district, is more likely to lead to a higher proportion of housing development taking place on previously developed land.

3.2.24   Due to their nature as housing growth scenario options, how new development taken forward through the Housing Requirement incorporates energy efficiency measures or utilises renewable energy provision will be influenced by the design of the thematic Core Strategy policies. Similarly, issues such as water efficiency measures, sustainable waste management or the utilisation of recycled and reused materials in new development will also be addressed by the thematic Core Strategy policies. These issues will be considered later in the SA process through the assessment of draft Core Strategy policies.

SA Objective 8: Reduce air, soil and water pollution

Air Quality

3.2.25   Air quality issues in the district are focussed in Stratford-upon-Avon, Studley and Henley-on-Arden, as highlighted by the recent declaration of air quality management areas in these settlements.   All three AQMAs designated in the district have been declared due to exceedences of the annual mean objective for nitrogen dioxide, linked to emissions from transport.

3.2.26   Option 2, through promoting a higher degree of housing growth in the district (13,000 homes) than Option 1 (10,300 homes) has more potential to lead to impacts on air quality. This is due to the likelihood of the increased population growth promoted by Option 2 stimulating a larger increase in traffic growth. Similarly, Option 3, which seeks to deliver a reduced level of housing growth in the district compared to Options 1 and 2, has less potential to lead to additional air quality issues as traffic growth stimulated by this option is likely to be more limited.

3.2.27   The extent to which the housing growth proposed through the options will affect air quality in the district will depend on the location of new development, both in terms of its proximity to routes with existing air quality issues relating to transport, and the effect of new growth areas on traffic growth at locations where air quality objectives are at risk of being exceeded.

Water and Soil Quality

3.2.28   In terms of water and soil quality, the effect of the options is likely to depend on: the extent to which the Core Strategy seeks to limit and reduce the release of diffuse and point source pollutants into local watercourses through the remediation of contaminated land in the most sensitive areas for water quality; reducing 'unsatisfactory intermittent discharges'; and improving the management of waste water. It will also depend on the extent to which the Core Strategy promotes the use of high quality drainage systems in the district, including SuDS where appropriate. The effect of the Housing Requirement Options will therefore depend on the thematic policies which are introduced to guide new development in the district.

SA Objective 9: Reduce waste generation and disposal, and promote the waste hierarchy of reduce, reuse, recycle/compost, energy recovery and disposal.

3.2.29   Due to the high level strategic nature of the options, the provision of improved recycling facilities and the encouragement of sustainable waste management has not been addressed by the Housing Requirement Options. Although household recycling rates in Stratford-on Avon are very high by national standards (59% for Stratford-on-Avon in 2009/10 compared to 40% regionally and nationally in the same period[2]), the Core Strategy should aim to ensure provision of sustainable waste management facilities for new and existing development and focus on the minimisation of waste in conjunction with the Warwickshire Minerals and Waste Development Framework. To support national, county and district-wide objectives in relation to sustainable waste management, the Core Strategy should therefore seek to support the development of waste facilities at sustainable locations, engage the local employment, reduction, reuse or recycling of waste, and where appropriate, realise the opportunities for renewable energy generation through waste. At the same time the Core Strategy should recognise the impacts that waste management can have on noise, soil and air quality; the built environment and the setting of cultural heritage assets; flora and fauna; and effects on residents' quality of life.

SA Objective 10: Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.

3.2.30   The extent to which the Housing Requirement Options will promote the use of sustainable transport modes and support existing and new sustainable transport links depends on a number of factors. These include the location of new housing growth areas in conjunction with existing public transport and walking and cycling networks, and the provision of new and improved sustainable transport links to accompany new development.

3.2.31   Whilst the sustainability performance of the options depends on these factors, Option 2, through promoting an increased level of housing growth than Options 1 and 3, has the most potential to support the viability of existing and new public transport links. This includes through potentially stimulating increased ridership on bus and rail routes.

SA Objective 11: Reduce barriers for those living in rural areas

3.2.32   The options which deliver a greater degree of housing growth in the district, Option 1 (10,300 dwellings) and Option 2 (13,000 dwellings) have increased potential to support existing services and facilities in rural areas, if new housing is located in the district's rural centres. Similarly, an increased level of population growth in the district's main settlements outside of Stratford-upon-Avon, including Shipston-on-Stour, Henley-in-Arden, Studley, Bidford-on-Avon, Wellesbourne and Kineton will promote the provision of new amenities at these locations. If this is accompanied by new and improved public transport links, this will help reduce barriers for those in rural areas as the main settlements are important service centres for their rural hinterlands.

---

[2] Defra, Municipal Waste Statistics http://archive.defra.gov.uk/evidence/statistics/environment/wastats/bulletin10.htm

3.2.33   Effects in relation to this SA Objective will depend however on the location, affordability and type and tenure of new housing in the district, and new rural housing's accessibility to existing service centres, facilities and amenities and public transport links.

SA Objective 12: Protect the integrity of the district's countryside

3.2.34   Option 2, through promoting a larger degree of housing development in the district (13,000 homes) than Option 1 (10,300 homes) and Option 3 (8,200 dwellings) has, of the three options the most potential to lead to impacts on integrity of the countryside. This includes through the option's potential to lead to the loss of a larger area of agricultural land to housing growth and an increased likelihood of the option having effects on local distinctiveness and identity and local landscape quality. The promotion of an increased level of housing provision through Option 2 also has more potential to lead to the degradation of land on the urban fringes of the district's settlements through the effect of potential proposed allocations at these locations.

3.2.35   Overall, Option 3, through delivering a more limited degree of housing in the district, is less likely to lead to effects on the integrity of the district's countryside. This depends however on the location, design and layout of new development, associated infrastructure and the provision of affordable rural housing and services to support rural areas' needs.

SA Objective 13: Provide affordable, environmentally sound and good quality housing for all

3.2.36   Options 1 and 2, through delivering an increased level of housing provision than proposed for Option 3, are more likely to meet housing needs in Stratford-on-Avon through increasing the availability of housing in the district. In this context the delivery of more affordable housing and a larger range of housing in terms of types and tenures is likely through these two options.

3.2.37   The extent to which local housing needs are met by the options will however depend on the detailed location of housing, and the type and tenure of housing proposed for each settlement in conjunction with local demand. Similarly, the extent to which new housing is affordable and meets local needs will depend on the thematic policies put forward by the Core Strategy to guide new housing provision in the district.

3.2.38   The Core Strategy should therefore seek to promote a range of housing through the delivery of new residential land in the area. This should include provision of affordable housing, housing which meets rural needs and the consideration of housing densities and mixed housing development. To accompany these aspects, the Core Strategy should explicitly recognise the benefits of housing (both affordable and standard) which is high quality, energy efficient and environmentally sustainable. This will help bring a range of longer term benefits to the quality and longetivity of the district's new and existing housing stock, and will support the health and wellbeing and quality of life for residents.

SA Objective 14: Safeguard and improve community health, safety and well being

3.2.39   The effect of the options on health and wellbeing in the district will depend on a number of factors, including accessibility to health, leisure and recreational facilities, the provision of enhanced green infrastructure networks, the extent to which new housing development promotes healthier modes of travel, and the extent to which community cohesion and the needs of vulnerable sectors of the community are promoted. It will also depend on factors such as the type and tenure and the energy efficiency of new housing.

3.2.40   In this context the level of housing provision promoted by each option's effect on health and wellbeing will depend on the extent the Core Strategy seeks to address these issues.

SA Objective 15: Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.

3.2.41   The effect of the three housing scenarios promoted by the Housing Requirement Options will be influenced by the level of housing proposed by each option. In this context an increased level of housing promoted through Option 2 has the potential to support to a greater degree the vitality and viability of the towns and villages of the district, depending on the detailed location of new housing provision. This will include through enhancing local markets for goods and services, promoting local employment opportunities, supporting local retail offer and stimulating improvements services and facilities.

3.2.42   Unless opportunities and amenities are accessible from proposed new areas of housing, the full range of potential economic benefits of new growth in the district will not be seen by existing centres. This will also do less to reverse and existing trends of high levels of out-commuting from the district for employment purposes. In this context new housing areas should be accompanied by high quality public transport and walking and cycling networks to the district's centres to help ensure that the economic benefits of new housing development facilitates enhancements to the vitality of the district's service, retail and employment centres.

This page has been left intentionally blank for the purposes of double sided printing.

4   Conclusions and Next Steps

4.1   Conclusions

4.1.1   The Housing Requirement Options set out three levels of housing provision for the district over the 20 year plan period for the Core Strategy.

4.1.2   In terms of effects on landscape and townscape quality, the integrity of the historic environment, biodiversity assets and air and noise quality, Option 2 has the most potential of the options to have significant effect. This is due to the option promoting the largest degree of housing growth of the three options in the district and the potential for new development through the option to require increased landtake and associated infrastructure provision. Similarly, Option 3 has the potential to lead to fewer adverse environmental effects relating to these aspects through supporting the lowest level of growth in the district of the three options.

4.1.3   In terms of economic factors, housing provision and the vitality of local service centres, an increased degree of housing growth in the district has the potential to stimulate the most benefits, if housing growth is managed effectively. For these reasons Housing Requirement Options 1 and 2 have the potential to do more to support the vitality and vibrancy of local centres, meet local demand for housing and fulfil local housing needs than Option 3.

4.1.4   It should be noted that the assessment carried out on the Housing Requirement Options only provide a limited indication of potential sustainability effects. In this context the detailed proposals and thematic policies developed for the Core Strategy will be the key influence on the sustainability performance of housing provision and growth taken forward. The effect of the three options on the range of issues addressed through the SA Objectives will largely depend on a range of factors, including the detailed location, design and layout of new development and the type and tenure of new housing. It will also depend on aspects such as enhancements to district-wide green infrastructure networks, improvements to public transport and walking and cycling networks, the provision of new and improved services and amenities to serve new and existing residential areas, the management of the effects of climate change and flood risk and a range of other factors. The high level strategic nature of the Housing Requirement Options have not enabled these effects to be examined in detail.

4.1.5   For this reason the findings of the assessment of the Housing Requirement Options should be considered in conjunction with the appraisal of other options considered by the SA for the Core Strategy. This includes the appraisal of the Initial Options and Housing Development Options presented in the Part 1 Options SA Report (**section 1.2**).

4.2 Next Steps

4.2.1 The assessment presented in this Part 2 Options SA Report sets out the second stage of the appraisal of reasonable alternatives for the Stratford-on-Avon Core Strategy, accompanying the appraisal of alternatives included in the Part 1 Options SA Report.

4.2.2 The findings and recommendations of the appraisal of reasonable alternatives presented in both the Part 1 and Part 2 Options SA Reports should be considered during the ongoing development of the Core Strategy, including linked to potential locations for strategic allocations and the design of district-wide policies to guide growth in Stratford-on-Avon.

4.2.3 Following the completion of the current stage of the SA process, the SA team will assess in detail successive versions of the policies and proposals to be included in the Core Strategy. This will include appraisals of the thematic policies designed to guide new development in the district.

References

Department for Communities and Local Government (2009), *CLG Plan Making Manual: Sustainability Appraisal* (September 2009):

http://www.pas.gov.uk/pas/core/page.do?pageId=152450

Department for Communities and Local Government (2010), *Planning Policy Statement 5: Planning for the Historic Environment* (March 2010)

http://www.communities.gov.uk/publications/planningandbuilding/pps5

Department for Communities and Local Government (2010), *Planning Policy Statement 5: Planning for the Historic Environment, Practice Guide* (March 2010)

http://www.communities.gov.uk/publications/planningandbuilding/pps5

Department for Communities and Local Government (2010), *Planning Policy Statement 25: Development and Flood Risk* (revised March 2010):

http://www.communities.gov.uk/publications/planningandbuilding/pps25floodrisk

Department for Communities and Local Government (2008), *Planning Policy Statement 12: Local Spatial Planning* (June 2008):

http://www.communities.gov.uk/publications/planningandbuilding/pps12lsp

Department for Environment, Food and Rural Affairs (2011), *Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services* (August 2011)

http://www.defra.gov.uk/publications/files/pb13583-biodiversity-strategy-2020-110817.pdf

GL Hearn, in association with JG Consulting (2011), *Stratford-on-Avon District Council Housing Provision Options Study* (June 2011):

http://democracy.stratford.gov.uk/mgConvert2PDF.aspx?ID=14577

Halcrow, on behalf of Stratford-on-Avon District Council (2008) *Strategic Flood Risk Assessment for Local Development Framework Level 1* (January 2008):

http://www.stratford.gov.uk/files/seealsodocs/8649/Stratford%2Don%2DAvon%20Level%201%20SFRA%20%2D%20January%202008.PDF

HM Government (2011), *The Natural Choice: Securing the Value of Nature* (June 2011):

http://www.official-documents.gov.uk/document/cm80/8082/8082.asp

UE Associates (2011), *Green Infrastructure Study for the Stratford-on-Avon District* (August 2011):

http://www.stratford.gov.uk/planning/planning-3897.cfm

UE Associates (2011), *Part 1 Options SA Report* (October 2011):

http://www.stratford.gov.uk/planning/planning-3811.cfm

Appendix A: Stratford-on-Avon Core Strategy SA Framework

This page has been left intentionally blank for the purposes of double sided printing.

Stratford-on-Avon Core Strategy SA Framework

	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	Q1a	Will it preserve buildings of architectural or historic interest and, where necessary, encourage their conservation and renewal?	Number of Grade I and Grade II* buildings at risk.	None (English Heritage)
				Number of Grade II and locally listed buildings at risk.	None (English Heritage)
		Q1b	Will it preserve or enhance archaeological sites/remains?	Proportion of scheduled monuments at risk from damage, decay or loss	None (English Heritage)
				Number/proportion of development proposals informed by archaeological provisions, including surveys	All (English Heritage)
		Q1c	Will it improve and broaden access to, understanding, and enjoyment of the historic environment?	Annual number of visitors to historic attractions	
		Q1d	Will it preserve or enhance the setting of cultural heritage assets?	Proportion of conservation areas covered by up-to-date appraisals (less than five years old) and published management plans.	
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	Q2a	Will it safeguard and enhance the character of the landscape and local distinctiveness and identity?	Application of detailed characterisation studies to new development	
		Q2b	Will it safeguard and enhance the character of the townscape and local distinctiveness and identity?	Application of detailed characterisation studies to new development	
		Q2c	Will it preserve or enhance the setting of cultural heritage assets?	Proportion of conservation areas covered by up-to-date appraisals (less than five years old) and published management plans.	
		Q2d	Will it help limit noise pollution?	Tranquillity assessments	
		Q2e	Will it help limit light pollution?	Tranquillity assessments	
		Q2f	Will it encourage well-designed, high quality developments that enhance the built and natural environment?	% development meeting Building for Life standards.	

	SA Objective		Decision making criteria: Will the option/proposal…	Indicators	Targets
3	Protect, enhance and manage biodiversity and geodiversity.	Q3a	Will it lead to a loss of or damage to biodiversity interest?	Extent (and condition) of priority habitats	
				Extent of priority species	
				Area and condition of nationally designated sites in appropriate management	By 2010, to ensure that 95% of SSSIs are in favourable or recovering condition (target to directly reflect the national PSA target)
		Q3b	Will it lead to habitat creation, matching BAP priorities?	Area of Nature Conservation designation per 1,000 population (ha).	At least 1ha of Local Nature Reserve per 1,000 population (Natural England)
				Area of new habitat creation reflecting Warwickshire, Coventry and Solihull BAP priorities	
				Extent and condition of key habitats for which Biodiversity Action Plans (BAPs) have been established	
		Q3c	Will it maintain and enhance sites nationally designated for their biodiversity interest and increase their area?	Number, area and condition of nationally designated sites in appropriate management	
		Q3d	Will it increase the area of sites designated for their geodiversity interest?	Area designated for geological interest	
		Q3e	Will it maintain and enhance sites designated for their geodiversity interest?	Condition of geological SSSIs	By 2010, to ensure that 95% of SSSIs are in favourable or recovering condition (target to directly reflect the national PSA target)
		Q3f	Will it link up areas of fragmented habitat?	Extent (and condition) of priority habitats	
		Q3g	Will it increase awareness of biodiversity and geodiversity assets?	Number of school trips to Stratford-on-Avon's Nature Reserves	
				Number of accessibility improvements to nature reserves and local sites (including geodiversity sites)	
				Number of interpretation improvements (including information boards etc) in nature reserves and local sites	

	SA Objective	Decision making criteria: Will the option/proposal…		Indicators	Targets
4	Reduce the risk of flooding.	Q4a	Will it help prevent flood risk present in the district from fluvial flooding?	Amount of new development (ha) situated within a 1:100 flood risk area (Flood Zone 3), including an allowance for climate change	Zero (Environment agency)
		Q4b	Will it help prevent flood risk present in the district from surface water flooding?	Number of properties at risk of flooding	
				No. of planning permissions incorporating SUDS	All (Environment agency)
		Q4c	Will it help limit potential increases in flood risk likely to take place in the district as a result of climate change?	Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds	Zero (Environment agency)
5	Minimise the district's contribution to climate change.	Q5a	Will it help reduce Stratford-on-Avon's carbon footprint?	Proportion of electricity produced from renewable resources	UK Government renewable energy target: 15% of electricity to be produced from renewable sources by 2020.
				Proportion of new homes achieving a four star or above sustainability rating for the "Energy/CO_2" category as stipulated by the Code for Sustainable Homes	All new homes to be carbon neutral by 2016 (DCLG target)
				Per capita greenhouse gas emissions	
				Emission by source	
				Percentage of people aged 16-74 who usually travel to work by driving a car or van	
				CO_2, methane and nitrous oxide emissions per sector	UK Government targets: 80% reduction of carbon dioxide emission by 2050 and a 26% to 32% reduction by 2020
		Q5b	Will it help raise awareness of climate change mitigation?	Number of initiatives to increase awareness of energy efficiency	
6	Plan for the anticipated levels of climate change.	Q6a	Will it help limit potential increases in flood risk likely to take place in the district as a result of climate change?	Amount of new development (ha) situated within a 1:100 flood risk area, including an allowance for climate change	Zero (Environment agency)
				Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds	Zero (Environment agency)

	SA Objective		Decision making criteria: Will the option/proposal...	Indicators	Targets
				Number of properties at risk of flooding.	
		Q6b	Will it encourage the development of buildings prepared for the impacts of climate change?	% of developments meeting the minimum standards for the "Surface Water Run-Off" and "Surface Water Management" categories in the Code for Sustainable Homes	
				Thermal efficiency of new and retro fitted development; % planning permissions for projects designed with passive solar design, building orientation, natural ventilation	
				Proportion of new homes meeting Level 4 of the CSH water category.	
				No. of planning permissions incorporating green roofs	
				No. of planning permissions incorporating SUDS	All (Environment agency)
		Q6c	Will it retain existing green infrastructure and promote the expansion of green infrastructure to help facilitate climate change adaptation?	Amount of new greenspace created per capita	
7	Protect and conserve natural resources.	Q7a	Will it include measures to limit water consumption?	Average domestic water consumption (l/head/day)	
		Q7b	Will it safeguard the district's minerals resources for future use?	Area of land with potential for minerals use sterilised	
		Q7c	Will it utilise derelict, degraded and under-used land?	% of dwellings built on previously developed land	
				Previously developed land that has been vacant or derelict for more than five years	
		Q7d	Will it lead to the more efficient use of land?	Housing density in new development: average number of dwellings per hectare	

	SA Objective		Decision making criteria: Will the option/proposal...	Indicators	Targets
		Q7e	Will it lead to reduced consumption of materials and resources?	Percentage of commercial buildings meeting BREEAM Very Good Standard or above or equivalent	
				Percentage of housing developments achieving a four star or above sustainability rating as stipulated by the Code for Sustainable Homes	
		Q7f	Will it lead to the loss of the best and most versatile agricultural land?	Area of Grades 1, 2 and 3a agricultural land lost to new development	
8	Reduce air, soil and water pollution.	Q8a	Will it lead to improved water quality of both surface water groundwater features?	% of watercourses classified as good or very good biological and chemical quality	All inland water bodies to reach at least "good status" by 2015 (Water Framework Directive)
				% change in pollution incidents	
				No. of planning permissions incorporating SUDS	All (Environment agency)
		Q8b	Will it lead to improved air quality?	Number and area of Air Quality Management Areas	To meet national Air Quality Standards
				No. of days when air pollution is moderate or high for NO_2, SO_2, O_3, CO or PM_{10}	To meet national Air Quality Standards
		Q8c	Will it maintain and enhance soil quality?	Area of contaminated land (ha)	
				% of projects (by number and value) involving remediation of any kind	
		Q8d	Will it reduce the overall amount of diffuse pollution to air, water and soil?	% change in pollution incidents	

	SA Objective	Decision making criteria: Will the option/proposal…		Indicators	Targets
9	Reduce waste generation and disposal, and promote the waste hierarchy of reduce, reuse, recycle/compost, energy recovery and disposal.	Q9a	Will it provide facilities for the seperation and recycling of waste?	Type and capacity of waste management facilities	
				Household waste (a) arisings and (b) recycled or composted	
		Q9b	Will it encourage the use of recycled materials in construction?	Reuse of recycled materials from former building stock and other sources	
10	Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	Q10a	Will it reduce the need to travel?	Percentage of completed significant local service developments located within a defined centre	
				Average distance (km) travelled to fixed place of work	
				Percentage of new residential development within 30 minutes public transport time of a GP, hospital, primary and secondary school, employment and major health centre.	
				Percentage of residents surveyed finding it easy to access key local services.	
		Q10b	Will it encourage walking and cycling?	Percentage of people aged 16-74 who usually travel to work by bicycle or on foot	
				Proportion of new development providing cycle parking.	
		Q10c	Will it reduce car use?	Percentage of people aged 16-74 who usually travel to work by driving a car or van	
		Q10d	Will it encourage use of public transport?	Percentage of people aged 16-74 who usually travel to work by bus or train	
				Number of journeys made by bus per annum	
				Percentage of development in urban/rural areas within 400m or 5 minutes walk of half hourly bus service	
				Number of journeys made by train per annum	

	SA Objective		Decision making criteria: Will the option/proposal…	Indicators	Targets
		Q10e	Will it provide adequate means of access by a range of sustainable transport modes?	Distance of new development to existing or proposed public transport routes.	
				Provision of new walking and cycling links to accompany new development	
		Q10f	Will it help limit HGV traffic flows?	HGV traffic flows	
11	Reduce barriers for those living in rural areas	Q11a	Will it increase provision of local services and facilities and reduce centralisation?	Percentage of residents surveyed finding it easy to access key local services	
		Q11a	Will it improve accessibility by a range of transport modes to services and facilities from rural areas?	Percentage of rural households within 800m of an hourly or better bus service	
		Q11a	Will it support the provision of affordable housing in rural areas?	Affordable housing completions in rural areas	
12	Protect the integrity of the district's countryside.	Q12a	Will it prevent the degradation of land on the urban fringe?	Area of derelict or underutilised land on the urban fringe	
		Q12b	Will it lead to a loss of agricultural land?	Area of agricultural land not in use or under active management.	
		Q12c	Will it safeguard local distinctiveness and identity?	Application of detailed characterisation studies to new development	
13	Provide affordable, environmentally sound and good quality housing for all.	Q13a	Will it ensure all groups have access to decent, appropriate and affordable housing?	Affordable housing completions	
		Q13b	Will it identify an appropriate supply of land for new housing?	Net additional dwellings for the current year.	
		Q13c	Will it ensure that all new development contributes to local distinctiveness and improve the local environment?	Number of major housing applications refused on design grounds.	
				Accessible Natural Greenspace	100% of population with Accessible Natural Greenspace of at least 2ha within 300m (or 5 minutes of their home (Natural England) SDC targets for open space are currently being developed.

SA Objective		Decision making criteria: Will the option/proposal...		Indicators	Targets
		Q13d	Will it meet the building specification guidance in the Code for Sustainable Homes? (DCLG)	Percentage of housing developments achieving a four star or above sustainability rating as stipulated by the Code for Sustainable Homes	All new homes to be carbon neutral by 2016 (UK Government target)
		Q13e	Will it reduce the number of households on the Housing Register?	Number of households on the Housing Register	To reduce the numbers of homeless households in priority need and the number of households in housing need on the housing register
14	Safeguard and improve community health, safety and well being.	Q14a	Will it improve access for all to health, leisure and recreational facilities?	Travel time by public transport to nearest health centre and sports facility.	
		Q14b	Will it improve and enhance the district's green infrastructure network?	Area of parks and green spaces per 1,000 head of population	SDC open space standards are currently being developed.
				Accessible Natural Greenspace	100% of population with Accessible Natural Greenspace of at least 2ha within 300m (or 5 minutes of their home (Natural England) SDC standards are currently being developed.
				Area of playing fields and sports pitches.	2.83 hectares per 1,000 population for playing field provision (National Playing Fields Association Standard) SDC open space standards are currently being developed.
				Amount of land needed to rectify deficiencies in Open Space Standards (ha)	
				Percentage of eligible open spaces managed to green flag award standard	
				Percentage of residents that are satisfied with the quantity/quality of open space	
		Q14c	Will it improve long term health?	Life expectancy at birth	

SA Objective		Decision making criteria: Will the option/proposal…		Indicators	Targets
				Standardised mortality rates	
		Q14d	Will it ensure that risks to human health and the environment from contamination are identified and removed?	Area of contaminated land (ha)	
		Q14e	Will it encourage healthy and active lifestyles?	% of adults (16+) participating in at least 30 minutes of moderate intensity sport and active recreation (including recreational walking) on three or more days of the week	To increase participation by 1% year-on-year until 2020 to achieve target of 50% of population participants in 30 mins activity, three times a week by 2020 (The Framework for Sport in England)
				The number of sports pitches available to the public per 1,000 population	
		Q14f	Will it reduce obesity?	Percentage of adult population classified as obese	By 2010, stabilise incidences of obesity in children by 2010 (DoH)
		Q14g	Does it consider the needs of the district's growing elderly population?	Percentage of older people being supported intensively to live at home	Increasing the proportion of older people being supported to live in their own home by 1% annually (DoH PSA)
		Q14h	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life?	Percentage of adults surveyed who feel they can influence decisions affecting their own local area	
		Q14i	Will it improve the satisfaction of people with their neighbourhoods as a place to live?	% respondents very or fairly satisfied with their neighbourhood	
		Q14j	Will it reduce crime and the fear of crime?	Indices of Multiple Deprivation: Crime domain	
		Q14k	Will it reduce deprivation in the district?	Indices of Multiple Deprivation	
		Q14l	Will it improve road safety?	Number of people killed or seriously injured on the roads per year	

	SA Objective	Decision making criteria: Will the option/proposal…		Indicators	Targets
15	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	Q15a	Will it ensure that new employment, office, retail and leisure developments are in locations that are accessible to those who will use them by a choice of transport modes?	Proportion of residential development within 30 minutes public transport time of key services	
		Q15b	Will it help ensure an adequate supply of employment land?	Ha of new employment land provision	
		Q15c	Will it support or encourage new business sectors?	No. of start-up businesses in the environmental and social enterprise sector	
				Expenditure on R&D as the proportion of GVA	
		Q15d	Will it support the visitor economy?	Visitor numbers	