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date 14 October 2010

**TO EACH MEMBER OF THE
LUTON & SOUTH BEDS JOINT COMMITTEE**

14 October 2010

Dear Councillor

LUTON & SOUTH BEDS JOINT COMMITTEE - FRIDAY 22 OCTOBER 2010

Further to the Agenda and papers for the above meeting, previously circulated, please find attached:

6. The Luton and South Bedfordshire Core Strategy (Ref 6)

Attached is a copy of the Sustainability Appraisal Report for the Core Strategy Pre-Submission.

Should you have any queries regarding the above please contact Sandra Hobbs on Tel: 0300 300 5257.

Yours sincerely

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Luton and Southern Bedfordshire Joint Committee
Local Development Framework

Sustainability Appraisal Report for the Core Strategy Pre-Submission

October 2010

Main Report

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Glossary

AMR	Annual Monitoring Report
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
CPRE	Campaign to Protect Rural England
DEFRA	Department for the Environment, Fisheries and Rural Affairs
DETR	Department of the Environment, Transport and the Regions
dph	Dwellings per Hectare
DPD	Development Plan Document
EA	Environment Agency
ESDP	European Spatial Development Perspective
EC	European Commission
EU	European Union
GB	Great Britain
GCSE	General Certificate of General Education
GI	Green Infrastructure
GIS	Geographical Information System
GP	General Practitioner
GSS	Green Space Strategy
Ha	Hectares
ISA	Integrated Sustainability Appraisal
JC	Joint Committee
LDD	Local Development Document
LDF	Local Development Framework
LDS	Local Development Scheme
LTP	Local Transport Plan
NAQS	National Air Quality Strategy
NOMIS	National Online Manpower Information Service (Office for National Statistics, UK)
NVQ	National Vocational Qualification
ODPM	Office of the Deputy Prime Minister
PDL	Previously Developed Land
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
QoL	Quality of Life
RSL	Registered Social Landlord
RPG	Regional Planning Guidance
RSS	Regional Spatial Strategy
RTS	Regional Transport Strategy
SA	Sustainability Appraisal
SAC	Special Area for Conservation
SAMs	Scheduled Ancient Monuments
SPA	Special Protection Area
SCI	Statement of Community Involvement
SEA	Strategic Environmental Assessment
SFRA	Strategic Flood Risk Assessment
SPD	Supplementary Planning Document
SSSA	Strategic Site Specific Allocations
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Systems
UK	United Kingdom
UN	United Nations

1. Introduction

Purpose of the SA and the SA Report

- 1.1 The purpose of Sustainability Appraisal (SA) is to promote sustainable development through the integration of environmental, social and economic considerations in the preparation of Local Development Documents (LDDs). This requirement is set out in Section 39 (2) of the Planning and Compulsory Purchase Act 2004 and Planning Policy Statement 12: Local Development Frameworks, 2008. Local Development Documents must also be subject to Strategic Environmental Assessments (SEA) and Government advises that an integrated approach is adopted so that the SA process incorporates the SEA requirements.
- 1.2 This is the SA Report that documents the SA/SEA process for the Luton and South Bedfordshire Core Strategy: Submission Document. This SA Report is published for consultation with the Core Strategy DPD: Submission Document in accordance with SEA Regulations and SA Guidance.

The Sustainability Appraisal Process

- 1.3 In November 2005, the Government published guidance on SA "Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents", which included guidance on the application of SA to Development Plan Documents (DPDs). The appraisal methodology and processes used in this SA Report were prepared to comply with the SA process for DPDs as set out in the guidance. The SA has been conducted to meet the requirements of SEA as set out in the Environmental Assessment of Plans and Programme Regulations 2004 (No.1633).
- 1.4 Work began on the Luton and South Bedfordshire Core Strategy in 2006. In accordance with the SA guidance and Regulations, a Scoping Report was initially prepared in April 2007 to correspond with the consultation on the Core Strategy Issues and Options Document and was consulted on from May 2007 to October 2007. The Issues and Options Sustainability Appraisal was published in January 2009. This document appraised the options for growth as identified in the Issues and Options Document.
- 1.5 Following the findings of the Issues and Options Sustainability Appraisal and the results of the consultation and evidence emerging from technical evidence studies, a Core Strategy Preferred Options Document was published for consultation in April 2009 together with an accompanying SA. The Preliminary Sustainability Appraisal of the Core Strategy Preferred Options Document, March 2009; hereafter referred

to as the Preferred Options SA Report; provided a broad appraisal of the policy direction regarding growth options and thematic policies.

- 1.6 A revised Scoping Report was published in October 2009 for consultation in response to changes in Government guidance for the preparation of LDFs, changes to the Luton and South Bedfordshire Local Development Scheme, the emerging East of England Plan and its Scoping Report and the availability of new and more detailed evidence coming forward from the technical reports commissioned to inform the progression of the Core Strategy.
- 1.7 The revised Scoping Report October 2009, recommended minor changes to the sustainability framework. This SA Report uses the revised sustainability framework to appraise the Core Strategy Pre-Submission.
- 1.8 The revocation of the East of England Plan and previous growth figures in the Milton Keynes South Midlands Sub-Regional Strategy in July 2010 halted the progression of the Core Strategy from the preferred options to its pre-submission consultation stage. The three statutory consultees (Natural England, Environment Agency, English Heritage) advised that there was no need to re-consult on the 2009 Scoping Report and recommended to just make amendments to the Scoping Report's Context Review to reflect the new changes.
- 1.9 The findings of the Preferred Options SA and the results of the consultation on the Preferred Options and associated SA Report, have led to certain amendments and refinements to the Core Strategy. Although the principle of the Preferred Option is carried through into the Core Strategy Pre-Submission, this is now assessed within the context of the Government's 'localism agenda' and the locally generated housing, employment and infrastructure requirements for the Luton and Southern Central Bedfordshire area. This is elaborated and expanded upon in the Core Strategy Pre-Submission through detailed policies, including the allocation of strategic sites.
- 1.10 At the Preferred Options stage of the Core Strategy, the preferred areas for growth and preferred policy direction was appraised. For the Core Strategy Submission, the growth strategy, which identifies the areas for growth, plan policies and plan objectives have been appraised against the 15 sustainability objectives of the SA framework. The key priorities for the Core Strategy and the sustainability objectives have not been changed by the 'localism' agenda.

Core Strategy Development Plan Document Context and Objectives

- 1.11 The Core Strategy is the overarching strategic document for the Luton and South Bedfordshire Local Development Framework. It sets out the key elements of the planning framework for the area.
- 1.12 The Core Strategy includes a Spatial Vision and Spatial Objectives for Luton and Southern Central Bedfordshire as follows:

Spatial Vision:

'The Luton and southern Central Bedfordshire area will be a green growth area. All its towns, villages and the countryside surrounding will contribute, according to their specific strengths, to achieving this aim.

Luton's main contribution will be to continue to develop as a sub-regional shopping and service centre and as the principal focus for new employment and inward investment within its area of influence. It will also be expanded to accommodate new housing development.

This will be supported by an enhanced public transport infrastructure, new green infrastructure, new strategic road infrastructure and by taking advantage of the town's regeneration opportunities and the asset of London Luton Airport.

Dunstable will have a less traffic congested town centre which will open up opportunities for a vibrant town centre, an improved evening economy, enhanced cultural activities and an improved physical environment.

Houghton Regis will be expanded and thus offer opportunities for the regeneration of its physical environment and its district centre in particular. New employment opportunities and new community facilities will be created in association with this development.

Leighton-Linslade will retain its high quality market town character with development mainly focussed on new housing and employment opportunities to support its self-sufficiency. It will retain and enhance its services in the town centre and seek to improve its "green wheel" of attractive open spaces.

The villages in the remaining areas will be important contributors to meeting new housing needs in a manner appropriate to their individual capacities and identities.

Development in the surrounding countryside and the smaller settlements will be local and limited within the constraints of the amended Green Belt boundaries, with respect for the value of existing landscape qualities and settings. Advantage will be taken of the rural area's contribution to the

economy and to the provision of and appropriate access to, green infrastructure.'

Objectives:

1. *To manage the natural growth of the area to help deliver sustainable and integrated communities.*
2. *To deliver a consistent supply of housing and range of housing types and tenures to help ensure greater affordability and choice.*
3. *To increase job opportunities in the area through an improvement of its image, skills, connectivity and quality of employment premises.*
4. *To improve strategic and local connectivity through the delivery of major transport infrastructure, improved access to existing strategic transport facilities, efficient integrated public transport and new sustainable transport opportunities.*
5. *To ensure that existing communities and new development are supported by a range of cost effective and well supported community and social facilities in step with changing needs.*
6. *To revitalise and support the delivery of 4 vibrant, dynamic, distinctive, safe and popular town centres.*
7. *To deliver development which offers the highest level of protection for and access to the natural environment to enable greater enjoyment of this resource.*
8. *To use development to help minimise the area's carbon footprint and to mitigate and adapt to climate change.*
9. *To improve the quantity and quality of green infrastructure by providing a network of spaces appropriate both for existing and new urban areas and also for improving biodiversity.*

Statement on the difference the SA process has made to date

- 1.13 The appraisal of the Core Strategy shows that its objectives, policies and development strategy are in general conformity with the themes of other relevant plans, policies and programmes. It highlights sustainability implications that could arise from implementing the Core Strategy. The Preferred Options SA of the Core Strategy Preferred Option Document remained broad to allow for discussion with stakeholders and the community over the most appropriate policy approach for the Core Strategy. The Core Strategy Submission provides detailed policies that aim to address the sustainability issues raised throughout the SA process.
- 1.14 The SA assessment of the Issues and Options and Preferred Options has informed the considerations of the pros and cons of adopting the

preferred option, including the inter-relationship of the options and implications of various elements of the preferred option and the development of more detailed policies and objectives to deliver the Core Strategy vision. The appraisal has also ensured that the objectives and vision bring about a plan that is sustainable and capable of implementation.

Summary Compliance with the SEA Directive and Regulations

- 1.15 The SEA Regulations set out certain requirements for reporting the SEA process, and specify that if an integrated appraisal is undertaken, then sections of the SA Report that meet the requirements set out for reporting the SEA process must be clearly signposted. The requirements for reporting the SEA process are set out in Appendix 6 and with the section of the report that progresses each SEA requirement indicated.

Compliance with the EU Habitats Directive and Regulations

- 1.16 The only European site located near the boundary to which the Core Strategy relates, and which could potentially be affected is the Chiltern Beechwoods SAC. In terms of possible effects that the plan could have, the only real potential issues would relate to increased visitor pressure to the sites as a result of the increased population projected within the LDF, and possibly air quality impacts.
- 1.17 The component part of the SAC most at risk (that nearest to the area's boundary) is Ashridge Commons and Woods SSSI. This site is currently in favourable/unfavourable recovering condition, and previous issues at the site (and the current conservation objectives for the site) relate to securing appropriate woodland management rather than the impacts of visitor pressure or air quality. Even if these were an issue, the proposed urban expansions/road schemes are sufficiently far away that they would be unlikely to exacerbate the problem.
- 1.18 Based on the above, Natural England concluded that the plan is unlikely to have a significant effect on the Chiltern Beechwoods SAC, and therefore further consideration of an Appropriate Assessment is not required.

2. Approach

Introduction

- 2.1 This SA report documents Stage B (Developing and refining options and assessing effects) of the five stage approach to SA and summarises Stage A of the process (Setting the context and objectives, establishing the baseline and deciding on the scope). By documenting and reporting Stages A and B, this report fulfils the requirements of Stage C, the preparation of the SA Report. Stage D is the consultation with stakeholders of the plan and its SA and Stage E is the monitoring of the implementation of the plan and its sustainability effects.

Table 1: SA Stages and Tasks

SA Stages and tasks	DPD stage
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope	DPD Stage 1: Pre-production – Evidence gathering
A1: Identifying other relevant plans, programmes and sustainability objectives	
A2: Collecting baseline information	
A3: Identifying sustainability issues and problems	
A4: Developing the SA Framework	
A5: Consulting on the scope of the SA	DPD Stage 2: production
Stage B: Developing and refining options and assessing effects	
B1: Testing the DPD objectives against the SA framework	
B2: Developing the DPD options	
B3: Predicting the effects of the draft DPD	
B4: Evaluating the effects the draft DPD	
B5: Considering ways of mitigating adverse effects and maximising beneficial effects	
B6: Proposing measures to monitor the significant effects of implementing the DPD	DPD Stage 3: Submission of DPD to the Secretary of State and Examination of soundness
Stage C: Preparing the Sustainability Appraisal Report	
C1: Preparing SA Report	DPD Stage 4: Adoption and monitoring
Stage D: Consulting on draft DPD and Sustainability Appraisal Report	
D1: Public participation on the preferred option and the SA Report	
D2 (i) : appraising the effects of significant changes to the DPD	DPD Stage 3: Submission of DPD to the Secretary of State and Examination of soundness
D2 (ii) : appraising the effects of significant changes resulting from the representations	
D3: Making decision and providing information	DPD Stage 4: Adoption and monitoring
Stage E: Monitoring the significant effects of implementing the DPD	
E1: Finalising aims and methods for monitoring	
E2: Responding to adverse effects	

Sustainability issues and objectives

- 2.2 The revised SA Scoping Report, October 2009 identifies the key issues that the Local Planning Authorities (LPAs) took into account when drafting objectives for the LDF and the SA Framework used to assess the LDF. Appendix 3 contains a table with the main findings from the context review for reference.
- 2.3 The Scoping Report, July 2007 and the revised Scoping Report, October 2009 carried out a review of the relevant international, EU, national, regional and local plans, programmes and sustainability objectives, this was updated further in summer 2010 to reflect the changes brought by the localism agenda. In accordance with the SA government guidance and the SEA Directive, the review identifies the relationship and influences of other plans and programmes on the Core Strategy and helps in the development of objectives for the SA Framework. The review focussed on matters influencing or contributing towards the context of the Core Strategy. The review can be viewed in the Revised Scoping Report, October 2009, Appendix 1: Context Review of Policies, Plans and Programmes.
- 2.4 Table 2 below lists the environmental, social and economic problems facing Luton and southern Central Bedfordshire together with evidence of the problems. They have been identified in the context review (Task A1), through consideration of the baseline information (Task A2) and through other published information. Table 2 is not an exhaustive list of sustainability problems, but it includes those where, in the future, the planning system may contribute towards their solution or amelioration.

Table 2: SA Scoping Report Sustainability Problems

Sustainability problem		Evidence of the problem
Environmental		
1	Condition of Sites of Special Scientific Interest	The condition of SSSIs is worse than sites elsewhere in England. (Natural England assessment of SSSIs 2002-2009). It is not possible to know whether their condition is improving or declining, as there is no trend data available.
2	Poor biological quality of river water	Southern Central Bedfordshire has seen a general shift in biological quality from good to fair. Luton has seen a consistent grading of fair. (Environment Agency)
3	Poor chemical water quality	Luton's chemical water quality is in a poor state. (Environment Agency)
4	Loss of wildlife sites	It is unclear whether development taking place in wildlife sites in southern Central Bedfordshire relates to loss of or impact on wildlife sites. (Luton and South Bedfordshire AMR 07/08). There is not enough information and no trend data is available.
5	Loss of Green Belt	The growth agenda through urban extensions will require the review of the Green Belt boundaries. (Milton Keynes Sub-Regional Strategy)
6	Loss of agricultural land	The majority of land in southern Central Bedfordshire is classified as Grade 3 agricultural land, with some small areas of Grade 2 land for example to the north of Luton. Other land is classified as Non-agricultural, and urban.

		(www. Magic.gov.uk) Grade 2 Land to the north of Luton could be affected by growth agenda.
7	Congestion and air quality	Air Quality Management Areas designated because of traffic, high levels of car as mode of transport to work. Most airport journeys are by car or taxi. Future development of airport capacity could increase car traffic and aircraft movements, and increase air pollutants.
8	Need for conservation and enhancement of the Chilterns AONB and its setting	Scale of growth proposed in the area together with accompanying infrastructure is a potential threat to the AONB and its setting.
9	Pressure on water resources	Luton and southern Central Bedfordshire sits in a water stressed area with water resources already heavily exploited. A lot of its water supply to meet existing demand is imported from other catchments.
10	Flood risk	Large numbers of existing properties are at risk from flooding.
11	Heritage at Risk	A number of buildings in the Plaiters Lea Conservation Area (Luton) are on the SAVE Britain's Heritage Building at Risk Register. 1 Building, 5 schedule monuments, and one historic park and garden (Putteridge Bury) are on English Heritage's Heritage at Risk Register
12	Impact on conservation areas	Conservation areas may be affected by master plans and strategies for development. Plaiters Lea Conservation Area is currently on the SAVE Britain's Heritage Building at Risk Register. Dunstable Conservation Area is on English Heritage's Heritage at Risk Register
13	Noise	Noise impact from airport operations, and could increase with development of airport operations in the future. Airport is close to residential areas. Air noise contour maps are available to assist planning decisions.
Social		
14	Declining bus services	Bus patronage has been in decline since 2005.
15	Lack of open space provision	Existing provision is very low, or absent in some areas. Uneven distribution. Quality and value vary. Future housing and population growth forecasts indicate that Luton and southern Central Bedfordshire will require an additional 334ha of green space until 2021 and a further 196ha from 2021 to 2031 based on an overall standard of 51 sq.m per head. (Luton and South Bedfordshire Green Space Strategy, Draft SPD, Feb 2008)
16	Deprivation	Deprivation in Luton has worsened since 2004. It is currently ranked 87th most deprived out of 354 local authority areas. Although deprivation in southern Central Bedfordshire is not as bad, it has some localised deprivation issues. (Index of Multiple Deprivation)
17	Low community activity	There is a lower than average feeling that community activities have improved or stayed the same (Audit Commission)
18	Poor race relations	In Luton, there is a very low percentage of people who think race relationships have improved in their area. While southern Central Bedfordshire perception of race relations improvement is very high. (Audit Commission)
19	High level crime	Luton has high levels of crime. Southern Central

	and perception of crime	Bedfordshire has higher than England average crime rates in certain crimes. (Audit Commission). This is reflected in their perception of crime. Southern Central Bedfordshire has only high levels of crime on certain crimes. However, the perception of crime is equally poor. (Audit Commission)
20	Health inequalities	Health Inequalities are present in Luton and southern Central Bedfordshire. In Luton, most wards are in the most deprived or second most deprived category in comparison with England. In southern Central Bedfordshire, health is good for most wards but with exception of three wards in the second most deprived category. (Department of Health)
21	Lack of health services	The growth agenda will require action to ensure provision and access to health services are not compromised. <u>Future needs</u> Southern Central Bedfordshire 16 additional GPs by 2021 and 15 more between 2021 and 2031; 3 or 4 new polyclinics by 2021 and 2 more between 2021 and 2031; and 22 new dentists by 2021 and 10 more between 2021 and 2031 Luton 5 additional GPs by 2021 and possibly 1 between 2021 and 2031; possibly 1 new health centre by 2031; Total of 3 dentists by 2031; and possibly 1 new dental practice required (Identifying Existing and Future Social and Community Infrastructure Needs for Luton and Southern Central Bedfordshire, August 2008 (UCL and Colin Buchanan))
22	Uncertain community infrastructure coverage	Social and Community Infrastructure Study identified a mixed picture in terms of current level and distribution of infrastructure provision To serve population growth until 2021, southern Central Bedfordshire has additional need for: 4 community centres; 600sqm. of library space; 11 additional sports halls; 8 more swimming pools Luton has additional need for: 1 community centre; 15 additional sports halls; 10 more swimming pools (Identifying Existing and Future Social and Community Infrastructure Needs for Luton and South Bedfordshire, August 2008 (UCL and Colin Buchanan))
23	Decrease of adult participation in sport and active recreation	Luton has shown a decrease and is far below the regional and national average. While southern Central Bedfordshire has shown an increase. (Sports England)
24	High level of vacancies in RSLs housing	% of RSL dwellings vacant in the South Bedfordshire area showed a large increase from 2007 to 2008, well above the national average. (Bedfordshire Housing Monitor Compendium of Housing Statistics for Bedfordshire in 2007 And www.emptyhomes.com And http://www.housingmarkets.audit-commission.gov.uk/)
25	Low housing affordability	Market housing is relatively affordable compared to other surrounding areas but still not affordable compared to the average wage in the area. (Bedfordshire Housing Monitor) The number of people on housing waiting lists has increased in Luton substantially, and decreased in southern Central Bedfordshire. (http://www.housingmarkets.audit-commission.gov.uk/)
26	Low affordable housing provision	The emerging Strategic Housing Market Assessment for Bedfordshire and Luton details need for affordable housing from 2007 to 2021. Luton requires 407 units per annum and southern Central Bedfordshire 371 per annum. (CLG)

27	Low overall housing provision	Current shortfall on housing supply (CLG)
Economic		
28	Declining town centres	Pedestrian flows decreased in Dunstable. In Leighton Buzzard and Houghton Regis pedestrian flows fell but have increased again. (2007/2008 AMR) Dunstable has experienced an increase in number of vacant units. Number of vacant units in Houghton Regis has remained the same. In Leighton Buzzard, the figure has fluctuated. All three centres have faced competition from larger centres and out of town centres. (2007/2008 AMR)
29	High level of in and out commuting	Out commuting is increasing. 36,800 people commute into Luton and southern Central Bedfordshire 50,800 commute out of the area. Luton:29,500 in-commute & 28,000 out-commute High levels of people commuting by private car or van in comparison with UK averages, and low levels of bicycle use. (The Luton, Dunstable and Houghton Regis Local Transport Plan 2006-2011)
30	Low employment levels	Luton is below the regional and national average. Southern Central Bedfordshire has experienced a slump in the last year, to below the regional and national average (NOMIS)
31	Low incomes	Luton average pay is lower than neighbouring areas, regional and national averages (NOMIS)
32	Low education achievement	Southern Central Bedfordshire has witnessed a decline in the higher qualifications (falling below the benchmarks). Luton consistently has levels of academic achievement below the benchmarks (including those with no qualification) though has a greater percentage of other foreign or professional, qualifications than it's neighbours, region or nation. (NOMIS)

2.5 This SA used the SA Framework in the Scoping Report, January 2009, which contains 15 objectives, listed in Table 3 below. The Core Strategy Objectives, Development Strategy and the Core Policies were then appraised against these objectives.

Table 3: SA Scoping Report Sustainability Objectives

Sustainability Objectives for Luton and South Beds SA Framework		Soc	Env	Eco
1	To maintain and enhance biodiversity		✓	
2	To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB		✓	
3	Protect and enhance air, soil and water resources		✓	
4	Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk	✓	✓	✓
5	Adapt to and mitigate against the impact of climate change	✓	✓	✓
6	Increase resource efficiency and reduce resource use and waste	✓	✓	✓
7	Maintain, enhance and deliver, new green infrastructure including green open space	✓	✓	

8	To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	✓	✓	✓
9	Reduce poverty and inequality and promote social inclusion	✓		✓
10	Reduce both crime and fear of crime	✓		✓
11	To encourage healthier lifestyles and reduce adverse health impacts of new developments	✓		✓
12	Provide decent, affordable and safe homes for all	✓		
13	Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	✓		✓
14	To provide and encourage the use of sustainable integrated transport systems, improve access and mobility	✓	✓	✓
15	To promote employment, learning, skills and innovation	✓		✓

2.6 The SA is a qualitative exercise and the exact nature of impacts is, in some cases, uncertain given the strategic level of the policies. For that reason, professional judgment has been used to ensure the appraisal has a balanced perspective. Such professional judgements were informed by the evidence in the Scoping Report, technical reports and advice from other agencies.

2.7 The various Core Strategy options and policies were tested against the fifteen SA objectives contained in the SA framework, with comments made on the predicted social, economic and environmental effects of the options. The likely effects of each option were scored according to the criteria below.

++	Option will result in a significant positive effect on the SA objectives
+	Option will result in a minor positive effect on the SA objectives
+?	The effect of the option is dependant on implementation, but if there were to be an impact, it would most likely be positive or minor positive.
0	Neutral or negligible effect
?	Relationship between the SA Objective and the Option is unknown, or there is not enough information to make an assessment
-?	The effect of the option is dependant on implementation, but if there were to be an impact, it would most likely be negative or minor negative.
-	Option will result in a minor negative effect on the SA objectives
--	Option will result in a significant negative effect on the SA objectives

2.8 The options were appraised in terms of the significance of their effects giving consideration to the probability, duration, frequency and reversibility of the effect. The appraisal included consideration of measures to prevent, reduce or offset the adverse effects of the options and its results are presented in Appendix 4 and 5.

Difficulties encountered

- 2.9 No major difficulties were encountered when undertaking the appraisal of the Core Strategy. However, the nature of the effect of some of the options assessed, mainly those with wide strategic nature have been difficult to predict against more site-specific SA objectives.

3. Sustainability Appraisal Findings

Introduction

- 3.1 The following section of the report addresses the key component parts of the present Core Strategy: the strategic objectives, the development strategy and the thematic policies. The implications of the infrastructure delivery strategy have been taken into account as part of the wider appraisal. For each component a short introduction is given on the policy background, followed by a summary of previous Sustainability Appraisal findings (both at Issues and Options and Preferred Options stages) outlining where this has led to changes in policy direction. A summary of the sustainability appraisal findings for the Core Strategy Submission is then given, together with some concluding remarks on the policy.
- 3.2 The appraisal of the Core Strategy Submission covers the appraisal of the significant changes that have been made to the emerging Core Strategy since the preferred options stage.
- 3.3 The SEA Directive requires a number of procedural elements to be followed. The checklist in Appendix 6 of this report illustrates whether the SEA Directive requirements have been met.

Appraisal of Strategic Objectives

Background

- 3.4 The strategic objectives set out how the Core Strategy's vision will be achieved and provides the context for developing the policies. They are designed to enable the realisation of corporate and community aspirations within the planning period. The way in which the objectives will be attained is described by the delivery strategy that also includes contingency planning to ensure achievement across a range of different and future scenarios.

Influence of Issues and Options appraisal

- 3.5 The Issues and Options consultation document contained details of the proposed Vision for the Core Strategy. It was based on a combination of the visions from the two Sustainable Community Strategies for the Luton and southern Central Bedfordshire areas. However, the strategic objectives did not appear for consultation until the Preferred Options consultation in April 2009.

Influence of Preferred Options appraisal

- 3.6 The Core Strategy Preferred Options consultation document set out eight strategic objectives aimed at achieving the proposed Vision. These objectives were appraised for their sustainability implications and the findings are set out in the Preferred Options SA.

- 3.7 In general terms the greatest level of compatibility between the strategic objectives and the SA objectives occurred on socio-economic matters. Incompatibility generally occurred regarding the natural environment as many of the strategic objectives promote new development, although some strategic objectives afford the natural environment a degree of protection. The appraisal of the strategic objectives also resulted in some general recommendations for consideration in developing the policy direction of the Core Strategy and other LDF documents. These have been addressed in so far as they relate to the Core Strategy and issues for other LDF documents will be addressed in due course.

Appraisal of pre-submission document

- 3.8 The pre-submission Core Strategy contains nine strategic objectives. These are:

<p>SO1: To manage the natural growth of the area to help deliver sustainable and integrated communities.</p> <p>SO2: To deliver a consistent supply of housing and range of housing types and tenures to help ensure greater affordability and choice.</p> <p>SO3: To increase job opportunities in the area through an improvement of its image, skills, connectivity and quality of employment premises.</p> <p>SO4: To improve strategic and local connectivity through the delivery of major transport infrastructure, improved access to existing strategic transport facilities, efficient integrated public transport and new sustainable transport opportunities.</p> <p>SO5: To ensure the existing communities and new development are supported by a range of cost effective and well supported community and social facilities in step with changing needs.</p> <p>SO6: To revitalise and support the delivery of 4 vibrant, dynamic, distinctive, safe and popular town centres.</p> <p>SO7: To deliver <i>development</i> which offers the highest level of protection for and access to the natural environment to enable greater enjoyment of this resource.</p> <p>SO8: To require sustainable development and design quality, including opportunities to use renewable and decentralised energy, in order to help minimise the area's carbon footprint and to mitigate and adapt to climate change.</p> <p>SO9: To improve the quantity and quality of green infrastructure by providing a network of spaces appropriate both for existing and new urban areas and also for improving biodiversity.</p>
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- 3.9 The first eight of these strategic objectives were the same or very similar to those appraised at Preferred Options Stage, with only minor wording changes. The compatibility test for strategic objectives SO1 to SO7 therefore remains as per the Preferred Option SA. Objective 8 has been redrafted and the final strategic objective is a new one. Table 4 below contains the compatibility test for objectives SO8 and SO9.

3.10 Amended objective 8 emphasises those areas where planning development can and is expected to make a contribution towards climate change. New strategic objective SO9 is not incompatible with any of the SA objectives and in addition to the environmental protection it offers, it is also compatible with some of the socio-economic SA objectives. This objective has the potential to address a level of incompatibility in those objectives promoting new development particularly concerning biodiversity and climate change.

Table 4: Appraisal of Core Strategy Objectives 8 and 9

	SA objectives	Core Strategy objective 8	Core Strategy Objective 9
1	To maintain and enhance biodiversity	✓	✓✓
2	To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	0	✓✓
3	Protect and enhance air, soil and water resources	✓✓	✓✓
4	Ensure that new developments avoid areas which are at risk from flooding and natural storage areas	✓	✓
5	Adapt to and mitigate against the impact of climate change	✓✓	✓✓
6	Increase resource efficiency and reduce resource use and waste	✓✓	0
7	Maintain, enhance and deliver, new green infrastructure including green open space	0	✓✓
8	To identify, protect, maintain and enhance the historic environment and cultural assets	0	✓
9	Reduce poverty and inequality and promote social inclusion	0	✓
10	Reduce both crime and fear of crime	0	0
11	To encourage healthier lifestyles and reduce adverse health impacts of new developments	0	✓✓
12	Provide decent, affordable and safe homes for all	0	0
13	Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	0	✓
14	To provide and encourage the use of sustainable integrated transport systems, improve access and mobility	0	0
15	To promote employment, learning, skills and innovation	0	0

Table key:

✓✓ Compatible	✓ Partially/Potentially compatible
0 Neutral	? Unknown
× Partially/Potentially incompatible	×× Incompatible

Appraisal of the Development Strategy

Background

- 3.11 An early part of the process of developing the growth strategy involved identifying land that could potentially be suitable for development. This was done by inviting landowners, developers and other interested parties to put forward sites for consideration.
- 3.12 Although the focus of the site search was informed by the areas of search identified in the Milton Keynes South Midlands Sub-Regional Strategy, there were no specific constraints put upon the invitation for submission of sites as the idea was to reveal as many options as possible at an early stage. Additional sites also emerged through later consultation responses and SA work. The sites that emerged through the site search and were consulted on through the Issues and Options stage are shown in Figure 1.

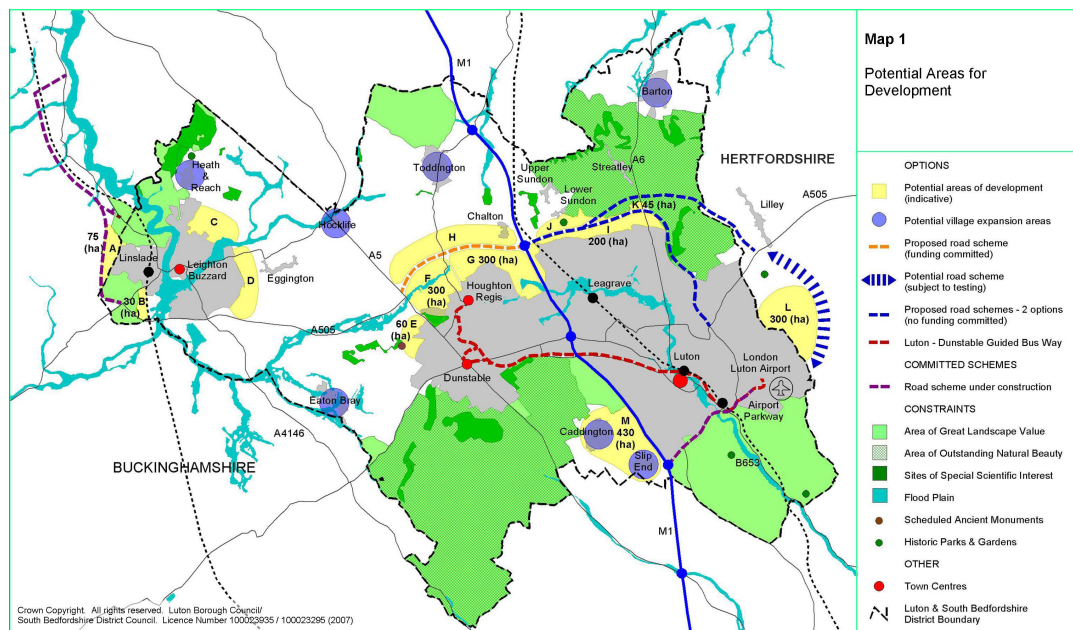


Figure 1: Core Strategy Issues and Options Key Diagram

- 3.13 Using the results of the site search, ten alternative approaches to accommodating development were constructed. These ten options involved a combination of the sites and varied in terms of their proposed geographical spread and land take. The options were set out for consultation at the Issues and Options stage and are duplicated below.

- Option 1:** Focus development within the bypasses with minimum land-take (at least 50 dwellings per ha) within new development areas (north of Dunstable, Houghton Regis and Luton).
- Option 2:** Focus development within the bypasses with maximum land-take (30

dwellings per ha) within new development areas (near Houghton Regis, Dunstable and Luton and around Leighton Linlade).

Option 3: Focus development within and beyond bypasses with minimum land-take, the proposed urban extension areas being located north of Houghton Regis on either side of the proposed A5-M1 link.

Option 4: Focus development within and beyond bypasses with maximum land-take (at least 30 dwellings per ha) with new development areas located to the north of Houghton Regis and Luton.

Option 5: Focus development near town centres and main employment areas with minimum land-take. New development areas located near Leighton Linlade, Houghton Regis, Dunstable and Luton to be developed with high capacity of 50 dwellings per ha.

Option 6: Focus development on maximising proximity to town centres and main employment areas with maximum land-take (30 dwellings per ha).

Option 7: Focus development on achieving a wide distributional spread with minimum land-take, the proposed development areas being spread across the Joint Area located outside Leighton Linlade, Houghton Regis, Dunstable and Luton towns.

Option 8: Focus development on achieving a wide distributional spread with maximum land-take, the proposed development areas being spread across the Joint Area located outside Leighton Linlade, Houghton Regis, Dunstable and Luton towns.

Option 9: Focus development on Luton with minimum land-take with new development areas located south and east of Luton respectively.

Option 10: Focus development on Luton with maximum land-take.

Influence of Issues and Options Appraisal

- 3.14 The appraisal of the options is set out in the Issues and Options Core Strategy and its SA report. The Issues and Options SA report considered Spatial Option 7 (based on achieving wide distributional spread with minimum land take) to be the best spatial option. This was due to its good performance under most of the economic and social factors and some positive effect under environmental themes.
- 3.15 The Issues and Options SA report made a number of recommendations to enhance the sustainability performance of Spatial Option 7, contained in Appendix 1 of this report.
- 3.16 The report's recommendations with regard to village settlements was less conclusive with 'positives' and 'negatives' for both options (incorporate villages close to the urban fringe into the new development or create green buffers between new development areas and existing villages).

- 3.17 In employment terms, the report showed again 'positives' and 'negatives' on the two options (safeguard existing employment sites or encourage employment development land within urban extensions).
- 3.18 The Issues and Options SA concluded that distributing additional retail, cultural and leisure development between existing town centres but with the majority of development going to Luton would provide the best sustainable outcome. This option would enhance the vitality and viability of all town centres and therefore increase opportunities for economic prosperity across the Core Strategy area. This distribution of town centre growth accorded with the Milton Keynes and South Midlands Sub-Regional Strategy still relevant at the time.
- 3.19 In addition to the above, the SA tested options relating to where people will work, how people will travel, the role of communities and neighbourhood health and inclusiveness.

Influence of Preferred Options Appraisal

- 3.20 In the course of preparing the Core Strategy Preferred Options, evidence gathered through the Issues and Options consultation responses and technical studies revealed that:
- a) significant amounts of green and other infrastructure will be needed to support growth. When taken together with the various landscape constraints and the location of the urban extensions, it was considered more appropriate to plan for an average density of 40 dwellings per hectare in order to integrate development within the existing area and still provide a coherent transition from the urban environment to the countryside; and
 - b) greater flexibility should be applied to housing figures to ensure the delivery of housing targets. This meant a contingency provision was needed to ensure the housing requirements are met.
- 3.21 These concerns left the Joint Committee with two options: either to proceed with Spatial Option 7 but provide a lower level of growth than that required by the sub-regional strategy; or retain the principles embedded in Spatial Option 7 but with a greater land take i.e. Spatial Option 8. Given that housing requirements are expressed as minimum targets, planning for a lower level of housing was not considered a realistic option. Therefore, Spatial Option 8 was taken forward as the basis for accommodating growth.
- 3.22 Spatial Option 8, together with the emerging spatial objectives and general policy direction, was therefore tested through the Preferred Options Core Strategy and accompanying Preliminary SA Report, March 2009.
- 3.23 The Preferred Options SA report notes that the levels of development to be accommodated through the growth agenda would be significantly detrimental to the natural environment. However, if the sub-regional

growth strategy is to be delivered, a key aim of the Core Strategy is to ensure that the distribution of new development is environmentally sustainable. It also points out that in socio-economic terms the Core Strategy is likely to be of benefit. The report identifies potential effects of the Core Strategy and makes a number of recommendations as summarised in Appendix 2. The Preferred Options SA highlights that Stage B4 of the SA process (Evaluation of Effects) was to be detailed in the final SA report to accompany the Core Strategy Pre-Submission.

- 3.24 In addition to the SA of the growth strategy options described above, a separate but related exercise was undertaken to assess the relative merits of each of the sites or areas that emerged through the site search process. Known as the “Site Assessment Matrix”, this process established 27 criteria aimed at assessing a broad range of sustainability-related issues. While not part of either the Issues and Options or Preferred Options Sustainability Reports, the Site Assessment Matrix is nevertheless a key part of the wider sustainability appraisal of growth options.
- 3.25 The Site Assessment Matrix that was prepared alongside the Preferred Options document helped inform the choice of preferred sites and strategies. The conclusions of the Matrix on the most appropriate sites to take forward at that stage fed into the final Preferred Options report.

Appraisal of submission document

- 3.26 On 6th July 2010, the Secretary of State revoked Regional Spatial Strategies (RSS). This revocation meant that this SA could go back to explore different levels of growth outside the minimum housing figures in the RSS, including Option 7 of the Core Strategy Issues and Options stage.
- 3.27 The Secretary of State decision also meant that the area of search in the RSS no longer applied and any allocations outside the Luton and southern Central Bedfordshire would need to be resolved with adjoining local authorities outside the overall regional context. PPS12 makes clear that spatial planning objectives for local areas should be coherent with the development plans prepared by neighbouring authorities, where cross boundary issues are relevant. Although the Sustainability Appraisal should not be too constrained by boundaries, it should make an assessment of options which have a good prospect of delivery.
- 3.28 The preferred options SA identified that the East of Luton extension into North Hertfordshire would offer most in terms of regenerating Luton town centre and CS objectives. However, the community and its representatives rejected this proposal. The development scenarios assessed in the submission SA changed given the opposition of the community and North Hertfordshire District Council to a Strategic Site Specific Allocation of the scale proposed in the Preferred Options and the review of the housing figures.

- 3.29 Notwithstanding the above changes, the main principle behind the Development Strategy that new development must be distributed in a sustainable manner remains unaffected. This is guided by the following directions:
- a) New development will be distributed to strengthen the established network of settlements, while new development in the countryside will be strictly controlled.
 - b) Priority will be given to the reuse of previously developed land and buildings within urban areas, followed by other suitable land within urban areas.
 - c) When locating new development, preference will be given to sites that are accessible by a range of transport modes.
 - d) The importance of existing town/suburban centres will be strengthened.
 - e) New development will be focused in the existing built up areas until 2012/13 when new development in the form of Strategic Site Specific Allocations (SSSAs) will commence in phases. The strategy allocates SSSAs in the main conurbation: north of Luton, north of Houghton Regis and a SSSA to the east of Leighton Linlade. In addition, the Strategy recommends a SSSA to the East of Luton to be allocated through the North Hertfordshire LDF.
 - f) Opportunities for extending the villages to facilitate appropriate development required to support rural communities will be identified through other LDF documents, such as the Site Allocations DPD. The strategy identifies the main villages where such development will be focused.
 - g) Integrating new development with sustainable transport linkages.
 - h) Provision of employment to accompany housing growth, maximise airport opportunities, increase employment opportunities outside Use Class B (i.e. retail, tourism, education etc) and diversify the economy.
- 3.30 The key priorities for the development area include the provision of housing for the existing population and its growth needs, the relief of current and future congestion, the provision of new employment opportunities, the protection of the surrounding countryside, the provision of green infrastructure and the strengthening of existing centres.
- 3.31 The delivery of the strategy relies on a considerable amount of infrastructure requiring significant funds. Ensuring a combination of funding sources will be essential to the delivery of the strategy under the current austerity measures on Government spending. Relying on public funding sources for the delivery of the strategy will be more difficult. This infrastructure provision is addressed through a combination of measures:
- a) The preparation of an Infrastructure Delivery Plan for the strategy area;
 - b) Public funding sources;

- c) Developer contributions;
- d) Efficient use of services and facilities including co-location of services and community hubs;
- e) Location of new development in accessible locations; and
- f) Phasing of development to support the timely delivery of infrastructure.

3.32 The Core Strategy will increase pressures on the environment that need to be prevented, mitigated or compensated in that order of preference where they are likely to arise.

Selection of the chosen strategy

3.33 The strategy in the Submission document has been selected because it is considered to provide the best overall alignment of SA objectives and CS objectives while responding to the growing needs of the population. In particular:

- a) Providing a long-term view in the direction of growth to provide certainty and secure infrastructure as encouraged by PPS12;
- b) Maximising airport opportunities and employment diversification;
- c) Distributing required development to promote town centre regeneration, minimise trip generation and address congestion; and
- d) Ensure development is planned to support green infrastructure.

Where will development happen and when

3.34 Core Policy CS1 sets out the approach to accommodating development, and is represented graphically on the key diagram included below:

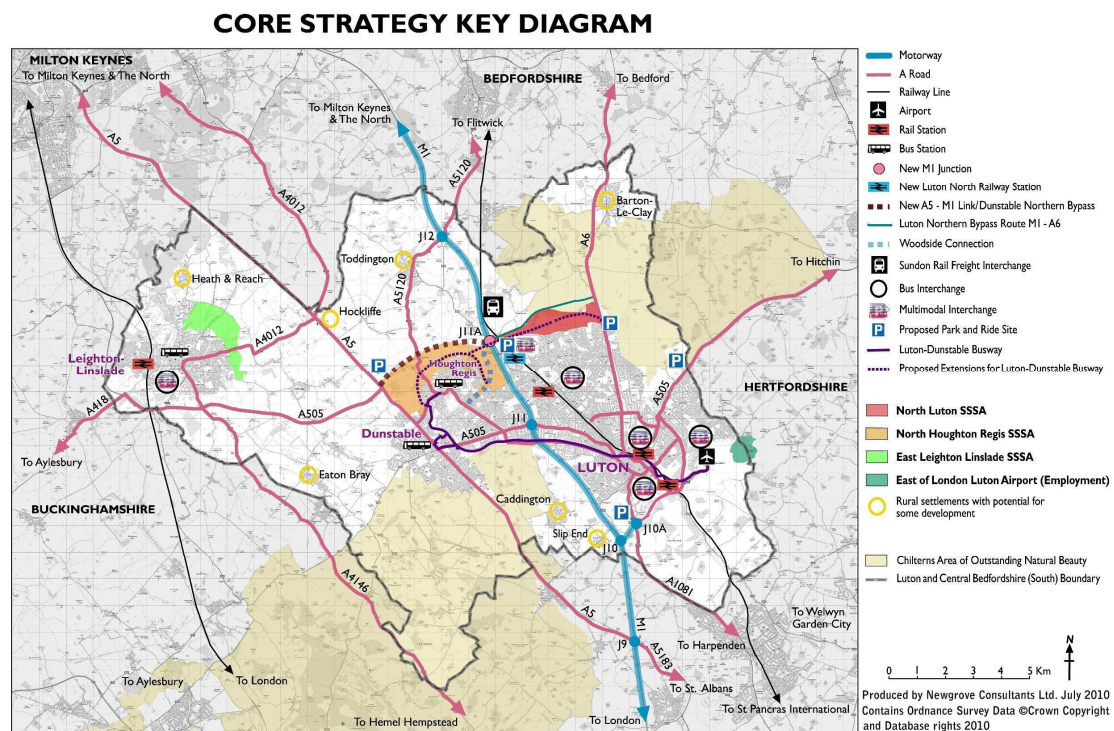


Figure 2: Pre-submission key diagram, September 2009.

- 3.35 The Core Strategy is required to deliver at least 23,000 new dwellings for the period 2011 to 2026. It is anticipated that it will be delivered by development in the existing urban areas, rural areas and SSSAs as identified below.

	2011/12-2020/21	2021/22-2025/26	Total
Existing urban area	9,962	3,100	13,062
Rural area	388	250	638
SSSAs	5,550	3,900	9,450
Total	15,900	7,250	23,150

- 3.36 The Development Strategy plans to deliver 9,450 new dwellings in three mixed use SSSAs during the period 2011 to 2026. The Strategy identifies 1,077 ha to be released from the Green Belt although only a proportion of the land is proposed for allocation during the plan period.

	Size in hectares	Number of dwellings	Phasing (Start)
North of Houghton Regis	Site 1: 300 Site 2: 280	5,150	2011/12
East of Leighton Linlade	240	2,500	2011/12
North of Luton	257	1,800	2015/16
Total	1077	9,450	

- 3.37 The Development Strategy also identifies a further 4,050 new homes beyond the plan period. They are not allocated within the Core Strategy but are referred to as a contingency within the Contingency Plan for Housing and Employment Areas Delivery Strategy.

	Number of dwellings	Phasing (Start)
North of Houghton Regis	1,850	After 2026
North of Luton	2,200	After 2026
Total	4,050	

- 3.38 The three mixed-use SSSAs allocate 55 ha of employment land and a further 75 ha are identified on two employment SSSAs. The total of employment land is expected to deliver 19,000 new jobs to 2026.

SSSAs	Size in ha	Use classes	Phasing start	No .of jobs
North of Houghton Regis	30	B1/B2/B8	2014/15	19,000
East of Leighton Linlade	16	B1/B2/B8	2014/15	
North of Luton	13	B1/B2/B8	2021/22	
East of London Luton Airport	35	B1/B2/B8	2016/17	
Sundon Quarry	40	B8	2016/17	
Total	134			

- 3.39 The Core Strategy allows for 17 hectares of employment land within North of Houghton Regis (10ha) and North of Luton (7ha) to help

address any events that may affect the delivery of employment land needed to 2026.

Appraisal of the selected strategy

- 3.40 A number of options have been identified following the findings of previous SA stages, Core Strategy consultation and technical studies. The Core Strategy contains SSSAs and the appraisal process needs to consider the various site options to identify the most appropriate site based on sustainability considerations and the spatial pattern of development set out in the Core Strategy.
- 3.41 The Councils made a second call for sites in early summer 2010 to update information on potential sites for allocation. Landowners, developers and interested parties were invited to put forward sites without being constrained to any area of search. The call for sites did not bring forward any new strategic sites neither changes to known sites.
- 3.42 The SA used the assessment criteria in the Site Assessment Matrix to help identify the likely effect of the site options against the SA Framework. Site Assessment Matrix is available as a separate document. It has been updated with site-specific information from the Preferred Options consultation and latest available evidence studies.
- 3.43 The SA criteria was organised around a first tier of major constraints and opportunities significant enough on their own to:
- a) pose a threat to the strategic environmental objectives; or
 - b) contribute to main strategic objectives regarding regeneration, green infrastructure and alleviation of congestion.
- 3.44 A second tier of criteria addressed the potential contribution of the sites to the existing character and needs of the area. A third tier looked at site deliverability.
- 3.45 Tables A4.1 to A4.3 in Appendix 4 test the different site options against the SA framework and illustrates that all sites will result in a significant detrimental effect on the environment. However, given the need to address population growth requirements, infrastructure shortfalls and employment imbalances, the SA assessment attempts to provide the distribution of growth that would cause the least amount of harm to the environment. Some of the sites perform better than others in social and economic terms and some are able to incorporate mitigation measures that minimise negative environmental impacts. Based on the assessment of Tables A4.1 and A4.2, site areas C&D, F, G, I and L are recommended as the most sustainable options.
- 3.46 Table A4.3 illustrates the correlation between site scale and dependence on major infrastructure but it will be the information in a finalised Infrastructure Delivery Plan that would provide the necessary

information to assess delivery within the plan period. The sites tested in tables A41 to A4.3 are:

Site A – West of Leighton Linlade: Located in Aylesbury Vale between the western edge of Leighton Linlade and the A4146

Site B – South West of Leighton Linlade: Located to the south of Leighton Linlade, the site is located within the eastern half of the triangle formed by the A418, A4146 and the railway line.

Site C – North East of Leighton Linlade: Located to the north east of Leighton Linlade between Broomshill Farm and the Clipstone Brook, with the narrow gauge railway running through the middle.

Site D – East of Leighton Linlade: Located in the southern eastern edge of Leighton Linlade, extending from Clipstone Brook in the north to the A505 in the south.

Site E – North West of Dunstable: Located to the north west of Dunstable and includes the Maiden Bower Scheduled Ancient Monument (SAM). Primary access to the A5 is gained from French's Avenue.

Site F - North West of Houghton Regis: Located between the A5 to the west and the A5120 (Bedford Road) to the east. The south of the site is bounded by the existing urban area of Dunstable and Houghton Regis and the northern boundary is the proposed A5-M1 link road.

Site G: North East of Houghton Regis Located to the north of Houghton Regis between the M1 to the east and the A5120 to the west. The southern boundary will comprise the existing urban edge of Houghton Regis and Lewsey Farm and the northern boundary will be the proposed A5-M1 link road.

Site H - North of A5 M1 Link: Located north of Houghton Regis and Dunstable beyond the proposed A5-M1 link road, extending from the M1 in the east to the A5 in the west. The site will encompass Chalton.

Site I – North of Luton: Located to the north of Luton from the M1 in the west to the A6 in the east with the proposed North Luton Bypass as the northern boundary.
rephrase this

Site J – North of North Luton Bypass: Located to the north of Luton, north of Site I and the proposed North Luton Bypass, south of Lower Sundon

Site K – North East of Luton Bypass: Located to the north of Luton beyond Site I and the proposed North Luton Bypass. The site is surrounded by AONB to the north.

Site L – East of Luton: Located to the east of Luton, extending from the A505 in the north to Luton Airport in the south. The eastern boundary would be Lilley Bottom and the site encompasses the villages of Mangrove Green, Cockernhoe and Tea Green.

Site M – West of Luton: Located to the west of Luton, between the M1 and Chaul End Road and to the north of the villages of Caddington and Slip End.

3.47 The Sustainability Appraisal of sites indicates that sites A, H, J and K had the greatest environmental impact and the least ability to mitigate that impact. Site E is also constrained and the actual scope for development, taking into account the significant mitigation measures that would be necessary, was considered to be very limited. On this basis, sites A, E, H, J and K have not been taken forward for further assessment at this stage.

3.48 On this basis, these sites are considered least preferable as contingency options.

Appraisal of development options

3.49 There were a number of possible scenarios to be tested based on the sites discussed earlier and the Luton and southern Central Bedfordshire work on urban housing capacity and draft Infrastructure

Delivery Plan. However, a number of set conditions outside the Councils' control also influenced the choice of scenarios.

The givens	The consequences
1. RSS figures and area of search revoked	a) Shortened plan period
2. Infrastructure and national planning advise uncertainties	b) Sites particularly affected by cuts on infrastructure funding and unknowns on the forthcoming planning reform and its localism agenda are: East of Luton, North of Luton, North of Houghton Regis and Century Park
3. Lack of short term government funding	c) Can explore I&Os Sustainability Appraisal recommended option for minimum land take – There is an assumption that the Core Strategy needs to provide for the natural growth of the population as a minimum
4. The strategy is dependent on large sites in need of major infrastructure.	d) East of Luton SSSA no longer a valid option to progress given to the lack of joint working arrangement with North Hartfordshire, demonstrated political and community opposition and the area of search directing growth there had been revoked.

3.50 All the possible scenarios were tested for the Submission Core Strategy 2010 with the exception of the Core Strategy Preferred Options scenario and the scenario which would provide less than the development needed to accommodate the natural growth of the population. The potential scenarios were:

1. Maximum geographical distribution with maximum land take

a) Core Strategy Preferred Options scenario with sites: North of Houghton Regis, North of Luton, East of Luton and East of Leighton Linlade.

b) North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade.

Both scenarios would mean the provision of 51% more dwellings than the needed under the circumstances described in paragraph 3.49.

Source of housing	Maximum geographical distribution with maximum land take	
	a)	b)
NoHR	7,000	7,000
NL	6,000	6,000
EoLL	2,500	2,500
WL	0	5,500
EoL	5,500	0
Urban capacity and villages	13,700	13,700
Total	34,700	34,700
% over the 23,000 dwellings needed to 2026	51%	51%

3.51 These two scenarios were part of the SA work undertaken following the Preferred Options consultation in 2009. Then, the Council had a given regional minimum housing target and area of search for allocation of sites. The draft SA concluded that all sites would have a negative environmental impact if developed and recommended progressing into scenarios only those which provided the greatest positive effect on the main objectives of the strategy and had the capacity to be mitigated against. West of Luton did not score as well as the other sites and given that sufficient land would be provided by the sites in scenario 1a), scenario 1b) did not progressed to be tested. See **Appendix 6** for 2009 Draft SA Site and scenario testing. The summary of significant effects concluded that:

1. All three scenarios perform similarly against main environmental protection objectives (Objectives 1, 2 and 3) and require considerable mitigation to overcome potential negative impacts.
2. Given the scale and location in relation to existing centres, all three scenarios have the potential to contribute towards environmental and resource management objectives (Objectives 4 and 7). However, it is uncertain how Scenario 2 could contribute towards these objectives at the same level as Scenarios 1 and 3. The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. Although Scenario 2 strengthens the Core Strategy commitment to develop previously developed land first, this may be undermined by the need to identify further smaller sites in the rural areas and around towns.
3. The Core Strategy should make clearer identification of resilient Green Belt boundaries following the identification of development sites that that future Green Belt boundaries are defensible.
4. The same happens in relation to social objective 9 where the effect of increased urban capacity needs to be assessed so that the cumulative effect of small sites does not place undue pressure on existing facilities, nor does it result in unacceptable development densities.
5. Scenarios 1 and 3 are likely to provide the greatest contribution towards affordable housing (Objective 12). Suitable thresholds and/or rural exception sites would be required to yield a similar level of contribution from Scenario 2.
6. Scenario 2 may also result in lost regeneration opportunities for Luton town centres (SA objective 13).
7. The SSSAs in all three scenarios are likely to positively contribute to objective 14. Given the greater reliance on smaller sites and greater dispersal of sites into the rural area Scenarios 1 and 3 perform better against this objective.
8. Neither of the scenarios contributes significantly to promoting employment and skills innovation (SA objective 15). Scenarios 2 and 3 may reduce opportunities to build a knowledge-based economy related to Luton's airport and university.

3.52 Scenario 1a is no longer a deliverable option as noted in paragraph 4.50 and is now discarded without further testing.

2. Maximum geographical distribution with minimum land take scenario with sites: North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade.

Given the context set out in paragraph 3.49, East of Luton is no longer an option and West of Luton becomes the next better scoring site to be included in this scenario. Also, it is unlikely that the SSSAs to the North of Houghton Regis and North of Luton will be developed in their entirety during the plan period. This scenario would provide 24.50% of the houses needed during the period 2026 to accommodate the natural growth of the population.

Source of housing	Maximum geographical distribution with minimum land take
NoHR	5,150
NL	1,800
EoLL	2,500
WL	5,500
EoL	0
Urban capacity and villages	13,700
Total	28,650
% over the 23,000 dwellings needed to 2026	24.50%

3. Reduced geographical distribution and land take with sites:

- a) North of Houghton Regis, North of Luton and East of Leighton Linlade.
- b) North of Houghton Regis, West of Luton and East of Leighton Linlade.
- c) North of Houghton Regis, North of Luton and West of Luton
- d) North of Houghton Regis and West of Luton
- e) North of Houghton Regis and North of Luton

All options under this scenario have been tested with the exception of option e) which does not provide sufficient housing to meet the natural growth of the population 23,000 new homes to 2026 and has been discarded.

Source of housing	Reduced geographical distribution and land take				
	a)	b)	c)	d)	e)
NoHR	5,150	5,150	5,150	5,150	5,150
NL	1,800	0	1,800	0	1,800
EoLL	2,500	2,500	0	0	0
WL	0	5,500	5,500	5,500	0
EoL	0	0	0	0	0
Urban capacity and villages	13,700	13,700	13,700	13,700	13,700

Total	23,150	26,850	26,150	24,350	20,650
% over the 23,000 dwellings needed to 2026	0.65%	17%	13%	6%	-10%

4. Reduction on urban capacity

A reduction of urban capacity scenario was added to the assessment table of development options. This is not an option to provide a development strategy on its own but it provides a variation of circumstances worth assessing alongside development strategy options. This would help inform monitoring of urban capacity changes and implementation of different development options.

3.51 The SA for the Submission Core Strategy 2010 tested the scenarios:

<p>Option 1: Maximum geographical distribution with maximum land take – High level of development (34,700 dwellings) with four SSSAs: North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade.</p> <p>Option 2: Reduced geographical distribution and land take – Medium-high level development with 3 SSSAs: a) North of Houghton Regis, West of Luton and East of Leighton Linlade (26,850 dwellings) or b) North of Houghton Regis, North of Luton and West of Luton (26,150 dwellings).</p> <p>Option 3: Reduced geographical distribution and land take – Low level development with 3 SSSAs: a) North of Houghton Regis, North of Luton and East of Leighton Linlade (23,150 dwellings) or with 2 SSSAs: b) North of Houghton Regis and West of Luton (24,350 dwellings)</p>

3.52 **Table A4.4 in Appendix 4** assesses the scenarios against the SA Framework. The summary of significant effects concludes:

<p>SA objective 1</p> <p>At strategic level all the sites will have similar impact on biodiversity the only difference is the scale of the land take and level of development. Although all sites will have the capacity to address Green Infrastructure deficits in the area which could help enhance biodiversity, Options 1, 2a and 3a would help deliver Leighton Linlade’s Green Wheel and identified need for green corridors north of Luton. No corridors have been identified to the West of Luton and any links are likely to be difficult to the barrier created by the M1.</p> <p>Potentially, a lower urban capacity would reduce pressure on urban green spaces and help maintaining biodiversity in the urban area.</p> <p>SA objective 2</p> <p>Reducing the land allocation in North Luton and West of Luton would reduce pressure on AONB and sensitive landscapes to the east of Luton and North of West of Luton.</p> <p>At the proposed scale, West of Luton would result on the coalescence of Caddington and Slip End with Luton to the detriment of townscape and character aims in objective 2.</p> <p>A reduction in urban capacity presents potential positives and potential negatives for objective 2. The higher the urban capacity the greater the pressure on townscapes and historic built environment. The smaller scale of urban sites may</p>
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mean less capacity to mitigate against loss of local character and negative effect on townscape which cumulatively could have a significant effect. On the other hand it alleviates development pressures to build non previously developed land.

Given the level of development needed even if scenarios were limited to natural growth, planned urban extensions may have a greater scope to respond to this objective than small urban sites subject to individual planning applications. However, the cumulative effect of smaller urban sites is better deal with through development management policies.

SA objectives 1& 2

Options 2a) and 3a) provide opportunities to restore and enhance former quarry areas at Houghton Regis and East of Leighton Linlade.

SA objective 3

The location of sites in and around the urban areas is likely to minimise pollution of these resources but need to consider the effect of pollution from construction stage.

Option 1 is unlikely to mitigate against pollution and enhance air quality given the lack of transport infrastructure to support the level of growth proposed. Any scenario with West of Luton (1, 2a, 2b and 3b) will have a negative effect on water resources unless a solution is found for the transfer to East Hyde.

Sites in and the urban areas are likely to minimise use of resources but need to consider the effect of pollution from construction stage.

On the other hand, the ability of smaller urban sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative negative effect on this objective could be significant.

SA objective 4

The screening of possible SSSAs eliminated sites in areas at risk of flooding. All sites could accommodate integrated sustainable infrastructure measures and renewable energy technology, which would minimise their effect on objective 4 and may be able to incorporate measures to help reduce flood risk in some areas.

Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water.

SA objectives 5 & 6

The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change with the exception of Option1 which is unlikely to be accompanied by the required transport infrastructure. The rest of the climate change elements are addressed as part of development management environmental policies.

With regards to land efficiency, the Core Strategy sets clearly its development strategy and, considering the level of development needed to support natural growth as a minimum, the strategy generally supports the preservation of the Green Belt's openness through its direction of growth.

Option 1 proposes a maximum distribution of development across the area with maximum land take which is no longer supported by major transport infrastructure. This was a given during the Preferred Options due to the RSS figures. Other lower scenarios can now be explored that provide a more balanced approach between needed growth and environmental priorities.

Decreasing urban capacity will weaken the strategy's commitment to prioritise the development of previously developed land and enhance town centre services and facilities. The concentration of population on established service centres has associated efficiencies in the use of resources. The significance of the effect would

depend on the level of the reduction on urban capacity and on whether that reduction were to be directed to improve environmental conditions on identified pressure areas. Although, this would be better addressed in development management documents.

There is less capacity to incorporate integrated sustainable infrastructure as part of smaller urban and rural sites and therefore their cumulative effect should be assessed through the monitoring of development management policies.

SA objective 7

Option 1 provides the greatest opportunity to address green infrastructure and green corridor deficiencies across the plan's area. Although the effect of the locational approach of development options contributes to this objective, the direct effect is contained in development management policies.

While focusing development within the urban area reduces the impact on the surrounding countryside, it could lead to increased development pressure for urban green spaces which are important features of local green infrastructure.

The shortage of existing green space in the urban area would make any further loss significant effect. A reduction on urban capacity could have a positive effect against this objective.

SA objective 8

This is a site-specific issue relating to the design and layout of proposals. Master planning of SSSAs to ensure that historic and architectural assets and their setting are protected, preserved and enhanced. Policy CS8 on quality of design provides the principles to guide development to respect local character while providing high quality of design. This will be developed further through Development Management policies.

SA objective 9

Distribution of development and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address social inequalities. However, it is through employment Policy SC9 and Policy SC7 on social and community infrastructure where the Core Strategy addresses this objective.

Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites.

The causes of deprivation are varied and approaches other than spatial policies such as housing management, health and skill programs may be better suited to reduce deprivation.

SA objective 10

Distribution of development to in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address crime and fear of crime. However, it is through design Policy CS8, masterplanning for the Strategic Site Allocations a forthcoming design SPD and town centre master planning which the Core Strategy addresses this objective.

SA objective 11

With the exception of Option 1, the distribution of growth in all options and their focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, it is through Design Policy CS8, Green Infrastructure Policy CS10 and Social and Community Infrastructure Policy CS7 that improved access to services and facilities is provided for.

SA objective 12

The scale of development proposed is likely to result in a significant step change in the provision of affordable housing in the area. When preparing the master plans of

SSSAs, proposals should have regard to the tenure mix in the surrounding area to maximise opportunities to create sustainable mixed communities. Option 1 provides the greatest benefit against this objective.

A decrease in urban capacity is likely to increase certainty on the provision of affordable housing and minimise the reliance on urban capacity and the use of thresholds which could preclude smaller sites coming forward or being developed below the threshold.

SA objective 13

Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, given the lack of transport infrastructure to support the level of growth in option 1, and the potential coalescence of settlements to the West of Luton only option 3a) performs well against this objective.

A decrease in urban capacity may lead to less pressure to redevelop urban sites for housing purposes rather than other town centre or commercial uses.

SA objective 14

Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, it is unlikely that infrastructure will be available to deliver option 1 within the plan period. The other options have not been tested through transport modelling and not scoring is given in the appraisal table. It can only be assumed based on existing modelling findings that a reduction on number of dwellings with a scaled down transport infrastructure would provide the highest environmental gain. The assessment did not provide evidence which would favour a site over another but there remain concerns with the impact of West of Luton on the transport network showed in the transport modelling work.

Scenarios without West of Luton would remove concerns on the impact on the transport network.

SA objective 15

Distribution of growth in and around existing centres together with employment allocated in the SSSAs is likely to have a positive effect on employment, skills and innovation. However, it is through employment policy CS9, that the Core Strategy will meet this objective.

A decrease in urban capacity could reduce pressure on the release of employment and commercial land in the urban areas.

See also site-specific mitigation in Tables A4 to A43 in **Appendix 4**.

Appraisal of the selected employment strategy

- 3.53 Employment scenarios seek the location of employment near the largest concentration of population and strategic transport nodes as per the growth strategy direction. Therefore, options such as no employment in SSSAs, relying entirely on the redevelopment of employment sites are not reasonable options. Equally, with the amount of housing growth and the strategy's aspiration 'business as usual' is not a reasonable option other than for comparison.

- 3.54 The Employment Land and Market Assessment, March 2010 sets out two employment growth scenarios, which involve equal land intake but different mix of employment uses and therefore different job numbers.

Option 1: Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).

Option 2: Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).

- 3.55 In addition, two more options have been tested to assess the performance of mixed use SSSAs against only employment led SSSAs option. In practice, there will always be need for some only employment allocations to accommodate specific uses.

Option 3: Distribution of employment on mixed use SSSAs and employment led SSSAs

Option 4: Distribution of employment mainly on employment led SSSAs

- 3.56 Table A4.5 in **Appendix 4** assesses the four against the SA Framework. The summary of significant effects concludes:

Summary of significant effects:

SA objective 1: Option 3 is likely to contribute to the enhancement of biodiversity through the large green infrastructure expected to accompany the mixed-use SSSAs

SA objectives 3, 5 and 6: Option 1 performs relatively well against the protection and management of resources while option 2 is likely to reduce opportunities to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing uses with other employment uses which may be less resource intensive. Option 3 is likely to generate more energy and resource efficiencies and respond more effectively to climate change than option 4 which would depend mainly on development management policy targets.

SA objective 7: Mixed use SSSAs are expected to be accompanied by substantial green infrastructure.

SA objective 9: All four options will have a significant positive contribution towards this objective. However, Option 3 allows synergies between different uses to build on skills and education. Providing homes and employment together may help reduce access inequalities.

SA objective 10: Only option 3 contributes to this objective. Mixed-use SSSAs are likely to create 24hour environments where surveillance occurs naturally by the transit of people.

SA objective 11: Option 3 is likely to encourage walking and cycling by brining housing and employment together which is likely to lead to healthy lifestyles.

SA objective 13: Only option 1 is likely to have a significant positive effect on objective 13. A wider range of employment uses and a greater proportion of non-B employment uses are likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The LDF could provide greater certainty to business if its Development Plan Documents contained policies

regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses. Options 3 and 4 are both likely to affect positively this objective new employment sites can free space in the town centres for regeneration by providing new suitable employment spaces for those uses which do not need or are not suited to be in the town centre.

SA objective 14: Options 1, 2 and 4 have the potential to contribute positively to the achievement of this objective but only option 3 strongly contributes to this objective by minimising car travel, create opportunities for linked journeys, concentrate infrastructure provision and increase potential patronage for public transport.

SA objective 15: Although all options will help increase employment provision, option 1 and 3 will be likely to support the required environment to support learning, skills and innovation.

Selection of employment site options

- 3.57 The search for employment sites followed the same consultation process as the mixed use SSSAs and was supplemented by site evidence in the Employment Land and Premises Review (January 2008) and the Retail Study Update (January 2009).
- 3.58 The Employment Land and Market Assessment by Nathaniel Lichfield and Partners, March 2010 identifies a number of potential drivers of change that set the criteria for identification of sites:
- a) Expansion of Luton Airport and activities linked to this, which could increase demand for freight and support activities;
 - b) Provision of large, attractive, well accessed development sites to encourage relocations and speculative development;
 - c) High population growth from planned urban extensions, which could drive increased demand for services and jobs;
 - d) Much improved road/public transport infrastructure making the area a more attractive place in which to live and work;
 - e) Building on linkages with research and development institutions to create an area with more knowledge intensive focus; and
 - f) The ability to change perceptions of parts of the area through high quality new development (perhaps combined with more active promotion).
- 3.59 The study explores the options of redeveloping existing employment sites and some of the sites identified are part of the SSSAs. The study also identifies Sundon Quarry and Junction 10A as potential stand-alone employment sites.
- 3.60 The Luton Local Plan allocates employment land at Butterfield Park and exploring the potential expansion of this site is considered an option to be assessed.
- 3.61 Although the SSSAs to the east of Luton is no longer an option as explained earlier, Century Park gained outline planning permission in Autumn 2009 and this SA tested a small allocation for employment uses as an expansion of the existing allocated site.

3.62 Table A4.6 of **Appendix 4** assesses the potential employment sites against the SA framework. The options tested are:

- Option 1:** Sundon Quarry
Option 2: Junction 10A
Option 3: Expansion of Butterfield Park
Option 4: Expansion of Century Park

Summary of significant effects:

All sites are out of centre employment-led potential allocations and although ancillary uses may be present as part of proposals these are not the main purpose for the selection of a particular site. Also different types of employment require locations which avoid conflict with other uses for their operations and therefore sites may not be comparable under some criteria.

All sites are located within the green belt and the test refers to how the site would retain Green Belt principles avoiding coalescence of settlements and providing robust and defensible boundaries for the future.

All sites will be expected to contribute to public transport provision and prepare travel plans.

All sites will have the potential to reduce deprivation by increasing employment close to the urban area but it will mainly depend on development management policies and Councils' skills initiatives.

Given to the limited uses (employment led) and smaller scale of these sites, the ability to contribute to the delivery of an integrated sustainable infrastructure systems is likely to be smaller than the mixed-use SSSAs but it is expected that all sites will make a contribution as per development management policies.

Sundon Quarry

1. Unique opportunity for the allocation for a rail freight terminal and associated distribution development. It is well located to provide B8 uses, the largest employment growth sector in the Core Strategy area, and take advantage of the Midlands Mainland train line. No other rail linked distribution exists in Luton and southern Central Bedfordshire and the rail terminal could serve a wider area with economic and environmental benefits associated with transferring freight from road to rail. There is a potential significant contribution towards enhancement of Luton Town Centre Regeneration.
2. Potential significant contribution towards economic and sustainable transport infrastructure including strategic rail and model transfer.
3. The site may generate significant traffic (including HGVs) on the local network and so phasing of development with existing and planned transport capacity improvements will be critical to managing delivery.
4. The development should be contained within existing physical and visual boundaries to avoid adverse effects on the wider landscape and without compromising the function of the green belt in preventing coalescence with Lower Sundon.
5. Major impact on sensitive landscape, biodiversity and Historic Buildings/areas. Any allocation in the Core Strategy would have to be 'in principle' and subject to further detailed work on either a Site Allocations

DPD or a Masterplan for the site.

Junction 10A

6. Well located for aviation-related businesses and a B1/business park location with good transport accessibility. There is a potential significant contribution towards enhancement of Luton Town Centre Regeneration although it may have an impact on existing employment land at Capability Green
7. Local traffic congestion from over development unless connected to planned J10A improvement and provision of significant new public transport connectivity linking the town centre and airport.
8. No major contribution to sustainable transport infrastructure.
9. Major contribution to community infrastructure if Luton Football Club were to be relocated to the parcel east of the M1 and north of Airport Way as per Luton Local Plan allocation.
10. As per current development proposals, the site would result on the coalescence of Luton, Harpenden and Slip End and would erode the robust Green Belt boundary to the West of Luton currently set by the M1.
11. Major landscape sensitive constraints with the exception of the parcel to the east of M1 and north of Airport Way.
12. Allocation of this site would have to be considered against the provision of employment land as part of mixed-use SSSAs in similarly well connected locations such as Junction 11A.

Expansion to Butterfield expansion

13. Potential significant contribution towards diversification and restructuring the Luton economy with technology business, the regeneration of the town's employment base and the improvement and vitality of Luton Town Centre. This site with its university focus would have an important role in the diversification of the local economy.
14. Depending on the direction of the expansion (not known at this stage), the development could result on the coalescence with smaller settlements e.g. Lilley.
15. Major landscape sensitivity constraints. With regards to biodiversity, archaeology and historic landscape, some development maybe appropriate with adequate mitigation. The level of detail required to ascertain whether mitigation measures could overcome the environmental impact of the development and its effect on the transport network is not available. If allocated in the Core Strategy, this should be done 'in principle' with further work done through a Site Allocations DPD or Masterplan.
16. Local traffic congestion from over development unless connected to planned transport infrastructure and provision of significant new public transport connectivity linking the town centre and airport.

Expansion to Century Park

17. Scale of site, reasonable proximity to M1 and Luton Airport and absence of incompatible uses suggest distribution and other industrial uses. There is potential for contribution towards enhancement of Luton Town Centre Regeneration and to contribute to knowledge base and skills industries with

the allocation of a small office park.

18. No major constraints have been identified with regards to landscape, biodiversity, archaeology and historic environment. However, any development should relate to the rural character of the landscape.
19. Existing road bordering the site would help contain development and provide a robust Green Belt boundary.
20. An allocation on this site would not result on the coalescence of settlements but it would narrow the gap between Luton and Tea.
21. An allocation in this area would have to be supported by improved public transport. No major contribution to sustainable transport infrastructure.
22. Site lies entirely within North Hertfordshire District and although a large mixed use SSSA at this location has been strongly opposed by the administration and the public, this should not in principle preclude an extension to Century Park to support Airport related industries subject to further joint working between the local planning authorities.

See detailed assessment and mitigations in Tables 4.6 to 4.8 of **Appendix 4**.

Major transport infrastructure to support development

3.63 Luton and South Bedfordshire Local Development Framework Transport Appraisal, 2009 assessed the effect of different development options and transport infrastructure scenarios on the strategic transport network.

Reference Case Scenario: Committed development and infrastructure	Emerging Preferred LDF Core Strategy: Additional LDF Core Strategy development and minimal “uncommitted” infrastructure;	Enhanced Emerging Preferred LDF Core Strategy: Additional LDF Core Strategy development with Enhanced “uncommitted” infrastructure;	Alternative Enhanced Emerging LDF Core Strategies, Options 1 and 2
M1 widening (Jcts. 6a-10); Leighton Buzzard Town Centre Scheme; East Luton Corridor (Capability Green-Airport); Luton – Dunstable Guided Busway; Ridgmont bypass; Bedford Western bypass (A421-A428); A421 dualling	Luton Town Centre Transport Scheme; Leighton Buzzard Eastern Distributor Road; New local distributor roads to serve potential urban extensions -to the north of Dunstable and Houghton Regis; and -the north and east of Luton; Extensions to the Luton – Dunstable Guided Busway system to serve potential urban extensions - to the north of Dunstable/ Houghton Regis; and - the north and east of Luton; On-road bus priority measures along - A6 (in-bound only) - A505 (in and out-bound as far as the Vauxhall Way); and - Vauxhall Way as far south as	Same infrastructure as emerging Preferred LDF case plus: East Luton Bypass; M1 Junction 10a Grade Separation; Woodside Connection to the M1 at Junction 11a; and Luton Northern Bypass from M1 Junction 11a to A505 with an intersection on the A6.	Same infrastructure as enhanced scenario but testing Option 1: Housing and jobs in area L re-allocated to areas C and D east of Leighton Buzzard, area E west of Dunstable, and areas H and J north of Luton and Houghton Regis Option 2: Housing and jobs in area L re-allocated to

Reference Case Scenario: Committed development and infrastructure	Emerging Preferred LDF Core Strategy: Additional LDF Core Strategy development and minimal “uncommitted” infrastructure;	Enhanced Emerging Preferred LDF Core Strategy: Additional LDF Core Strategy development with Enhanced “uncommitted” infrastructure;	Alternative Enhanced Emerging LDF Core Strategies, Options 1 and 2
(M1 Jct. 13-Bedford); M1 Widening (Jcts. 10-13); A5-M1 Link (Dunstable Northern Bypass) and M1 Junction 11a.	Crawley Green Road (in-bound only) - Heath Road/ Church Street/ North Street/West Street corridor in Leighton Buzzard (in and outbound).		areas C&D east of Leighton Buzzard. Area E west of Dunstable, and area M west of Luton.

- 3.64 The testing of alternative options (option 1 and 2) concluded that both alternative scenarios have a similar or only marginally worse effect than the Core Strategy Preferred Option 2009.
- 3.65 The detailed assessment of the transport appraisal is available on the “Shape your future” website (www.shapeyourfuture.org.uk).
- 3.66 Since then a further scenario was modelled by Halcrow on behalf of the West of Luton consortium using this study’s model and substituting site L (East of Luton) in the Enhanced scenario Preferred Option Core Strategy by site M (West of Luton).
- 3.67 The consultant conclusion is that with site M instead of L whilst there would be increases in flows and delays there would be no widespread congestion and that measures to mitigate the problems would be confined to junction improvements on the surrounding network. There would be additional traffic through the neighbouring villages of Caddington and Slip End, but it concludes that the relative increase is not unmanageable and measures to reduce and divert through movements can be expected to have an ameliorating effect. It also concludes that when assessed on a like by like basis there are no clear benefits for the East (site L) and in almost all the key measures the West (site M) produces more sustainable results.
- 3.68 The Councils’ views on the assessment is that there are concerns with regards to the robustness of the highway journey times particularly into the centre of Luton. However, it agrees that given the location of site M between Dunstable and Luton, combined with the fact that it is closer to Luton town centre, the results of the accessibility statement appear reasonable.
- 3.69 The consultant concludes that West of Luton (site M) does not result in an increase in Ratio of Flow to Capacity (RFC) categories at any key junctions in the vicinity of the site and only results in slight increase in delays at junctions in employment areas at Capability Green and Boscome Road in Dunstable. The Councils transport engineers view is

that this does not necessarily mean that delays have not increased and highlight that the delays and RFCs are averaged over the whole junction and are likely not to reflect condition on the worst approach.

- 3.70 Consultant traffic flows illustrate that the more significant increases in traffic will occur on Hatters Way, the A505, Chaul End and Newlands Road which have already queuing problems
- 3.71 Since the preparation of the study a number of major changes occurred, the RRS are no longer constraining the options and the Government's committed transport infrastructure in the area has changed, A5-M1 link Inquiry has been postponed pending of the Government Spending Review and the M1 widening for junctions 10 to 13 changed in January 2009 to a hard shoulder running.
- 3.72 Although the reference scenario of the 2009 study may still be a valid starting point the number of uncommitted infrastructure which could be realistically expected within the 2009 Core Strategy Plan period has changed and the site scenarios are no longer constrained to RSS figures. In addition, infrastructure which was already committed has also been affected. A5-M1 link Inquiry has been postponed pending of the Government Spending Review and the M1 widening for junctions 10 to 13 changed in January 2009 to a hard shoulder running.
- 3.73 The specific findings of the 2009 study cannot be applied to the new scenarios but there are a number of key overall conclusions which may help guide some options subject to further strategic modelling work and Site Specific Transport Assessments to inform detailed masterplan proposals outside the Core Strategy.
1. A significant shift to public transport use between the "Reference Case" and the Emerging Preferred LDF Core Strategy scenarios.
 2. Public transport decrease in the Enhanced Emerging Preferred LDF Core Strategy scenario, compared with the Emerging Preferred LDF Core Strategy scenario, due to the inclusion of strategic highway transport improvements.
 3. Locating most of the development on the northern periphery of the urban area, some distance from Luton Town Centre with the additional transport infrastructure provided in the Enhanced Emerging Preferred LDF Core Strategy scenario, the outer bypass routes became more attractive for some car travel. However, this option reduced congestion on some routes within the urban area.
 4. Increased levels of congestion in Luton and Southern Central Bedfordshire if the target growth in housing and employment as identified in the East of England Regional Spatial Strategy, is to be met without any additional investment in strategic highway infrastructure.
 5. The additional travel benefits of building the A6-A505 section of the Northern Bypass are marginal overall, although they do give some benefit in areas such as North East Luton.

6. Although a number of individual of site scenarios were modelled it was difficult to isolate the impacts of individual schemes.
7. Despite the increased private vehicle trips, the carbon emissions per capita are reduced with the additional investment in highway infrastructure, with less congestion on the road network with the Enhanced Emerging Preferred LDF Core Strategy, compared with the Emerging Preferred LDF Core Strategy scenario, with limited infrastructure improvements. Although in general the benefits are due to improvements in vehicle performance.

3.74 Further strategic modelling of new scenarios would provide a better evidence base to assess the impact of the different development options. However, the overall findings of the 2009 study above seem to indicate that:

1. High level of growth to former RSS requirements cannot be accommodated without major infrastructure funding and this is no longer available.
2. The scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would provide the greatest shift to public transport. It could be assumed that a scenario with lower development than those in the former RSS and minimal uncommitted infrastructure would provide the greatest sustainable transport gain.
3. Modelling of the effect of different transport scenarios on the strategic network is unlikely to provide information to favour one individual site over another. All sites tested were in potentially sustainable locations with access to the strategic network and adjacent to the urban areas the effect of individual sites on the local network would have to be tested at masterplan level.

The Policies

3.75 Core policy CS1 sets the development strategy, policies CS2 and CS3 establish the means to fund the strategy proposals and CS4 establishes the new Green Belt boundaries under the strategy. The development strategy is tested in Appendix 4 and was detailed in the previous section.

3.76 Policies CS5 to CS12 set out how the Core Strategy seeks to achieve the strategy’s objectives and vision. They comprise thematic policies considered to be fundamental to the success of the strategy and Policies CS13 to CS22 are site-specific policies that help illustrate the effects of the policies on a site or area-specific form highlighting areas of significant change. Table 5 lists the Pre-Submission Core Policies.

Table 5: Pre-Submission Core Policies

CS1 – Development Strategy
CS2 – Public Funding for Infrastructure
CS3 – Developer Contributions for Infrastructure
CS4 – Extent of the Green Belt

CS5 – Linking Places
CS6 – Housing for all Needs
CS7 – Increasing access to social and community infrastructure
CS8– Quality of design
CS9 – Delivering economic prosperity
CS10 – Green Infrastructure
CS11 – Resource efficiency
CS12 - Adapting to and mitigating Flood Risk
CS13 - North of Luton SSSA
CS14 – Houghton Regis North SSSA Site 1
CS15 - Houghton Regis North SSSA Site 2
CS16 - East of Leighton -Linslade SSSA
CS17 - Luton Town Centre
CS18 - Luton Urban Area
CS19 - Dunstable Area
CS20 - Houghton Regis Town Centre
CS21 - Leighton –Linslade Town Centre
CS22- Rural Settlements

- 3.77 Policies CS5 to CS12 and CS22 are thematic policies that set out the principles under which the Councils will address identified housing need, provision of social and community infrastructure, economic prosperity and management of environmental resources. The principles of the area policies CS13 to CS21 are assessed as part of both the growth and thematic policies and are therefore not assessed in isolation.

Linking places – Policy CS5

Background

- 3.78 The transport options to support the required growth are addressed as part of the growth strategy. However, transport policy developed to support the Core Strategy objectives with regard to increasing sustainable transport opportunities, minimising carbon footprint and supporting town centres is contained within Policy CS5 Linking places.
- 3.79 Policy CS5 provides:
- a) a spatial dimension to the Local Authorities’ Local Transport Plans which are on their own subject to an Environmental Impact Assessment; and
 - b) the broad principles to guide development management policies when assessing transport implications, including the requirement for Transport Assessments to accompany some planning applications.

Influence of Issues and Options appraisal

- 3.80 The Issues and Options SA tested the options:
- a) Make improvements to public transport and make it reliable, cost effective, efficient and attractive;

- b) Reduce car parking in new housing and discourage multi-car households;
- c) Reduce/discourage car-parking provision in town centres;
- d) Encourage sustainable transport;
- e) Provide pedestrian/cycle routes only;
- f) Provide more dedicated bus ways/lanes to make bus journeys quicker;
- g) Pursue Park & Ride facility provision to reduce congestion in town centres; and
- h) Encourage local employers to promote sustainable transport for employees.

3.81 It concluded that any options that would discourage car use would have a positive effect on the area. However, the assessment considered that the likely effects of 'improvement to public transport' and 'park & ride provision' were uncertain due to the lack of an east-west linkage across the area.

3.82 The options were not mutually exclusive and Policy CS5 incorporates measures addressing all of them. The policy requirement for a Transport Assessment is likely to lead to the promotion of sustainable transport from employees although detailed policy on this respect should be developed through the Development Management DPD.

Influence of Preferred Options appraisal

4.83 The Preferred Options SA concluded that the level of growth required is likely to result in an increased tendency to travel. It also noted that the transport proposals are likely to improve air quality and help in combating climate change. However, proposed new road schemes as part of the growth strategy are also likely to result in the emission of air pollutants and greenhouse gases and could detrimentally affect habitats and landscape character.

3.84 There are no reasonable options to assess against this policy that have arisen from previous SA work, national and regional guidance, consultation on the Core Strategy or technical evidence.

Appraisal of pre-submission document

3.85 Policy CS5 provides the spatial framework for the Local Transport Strategy, which is subject to its own Strategic Environmental Assessment.

3.86 The policy is expected to have a positive impact in terms of sustainability, particularly in terms of air quality and mitigating against climate change through encouraging a modal shift away from the private car. The policy also has the potential to reduce inequality through enhancing access to services and facilities, particularly in town centres. In addition, the policy encourages healthier lifestyles through the provision of new and enhanced cycling and walking routes. Finally,

Policy CS5 should have a particularly positive impact in terms of providing a sustainable integrated transport strategy.

Housing for all Needs – Policy CS6

Background

3.87 Policy CS6 and its supporting text contains the criteria to guide provision of affordable and specialist housing in Luton and southern Central Bedfordshire and covers:

- a) Housing size, type and tenure;
- b) Affordable housing percentage requirement from privately developed sites;
- c) Lifetime homes and
- d) Gypsies and Travellers.

Influence of Issues and Options

3.88 The Issues & Options SA tested the following affordable housing options:

- a) Retain existing targets and thresholds for Luton and South Bedfordshire (50% and 35% respectively);
- b) Have a standard target for whole Luton and Southern Central Bedfordshire; and
- c) Considering varying targets/thresholds for different areas (town centres, villages).

3.89 The SA report noted that retaining the existing affordable housing targets in the respective development plans (50% for Luton and 35% for South Bedfordshire) would have a positive effect and would increase access to housing for a wide range of social groups. It also recommended consideration of varying targets and thresholds for rural areas and town centres.

3.90 The Issues and Options SA tested the following Gypsies and Traveller policy options:

- a) Allocate a range of sites within the potential urban extensions and require them to be purchased at market value;
- b) Encourage provision of sites by Registered Social Landlords and developers, secured through planning obligations; and
- c) Seek a mix of sites for sale and social renting.

3.91 The SA report found the effect of the options to be in the majority of the cases neutral or unknown given the lack of information on site location at that stage. The two areas where the assessment was different were community inclusiveness and accessibility where options b) and c) were found to have a minor positive effect and option a) an unknown effect.

- 3.92 Neither of the three options are mutually exclusive. However, the Issues and Options assume that options b) and c) involve sites located in previously developed areas.

Influence of Preferred Options appraisal

- 3.93 The Preferred Options SA highlighted the potential positive contribution of housing suitable for all needs to promoting social cohesion, combat inequality and supporting the economy by encouraging economically active people to stay in the area or relocate to the area. However, most of the discussion in this SA report refers to the effect of the housing growth.

Appraisal of pre-submission document

- 3.94 Policy CS5 provides general principles for the provision of housing for those with specific needs based on the evidence of the Strategic Housing Market Assessment. The policy sets the national indicative minimum site size threshold of 15 dwellings for the Luton/Dunstable/Houghton Regis conurbation but sets a lower threshold of 4 dwellings for Leighton-Linslade and the rural area. This lower threshold is based on the different characteristics of the housing market in Leighton-Linslade and the rural area and reflects the threshold set out in the adopted Core Strategy for the remaining part of Central Bedfordshire. In sustainability terms it is important to balance the need to secure much-needed affordable housing with the need to maximise the efficient use of land. The requirement for rural exception sites to attend to local housing need should also be considered.

- 3.95 The likely effect is uncertain in a number of policy areas:
- a) Affordable housing percentage requirement from privately developed land
 - i. Policy CS6 proposes 35% affordable housing to be required from privately developed sites based on the Strategic Housing Market Assessment findings, which conclude that this is an economically viable target across the plan area and period.
 - ii. The likely effects of the 35% target in relation to the current requirements (35% in southern Central Bedfordshire and 50% in Luton) are uncertain. The 50% requirement in Luton has only been in place since 2006 and so the overall effect of the existing policy across a range of housing market conditions cannot be assessed.
 - iii. On the other hand, since 2001 Luton has not provided affordable housing above 17% of all housing completions with the exception of 2002, which was a particularly good year with almost 60% of affordable housing provision mainly through Housing Associations. The provision of affordable housing in southern Central Bedfordshire has recently been higher than in Luton but has not been higher than 30%. These figures on affordable housing completions from the Annual Monitoring

Report highlight the importance of the SHMA findings on economically viability.

- iv. However, the AMR figures may also indicate that planning policies should recognise the need to work with Residential Landlords to help increasing affordable housing provision.
 - v. Aspirations could potentially be raised for an increased overall delivery of affordable housing across all sources. While evidence would be required to support this, it is assumed that unique initiatives such as the development of surplus public-sector land with high levels of affordable housing could increase overall delivery above that provided from the requirement of 35% on privately developed sites. Consideration should be given to the role that planning policy can take in facilitating such unique initiatives over the plan period.
 - vi. As drafted, Policy CS6 supports a flexible approach to the delivery of affordable housing to ensure that it can be provided with consideration of individual site and temporal housing market circumstances. It is likely that smaller volumes or different proportions of affordable housing will be generated during the early stages of housing market recovery but there is no stated approach to resolving this deficit as the market peaks. An approach to the assessment of planning applications based on evidence of financial viability should be developed through the Development Management DPD.
- c) Housing size mix
- i. Policy CS6 sets out the delivery of three or more bedroom houses as a priority but more information will need to be developed as part of a Development Management DPD on what will be expected from development proposals. It may also be useful to explore housing sizes in square metres rather than bedroom numbers to ensure that there is lifetime homes compliance.
 - ii. There may be a link between housing size and lifetime homes and Building for Life standards to ensure that the size of housing is not just determined by the number of bedrooms but also ensure good standards of living and flexibility to adapt to different living needs and expectations.
- e) Gypsies, Travellers and Travelling Show people
- i. There is no specific reference to Gypsies and travellers in the policy which does not comply with current advice on Government Circulars and the Gypsies and Travellers and Travelling Showpeople Needs Assessment and the requirement of sites as part of Core Strategies. The Government has announced its intention to revise its national advise on provision for Gypsy and Traveller and Travelling

Show People but at the time of writing the current national guidance and Circulars still stand.

- ii. There are a number of assumptions in the Issues & Options SA report that may have not taken into account the different needs of this group. With regards to community cohesion and accessibility, the Issues and Options SA report scores option a) 'urban extensions' as uncertain because there may be a risk that this option could isolate them and reduce access to facilities. However, urban extensions will have services to provide for the daily needs of their population and are located in accessible locations by private and public transport therefore it is an appropriate location for Gypsies and Travellers who traditionally need to have access to road transport to carry out their business and help their travelling. Their preference tends to be for sites which are adjacent but not in the town/village to help them carry out their traditional trades without affecting or being constrained by the settled population. An urban extension could have a greater scope to bring together different sections of the community since the master plan will be led by the different needs of all future users.

f) Housing for the elderly

- i. The supporting text to CS6 provides specific information on housing for the elderly although further specific information may need to be developed as part of the Development Management DPD.

3.96 Overall, this policy is expected to have a positive impact on sustainability particularly in terms of social and economic factors. The impact of this policy, in particular for the environmental objectives, will be dependent on a range of factors, such as the scale and location of the housing development, provision of community services and facilities, use of sustainable design methods and construction techniques and access to sustainable integrated transport systems.

3.97 It is considered that this policy will have a positive impact on the social objectives as it aims to ensure housing for all through the provision of a range of housing types and the provision of affordable housing. Improving access to housing will indirectly improve social mobility having a positive impact on social and economic issues, such as employment. The impacts on the economic objectives are more limited and will depend again on the scale and location of the housing development.

Increasing Access to Social and Community Infrastructure - Policy CS7

Background

- 3.98 Policy CS7 supports the delivery of social and community infrastructure to address current need and future need. It addresses:
- a) Co-location of services;
 - b) The principles of planning obligations;
 - c) Protection of existing facilities;
 - d) Provision of interim community facilities;
 - e) Timely delivery of infrastructure to accompany major development proposals; and
 - f) Allocating land for Luton Town Football Club and a 50-metre swimming pool.

Influence of Issues and Options appraisal

- 3.99 The Issues and Options SA Report did not assess options for social and community infrastructure as its main purpose was to identify directions for growth.

Influence of Preferred Options appraisal

- 3.100 The Preferred Options SA highlighted the likely positive effects of Policy CS7 with regard to the co-location and location of services within settlements but also noted that large-scale development could have detrimental effects and highlighted in particular the 50-metre swimming pool and football stadium. It also highlighted the potential short-term negative effect of their construction and the need for sympathetic design in relation to the historic, natural and archaeological environment.

Appraisal of pre-submission document

- 3.101 The policy will have no direct impact upon many of the sustainability appraisal objectives. What impacts there are, are considered to be generally positive in nature. Nevertheless, the co-location of such facilities could help to mitigate against the effects of climate change by reducing private car use, while also making these facilities more accessible, particularly if they can be accessed using public transport. The impact on the town centres by providing such facilities will vary depending on location. However, there is potential to promote employment, learning and skills, particularly if facilities such as schools and libraries are provided.
- 3.102 With regards to the non site-specific elements of Policy CS7, there are no reasonable options to assess against which may have arisen from previous SA work, national and regional guidance, consultation on the Core Strategy or technical evidence. The policy provides a spatial element for strategies within other Council departments providing opportunities for multifunctionality and the co-location of services. The policy implementation and its likely effect depend on the findings of the forthcoming Infrastructure Delivery Plan and the options to be

assessed in the Planning Obligations Supplementary Planning Guidance.

3.103 The swimming pool and football stadium proposed in this policy are of a strategic nature and their inclusion within the Core Strategy is expected. However, there is not sufficient information available at this stage to assess whether the proposed location for these facilities is the most sustainable considering all reasonable options. Some of the reasons for this include:

- 1) The allocation of Luton Town Football Club near Junction 10A in Luton Local Plan has not been implemented since its allocation and its likely deliverability should therefore be tested rather than rolling forward the allocation;
- 2) Both facilities involve the construction of large structures and buildings likely to create a visual impact beyond their immediate location;
- 3) Both facilities are likely to generate a high level of use and therefore transport movements. Town centre sites and those with excellent public transport accessibility should be considered against the proposed locations. Luton's Sports Facilities Strategy 2008-2021 also promotes the siting of strategic swimming facilities near Houghton Regis, as this is central to the wider conurbation and would serve increased demand from potential urban extensions. The same strategy also considers allocation for a new football stadium adjacent to the M1 at Junction 12;
- 4) If these two sites were considered in isolation from other community needs, there may be a lost opportunity for co-location of services and multifunctionality; and
- 5) A 50-metre swimming pool could place extra pressure on water resources in an identified 'water stress area'. It is also considered that energy consumption will be high, leading to potentially high levels of energy-related pollution and revenue costs. Site location should be considered with particular emphasis with regards to water stress, on-site renewable power generation and opportunities for co-location of services to encourage resource efficiency and long-term financial viability.

3.104 Further information will be required to make an adequate assessment of possible site options. This could be carried out in the Site Allocations DPD when further information would be available.

Quality of design Policy – CS8

Background

- 3.105 This policy is a new policy that did not feature in previous rounds on consultation. However, it addresses issues that flow from national guidance on design (particularly PPS1 and PPS3) and is consistent with those guidelines.

Appraisal of pre-submission document

- 3.106 This policy will have a positive impact in terms of sustainability as good design is at the heart of adaption to and mitigation against climate change and flood risk, facilitating accessibility, designing out crime and fear of crime and using resources more efficiently. Well designed large developments can have a positive affect on the larger area by providing opportunities for more sustainable travel and green infrastructure, also resulting in healthier lifestyles for residents. High quality design will be used to regenerate and invigorate town centres and protect the identity and character of villages. The policy recognises the importance of historic, environment and architectural assets and aims to protect preserve and enhance their character, appearance and context. Good design will be used to create a 'sense of place' in urban extensions. All proposals will be required to incorporate sustainable design principles and meet recognised national industry design standards such as the Code for Sustainable Homes.

Delivering Economic Prosperity- Policy CS9

Background

- 3.107 This policy sets out support for economic development and, in particular, the approach towards employment development within Use Class B. It also advocates consideration of development around existing employment sites and at Sundon Quarry.

Influence of Issues and Options appraisal

- 3.108 The Issues and Options SA tested the options:
- a) Safeguard existing employment sites; enhance poor ones and lastly search for new sites; and
 - b) Encourage employment land development within urban extensions and encourage redevelopment of poor employment sites for other use.

These two options deal with the distribution of employment and given the level of growth proposed they are not necessarily mutually exclusive. Option b) scored more favourably.

- 3.109 It concluded that both options are considered to be approximately equal in terms of sustainability considerations. Option a) scores better in terms of town centre regeneration, economic prosperity and climate change adaptability, as it will capitalise on the existing transport network and proximity to residential development. Option b) scores better in terms of community inclusiveness as the redundant

employment could be used for housing and social and community facilities. However, this may lead to increases in work-travel distances due to the employment sites being located in the proposed urban extensions.

Influence of Preferred Options appraisal

- 3.110 The Preferred Options SA concluded that depending on the nature, scale and location of employment sites, they are likely to be detrimental for the natural environment. The preferred option was likely to have positive socio-economic effects while the historic environment could be adversely affected.

Appraisal of pre-submission document

- 3.111 Policy CS9 does not deal with the distribution of employment (this is dealt with through the Growth Strategy and accompanying appraisal) but sets out the principles that would support economic activity. The policy does not take advantage of airport, tourism related to airport and natural assets in the area. Strategic issues such as town centre boundaries, primary and secondary frontages and the Core Strategy approach to out of centre development is not indicated in the policy and will need to be addressed through the Development Management DPD or area/site-specific action plans or master plans.
- 3.112 Overall, this policy is expected to have a positive impact on sustainability in particular social and economic factors. The impact of this policy will however be dependent on a range of factors, such as location and scale of the new employment areas, accessibility to residential areas and town centres, use of sustainable construction techniques and access to sustainable integrated transport systems.
- 3.113 This policy has the most positive impact on the economic objectives due to the ability of this policy to create employment and deliver economic prosperity. It will be important that this policy seeks to attract and deliver a range of businesses offering a variety of jobs to suit the skills available locally and which offer the potential to enhance local skills. Learning linkages between the schools, colleges and businesses could be explored to ensure that the skills required by businesses are taught at a local level. The economic benefits of this policy will lead to a positive impact on the social factors by creating employment, people will be earning an income, which should lead people out of crime and reduce poverty in the area.
- 3.114 Sundon Quarry is a strategic site and has been appraised against the other possible sites such as an extension to Butterfield Park and site at Junction 10A. The proposed development at Sundon Quarry would have a positive contribution towards Core Strategy economic and sustainable transport infrastructure objectives. However, the adverse potential impact on national policy and statutory designations is so significant that it is likely it could not be mitigated against. Its

allocation should only be sought after detailed studies confirm that there is scope for mitigation.

- 3.115 It would not be appropriate to promote this option without a detailed EIA, heritage and Green Belt review, traffic modelling and infrastructure guarantees.
- 3.116 In relation to the employment site at Junction 10A, this would generate a significant positive contribution towards Core Strategy economic and 'place making' objectives but dependent on connection to J10Aa and transport access improvements to town centre and airport, with a need for some environmental mitigation via integrating local landscape and habitat features including one local designation. In addition, the allocation of this site would need to be assessed against other suitable employment allocations in the SSSAs.
- 3.117 It is important to consider that it would be feasible and appropriate to promote this option with landscape and green belt review, traffic modelling and infrastructure guarantees.
- 3.118 Finally, the potential extension of Butterfield development for employment purposes would produce a positive contribution towards the Core Strategy economic and regeneration objectives however, the adverse potential impact on national policy and statutory designations is so significant that its allocation should be sought only after detailed studies confirm that there is scope for mitigation.
- 3.119 Therefore, it would not be feasible or appropriate to promote this option without a detailed EIA, landscape assessment, heritage and Green Belt review, traffic modelling and infrastructure guarantees.

Green infrastructure – CS10

Background

- 3.120 This policy seeks to ensure that development has a positive effect on green infrastructure (GI) and, in particular, seeks a "net gain" in green infrastructure from new development.

Influence of Issues and Options appraisal

- 3.121 The Core Strategy Issues and Options presented five options for how readers would like formal and informal recreational green space to be provided in the urban extensions. The options included:
- a) Combine formal green space provision serving large areas into one or two large sites, with more facilities and better management;
 - b) Have more areas of formal green space, similar to traditional provision, with a standard number of pitches/fields per area, related to the size of development;
 - c) Encourage shared use of quality facilities at schools and colleges, and community centres;

- d) Have many small areas of informal green space within neighbourhoods; and
- e) Concentrate informal green space provision in large parks at the edge of the built up area, along a country park-type model.

3.122 There was support for all options during the consultation and the Issues and Options SA assessed all the options as having a positive impact against the sustainability objectives. Options c) and d) were assessed as having the potential to increase community participation, improve cohesion and, with appropriate management, could tackle crime. Option e) was assessed as having limited access to users that could reach larger parks, or serve people living in the vicinity leaving others to a disadvantage, thus the overall benefit of option e) was considered limited.

3.123 There was no option to 'do nothing' due to the need to provide a sustainable living environment in the proposed urban extensions and existing urban areas. The Preferred Option was therefore identified to maintain, enhance and deliver new green infrastructure at appropriate scales throughout the Growth Area.

Influence of Preferred Options appraisal

3.124 Preferred Option CS14 sought to maintain and deliver new green infrastructure throughout the Growth Areas by requiring new development to contribute towards the delivery of new green infrastructure, taking forward areas identified in the Strategic Green Infrastructure Plans and protecting and enhancing existing and new green infrastructure.

3.125 The Preferred Options SA found this Option to be sustainable and could result in related benefits for the Growth Area. These would include recreation, tourism, public access, biodiversity, landscape protection, cultural heritage, public open space and water environment.

3.126 Preferred Options CS15, 16 and 17 sought to protect, conserve, promote and enhance the Countryside and Landscape, Heritage and Townscape and Biodiversity and Geology. All the policies were considered to be sustainable and could result in benefits for the Growth Area.

3.127 There was support for all these Options during the consultation period and some stakeholders considered that there should be more linkages between green infrastructure, areas of historic interest, landscape, biodiversity and flooding given the character of the natural environment. As a result, the Policy in the Core Strategy Pre-Submission covers the protection and enhancement of green infrastructure that promotes recreation, public access, biodiversity, tourism, protection and enhancement of the local landscape and historic assets and a reduction in the risk of flooding.

Appraisal of pre-submission document

- 3.128 Policy CS10 will have a positive impact on sustainability. The provision of green infrastructure assets that are connected and multi-functional will result in general positive impacts relating to health, well-being, environmental protection, historic environment protection, encourage the use of sustainable transport and protect biodiversity. Green infrastructure assets will need to be carefully planned into any new development, particularly the urban extensions to ensure that they are fully integrated into the development and community and making use of existing features and assets in the area. If not, it is feared that the green infrastructure assets will become separated from the community and not used to their potential thus attracting anti-social behaviour and increasing fear of crime.

Resource efficiency – CS11

Background

- 3.129 The policy seeks to ensure that all new developments reach a high level of resource efficiency through the implementation of Code for Sustainable Homes standards. Where these standards cannot be met, the policy advocates the provision of an offset fund, money from which will be used to help make existing developments more resource efficient.

Influence of Issues and Options appraisal

- 3.130 With regards to the issue of resource efficiency, the Issues and Options SA tested the following options:

- g) To not seek any minimum Code for Sustainable Homes or BREEAM ratings on new developments; and
- h) To include policy that seeks compliance with the Code for Sustainable Homes or BREEAM to a reasonable level.

It concluded that the Option a) would not be valid due to the fact that Code for Sustainable Homes standards had already come into effect.

- 3.131 In terms of renewable energy, the Issues and Options SA tested the following options:

- a) Leaving thresholds and targets as set out in RSS;
- b) Lowering development size threshold to include more new developments;
- c) Increasing the renewable energy target above 10% but maintain RSS thresholds; and
- d) A combination of lowering the site threshold and increasing the renewable energy target.

It concluded that Option a) was the most relevant in sustainability terms while Options c) and d) could be considered good development practice.

Influence of Preferred Options appraisal

- 3.132 The SA concluded that the Preferred Option should contribute positively to SA objectives 1-12, 17 and 18. It also concluded that SA objectives 13-16 were unlikely to be effected.

Appraisal of pre-submission document

- 3.133 Overall, the policy should contribute positively to the SA objectives. The approach of implementing the Code for Sustainable Homes standards will most directly impact upon SAObjectives 5 and 6 relating to adapting to climate change and resource efficiency. Whilst the policy primarily seeks to address new developments, the concept of an offset fund means that existing development should also benefit.

Adapting and mitigating Flood Risk – CS12

Background

- 3.134 This policy seeks to ensure that development, in terms of building, roads, community facilities and open space, is located, designed and laid out to mitigate the risk of flooding and is able to adapt to future changes in climatic conditions, in line with PPS25.

Influence of Issues and Options appraisal

- 3.135 There was no Issues and Options question relating to Flooding. However, work on the Strategic Flood Risk Assessment Level 1 was continuing and this document was to provide policy guidance for the Core Strategy. PPS25 and its Companion Guide also provided policy direction.

Influence of Preferred Options appraisal

- 3.136 Following completion of the SFRA Level 1, the findings of study were used in drafting the Preferred Policy Approach, in line with national guidance in PPS25. Policy CS12 was drafted in close consultation with the Environment Agency and sought to mitigate flood risk. This policy was found to be sustainable in light of the Preferred Options SA. Comments during the consultation were in support of flood mitigation and stakeholders considered that there could be more linkages of flooding with the natural environment.

- 3.137 The policy in the Core Strategy Pre-Submission has been developed in close consultation with the Environment Agency and the completion of the SFRA and Water Cycle Study Phase 1.

Appraisal of pre-submission document

- 3.138 Policy CS12 will have a positive impact on sustainability and the strategy area will benefit from the implementation of this policy. By avoiding development in areas of flooding, new development will be concentrated around the urban areas of Luton, Dunstable and Houghton Regis and Leighton Buzzard. This will aid the regeneration of these town centres protecting the countryside from inappropriate development. More development in and around the town centres will facilitate the use of more sustainable modes of transport thereby reducing the impact on the climate change.
- 3.139 The river restoration works proposed on the River Lea in Luton will also contribute to the regeneration of the town centre by making it a more attractive town centre. Opening up the river in parts will make an attractive focal point in the town centre encouraging more and longer visits to the town centre and improving the biodiversity and natural environment of this river and reducing the risk of flooding.
- 3.140 Linking Policy CS12 with Policy CS10 (Green Infrastructure) will also have a positive impact on the natural environment, as areas at risk of flooding could be included within the GI network, enhancing this asset. Increasing the GI asset in the area will encourage healthier lifestyles due to the improved access to open space. The management of the GI network including the areas at risk of flooding will be important to ensure that they do not become areas attracting anti-social behaviour.
- 3.141 New developments, particularly the urban extensions, should be planned to include measures to reduce run-off and with sustainable measures to reduce the impact on the environment. Liaison with the Environment Agency for strategic developments and the urban extensions will be essential to ensure that there is a reduced risk of flooding across the Core Strategy area.

Rural Settlements –CS22

Background

- 3.142 This policy seeks to ensure that any growth in and around rural settlements maintains the character and setting of the villages, while improving public transport provision between settlements and protecting existing employment sites.

Influence of Issues and Options appraisal

- 3.143 The Issue and Options SA considered the following options in terms village settlement strategy:
- a) Urban extensions should incorporate the villages close to the urban edge, and integrate them into the new communities; and
 - b) Green buffers should be created between new development areas and existing villages.

- 3.144 The Issues and Options SA stated that the options were broad in nature and therefore the response to most of the social and environmental objectives could not be predicted. It concluded that the effect would depend on the scale of housing growth and the scale of village growth. The sustainability of the two options was therefore difficult to compare.

Influence of Preferred Options appraisal

- 3.145 The Preferred Options SA report did not make specific reference to the part of Preferred Option CS1 that refers to rural settlements.

Appraisal of pre-submission document

- 3.146 The scale of development in the rural areas will be limited so the impact on any of the sustainability objectives will be limited. The main positive impact will be the potential to provide affordable housing in areas where homes are often unaffordable to many. Village identity should be a major consideration when identifying which sites to allocate for housing. Inevitably, new development will increase pressure on natural resources. It is therefore important for the requirements of the resource efficiency policy to be met to reduce the impact of the new development as far as possible.

4. Conclusions, Mitigation and Monitoring

Introduction

- 4.1 The SA/SEA Report of the Core Strategy Pre-Submission appraises the Core Strategy's development strategy, thematic policies and plan objectives. It is considered overall that the Core Strategy is sustainable and will contribute towards more sustainable communities in Luton and southern Central Bedfordshire.
- 4.2 There will be SA objectives that will be negatively impacted upon due to the nature and scale of development required in this area. However, there are measures, which can be adopted that will mitigate against these impacts. These include measures such as implementation of development and the effectiveness of all policies within the Core Strategy, in particular those relating to environmental and social objectives.
- 4.3 A key issue on which the deliverability of the urban extension is dependent on is the provision of major infrastructure. This would include major transport infrastructure (such as strategic roads and provision of sustainable modes of transport) and social and community infrastructure (such as schools).
- 4.4 To ensure that that Core Strategy delivers sustainable communities, the policies need to be monitored on how they are being implemented and how effective they are. This is important to measure the sustainability of the overall LDF.

Implementation and Monitoring

- 4.5 This section discusses indicators and targets to help monitor the sustainability effects of the LDF. Targets and/or indicators for each sustainability objective have been identified from the SA Framework to provide a suggested list, as required by the SEA Directive. ODPM's SA Guidance (November 2005) specifies that monitoring arrangements should be designed to:
 - a) Highlight significant effects;
 - b) Highlight effects that differ from those that were predicted; and
 - c) Provide a useful source of baseline information for the future.
- 4.6 Government requires local planning authorities to produce AMRs and according to guidance from ODPM (now CLG) these would need to include the findings of SA monitoring. Accordingly, the monitoring strategy for the SA should be integrated with the LDF AMR.
- 4.7 The Luton and South Bedfordshire Joint Technical Unit produce a joint AMR and future AMRs will need to include indicators that can also be used to meet the requirements for SA monitoring.

4.8 The SA indicators are aligned with national and regional indicators and the AMR. The AMR will monitor the performance of the Core Strategy and progress on implementation. The AMR will specify those indicators or aspects of the environment that will be monitored, the methodology used, by whom, and the frequency of data collection. There are some indicators that cannot be monitored annually. This data will be collected and added to the baseline data as and when it is available. The monitoring will also provide a clear and understandable picture on how the implementation of the LDF is affecting Luton and southern Central Bedfordshire and establish a mechanism for action to enhance positive effects of the plan, mitigate any negative ones and assess any areas that were originally identified as containing uncertainty.

4.9 The SA Indictors are drawn from:

- a) Objectives and targets set out in the LDF;
- b) Indicators already identified and used in the SA process;
- c) Measures drawn from the baseline data collected during the LDF; and
- d) Any other measures suggested.

4.10 The table below contains a list of SA indicators and targets that are recommended to be incorporated into future AMRs.

Table 6: Proposed Targets and Indicators

Target	Indicators
1 Biodiversity	
To achieve BAP targets.	<ul style="list-style-type: none"> Condition of designated sites. Change in areas and population of biodiversity importance.
2 Landscape, townscape and local character	
New developments to demonstrate compatibility with the surrounding landscape, townscape and local character.	<ul style="list-style-type: none"> New build completions on housing sites of 10 or more dwellings scored against CABI Buildings for Life criteria. Number of planning applications and approvals in the AONB and Green Belt.
3 Air, soil and water resources	
60% of new housing to be built on PDL. Reduction pollution levels. Maintain river water quality.	<ul style="list-style-type: none"> Use of previously developed land. Nitrogen dioxide levels at the three AQMAs. Air quality monitoring Percentage of agricultural land lost to development. Condition of biological quality in local rivers.
4 Flood risk	
New developments to be located in flood zone 1.	<ul style="list-style-type: none"> Number of properties at risk of flooding. Number of planning permission granted contrary to the advice of the EA of flood defence grounds.
5 Climate change	

	Reduce greenhouse gas emissions.	<ul style="list-style-type: none"> Greenhouse gas emissions.
6	Resource efficiency	
	<p>Decrease water consumption per household.</p> <p>Reduce tonnage of waste to landfill.</p> <p>Renewable energy to meet 10% of the District's energy consumption by 2010 and 17% by 2020.</p> <p>All new development to meet level 3 of Code for Sustainable homes standards.</p>	<ul style="list-style-type: none"> Water consumption per household. Percentage of new development incorporating water efficiency measures. Recycling rates. Tonnage of waste to landfill. Percentage of new development including renewable energy generation, water efficiency measures and sustainable drainage systems. Percentage of new development meeting BREEAM standards. Renewable energy installed by type.
7	Green infrastructure	
	Achieving a net gain in green infrastructure provision.	<ul style="list-style-type: none"> Percentage of new developments providing green infrastructure, and accessible open space.
8	Historic environment	
	New developments to take into account historic assets.	<ul style="list-style-type: none"> Number of listed buildings on the Buildings at Risk Register and number removed from the Register. Number of conservation area appraisals produced. Number of planning applications which archaeological investigations were required.
9	Poverty and inequality	
	Reduce poverty and inequality.	<ul style="list-style-type: none"> Indices of deprivation. Residents' perceptions over community activities and race relations. Voluntary sector participation.
10	Crime	
	New developments to be designed to reduce crime.	<ul style="list-style-type: none"> Crime statistics. Residents' perceptions on crime and fear of crime.
11	Health	
	Reduce health inequalities in Luton and southern Central Bedfordshire.	<ul style="list-style-type: none"> Deprivation by ward. Life expectancy levels. Provision of health services and recreation and sport and leisure facilities from new development. Adult participation on sport and active recreation.
12	Housing	
	At least 35% affordable housing on new sites throughout Luton and southern Central Bedfordshire.	<ul style="list-style-type: none"> Percentage of housing which is affordable. Average house prices compared with average earnings. Housing completions. Housing stock by tenure.
13	Town centres	
	Revitalised and regenerated town centres.	<ul style="list-style-type: none"> Change of use and loss of A1 retail in town centres. Number of vacant units. Pedestrian flows in town centres.
14	Sustainable transport	

	Increase travel by means other than the car.	<ul style="list-style-type: none"> • Car ownership. • Mode of and distanced travelled to work/school. • Percentage of new residential development within 30 minutes public transport time of a GP, hospital, primary and secondary school, employment and major health centre. • Cycle network delivery.
15	Employment	
	Increase the amount of employment opportunities in Luton and southern Central Bedfordshire.	<ul style="list-style-type: none"> • Amount of land developed for employment (by type). • Employment jobs by sector. • Percentage of residents working.

Next Steps

- 4.11 The SA/SEA report accompanies the Core Strategy Pre-Submission Document. Consultation on both these documents will be from *****. Examination is anticipated to commence in **** with final adoption of the Core Strategy DPD scheduled for 2010. A Sustainability SA/SEA Statement will be produced alongside the final adopted plan.

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Luton and Southern Bedfordshire Joint Committee
Local Development Framework

Sustainability Appraisal Report for the Core Strategy Pre-Submission

October 2010

Appendices

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APPENDIX 1

Issues and Options SA Recommendations

Table A1.1 Issues and Options SA Recommendations

<p>Spatial Option 7 is considered to be the best performing spatial option. The Option is observed to perform well under most of the economic and social factors and has some positive effect under environmental themes. The proposed development to the north of Houghton Regis (F and G) and Luton (I and J) could also potential benefit from an extension to the Guided Busway thus encouraging public transport usage. Notwithstanding its positive performance, this Spatial Option has the potential to be improved by strengthening the community inclusiveness, soil and cultural heritage aspects.</p> <p>The following recommendations with regard to Economic, Social and Environmental Factors should be considered in order to enhance the sustainability performance of the spatial option taken forward. In particular, it is recommended that the mitigation measures to minimise the possible adverse effects on the Joint Area should be considered at the Preferred Options stage, wherever practicable.</p>
<p>Economic factors</p>
<p>The spatial option should include a spread of urban extensions across the whole Joint Area to maximise the potential for social, economic and environmental improvements across the Joint Area.</p>
<p>The distribution of social, cultural, educational and retail services between the proposed new urban extensions and existing urban areas is crucial to maintain the balance between urban expansion and urban regeneration, in particular, the enhancement of the town centres.</p>
<p>While balancing the urban regeneration and urban extension ratio, due consideration should be given to the development of building conservation, urban design and public realm policies. In addition to supporting the Cultural Heritage and Townscape sustainability objectives, these policies will help create attractive spaces both in the existing urban areas as well as in the proposed urban extensions, therefore contributing to economic prosperity.</p>
<p>The preferred approach should seek to ensure that all the existing and new development areas have good transport infrastructure and connectivity to improve accessibility. This would include improving transport connectivity between Leighton Buzzard Town Centre and areas C and D.</p>
<p>The preferred approach should strive to increase public transport catchments and patronage as well as ensure that the services will be effective and efficient. For example, the Guided Bus Way between Luton and Dunstable is likely to facilitate improved accessibility between these towns. An extension of this service into the new urban extension areas will help achieve many identified sustainability objectives.</p>
<p>Align the timing of the development of urban extension areas near Houghton Regis and Dunstable, namely proposed development areas F, G and H, to the completion of the A5-M1 link to minimise or avoid congestion and related problems at Houghton Regis.</p>
<p>Social factors</p>
<p>The DPD should consider introducing policies that will reduce crime and the fear of crime, including good lighting of public spaces, convenient parking that is overlooked, security lighting and CCTV.</p>
<p>The DPD should consider referring to development or adoption of policies relating to social equality (including ethnic minorities), social inclusiveness and prevention of crime (both actual and perceived). It may be possible for the DPD to refer to any relevant document that may be under production or that is proposed within the LDF to address this gap.</p>
<p>Future developments should consider access to the disabled particularly in public transport areas as well as community facilities.</p>
<p>Throughout the Joint Area desired housing types and tenures should be outlined e.g. public/private housing, apartments, high density, family housing and low-rise apartments. Housing types should also respond to the growing population profile, and take into account the diverse needs of ethnic minority groups who tend to be clustered in and around Luton. The allocation of sites for gypsies will be the subject of a further public examination in autumn of 2008 at the Single Issue Review of</p>

Gypsies and Travellers for the East of England Plan. Appropriate reference to this examination document should be made to direct future course of action regarding gypsy and traveller and travelling showmen sites.
A detailed phasing strategy should be produced for the A5-M1 link, Luton Northern Bypass and the proposed urban extensions F, G, H, I and J. It is critical for the developments to occur after or in parallel to these transport projects to ensure accessibility to the proposed areas and to limit disturbance to the existing towns as well as to attract developer funding.
Environmental factors
The Core Strategy should establish guidance/policies to ensure minimal or no effect on established biodiversity habitats while allocating green field/brown field sites for development.
Avoid development on designated sites of biodiversity importance (including priority species).
Ensure Greenfield sites are not locations for priority species identified in the Local BAP.
Developers should be encouraged from the outset to incorporate Biodiversity Action Plan habitats into all new types of developments proposed – retail, leisure, cultural, employment and housing.
The Core Strategy should ensure minimal loss of high-grade agricultural top soil, wherever applicable.
The Core Strategy should acknowledge potential increase in water demand due to the proposed development in the Joint Area. Additionally, reference to the ongoing Water Cycle Strategy should be made and recommendations to use this document to inform future infrastructure planning should be made.
The Core Strategy should include measures to protect river corridors from development especially in flood risk zones that potentially affect Luton and parts of Southern Central Bedfordshire.
All new developments should incorporate Sustainable Urban Drainage Systems (SUDS) in order to reduce the risk of internal flooding as well as to augment the ground water quantity. Requirement for appropriate studies to address this at a detailed development stage should be incorporated within the DPD.
Commercial uses, which may generate incidental nuisances (noise and odour), should not be situated close to residential areas where they may have an impact. There may also be some scope for indicating the suitability of sites for changes of use where mixed-use development is appropriate.
Consideration should be given to incorporate measures to promote re-use of construction waste and use of low environmental impact materials and the application of sustainable construction methods.
Commitment to energy efficiency should be written into LDF policy with reference to CfSH and BREEAM targets. These targets also include measures to reduce water. Water saving technology should be considered at the stage of layout and design of development. This should include consideration of rainwater capture, grey water recycling, water efficient appliances as part of the design and layout of buildings.
Consideration should be given to include measures to encourage creative solutions for managing extreme weather events. Design should respond to measures required for climate change adaptation with suitable defences in the most vulnerable areas, the incorporation of SUDS and micro regeneration renewables –particularly for all types of new development. SUDS will require ongoing management to maximise habitat potential.
Consideration should be given in the Core Strategy to include initiatives to reduce run off (during construction and operation of development) and include green roofs, rainwater storage and grey water recycling.

APPENDIX 2

Preferred Options
SA Recommendations

Table A2.1 Potential effects of the Core Strategy

Potential effects	SA Objectives
<p>Environmental</p>	
<p>Loss/depletion/fragmentation of habitats, the deterioration of landscape character.</p>	
<p>Damage to soil structure/quality and water pollution, particularly during construction.</p>	
<p>Large-scale developments may also increase impermeable surfaces in the plan area, place significant pressure upon water resources and generate waste during both construction and operation.</p>	
<p>A key aim of the Spatial Strategy is to ensure that the distribution of new development is environmentally sustainable. Such measures as prioritising the reuse of previously developed land, concentrating development in and around existing settlements and placing strict controls on growth within the countryside should work to lessen potentially adverse effects.</p>	
<p>The potential reduction in traffic that may be brought about through the provision of more sustainable modes of transport should work to reduce the emission of air pollutants and greenhouse gasses, which could result in knock-on benefits for biodiversity and reduce transport related water pollution.</p>	1,2,3,8 and 11
<p>Potential new road schemes are also promoted by the Core Strategy. These will have similar impacts upon the natural environment to those of general development. They can be particularly adverse for biodiversity through the fragmentation of habitats, severing of wildlife corridors and road kill. New roads may also encourage the use of unsustainable transport modes, potentially increasing the emission of greenhouse gasses. With regard to local air quality, new roads may result in a redistribution of air pollution, potentially drawing traffic away from currently congested areas while introducing it to those where there is currently no traffic. In addition, construction activities will result in air pollution and the emission of greenhouse gases through traffic generation and/or the use of machinery. New development is also likely to increase energy usage across the plan area.</p>	
<p>Socio economics</p>	
<p>A prime mover behind the growth is to improve quality of life and efforts to deliver this in a sustainable manner increase the possibility of benefits. In particular, the Spatial Strategy should work to improve accessibility in Luton and Southern Central Bedfordshire. This will largely be achieved through concentrating development in and around urban areas, which in turn will help to bring regenerative benefits to existing settlements.</p>	12, 13, 14, 15, 16, 17 and 18

<p>The large increase in housing is likely to be accompanied by a large increase in population. Such an increase may place pressure on existing services/facilities in Luton and Southern Central Bedfordshire. However, the Spatial Strategy acknowledges the need for the timely delivery of infrastructure in line with new development, and the policy direction on developer contributions should work to ensure this happens. Large scale construction could also adversely impact health (SA objective 12) in terms of noise and air pollution, as could traffic generation. The impact of traffic generation may be limited through measures to improve accessibility. SA objective 10 relates to the protection and enhancement of the historic environment. There is potential for the historic environment to be adversely impacted through the insensitive design of new developments. Currently undiscovered archaeological features may also be lost or damaged. In addition, issues such as traffic generation can further harm historic buildings through vibration and dust generation.</p>	
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Table A2.2: Preferred Options SA Recommendations

<p>Consider ways to ensure proposed developments are exposed to the appropriate level of site-specific archaeological/cultural heritage assessment prior to construction and that the recommendations of assessments are implemented.</p>
<p>Consider ways to ensure proposed developments are exposed to the appropriate level of site-specific environmental assessment prior to construction and that the recommendations of assessments are implemented. While the Core Strategy accounts for the protection of nationally and locally important sites it also proposes the development of a significant amount of previously developed land. The potential for smaller, undesignated sites to support biodiversity should be recognised.</p>
<p>Ensure flood defences/alleviation measures are exposed to the appropriate level of site-specific environmental assessment prior to construction and that the recommendations of assessments are implemented.</p>
<p>Recognise the inter-relationship between a healthy environment and a healthy economy, ensuring a holistic/integrated approach is taken.</p>
<p>Utilise opportunities to involve the community in the protection/enhancement of biodiversity and the landscape.</p>
<p>Consider requiring that all new homes achieve a Code for Sustainable Homes rating of 'Level 3'.</p>
<p>Consider ways to ensure that new housing is accompanied by the appropriate level of green/open space provision to conform to Natural England guidelines.</p>
<p>Consider ways to ensure that all new development other than housing achieves a BREEAM rating of 'Very Good'.</p>
<p>Consider integrating different housing tenures on the same sites allocated for housing provision.</p>
<p>Consider ways to ensure that all new developments incorporate Secured by Design principles.</p>
<p>Ensure the capacity of health and recreation facilities can withstand the proposed levels of growth.</p>
<p>Ensure the consideration of community safety in the design of public realm.</p>
<p>Consider ways to ensure the sensitive design of new development/public realm in relation to protection of the historic environment.</p>
<p>Utilise existing buildings and previously developed land where possible.</p>
<p>Consider favourably proposals that provide job opportunities, which also have the potential for training provision.</p>
<p>Ensure developers register with the Considerate Constructors Scheme.</p>
<p>Consider ways to minimise waste generation and encourage recycling both during the construction and operation of new developments. This should include the maximised use of recycled aggregates and reuse of building/construction materials where practicable.</p>
<p>Where practicable, ensure community participation in determining the nature and location of facilities.</p>
<p>The provision of social infrastructure should recognise the value of the natural environment in creating sustainable communities.</p>
<p>Accessibility should be a key consideration in the development of the Core Strategy to reduce the need for vehicular travel and bring about a reduction in greenhouse gas emissions (promote sustainable transport).</p>
<p>Consider transport options/alternatives to the provision of new roads.</p>

New road schemes should be exposed to the appropriate level of environmental assessment as set out in the Design Manual for Roads and Bridges, Volume 11.
Improve cycle and pedestrian routes/links.
Promote access to education for all.
Consider protection of the water environment in determining the location of development (avoid areas where groundwater is vulnerable).
Encourage the use of SuDS in new developments.
Ensure development is not located within the floodplain.
Explore options for the provision of renewable energy facilities.
Promote recycling.
Ensure transport infrastructure can sustain desired levels of growth.
Use opportunities to promote public access/enjoyment of heritage features.

APPENDIX 3

Main findings of Scoping report

Table A3.1: Main findings of the Scoping Report

Main findings	
1	Devise measures to minimise dependence on single economic sectors by ensuring economic diversity, promoting sites for small and local businesses and enhancing capacity for local sufficiency, including food sufficiency
2	Promote creativity, innovation and enterprise but without compromising environmental objectives.
3	Consider the implications of the regional growth agenda in Luton and Southern Central Bedfordshire with its requirement for 23,000 additional jobs, 26,300 new homes and Luton becoming a major town centre. Considering this agenda, Green Belt objectives and boundaries need to be revised as part of the LDF process, the Strategy's area needs to consider the implications of emerging Waste and Mineral DPDs and the LDF should take the opportunity to promote the vitality of the town centres whilst increasing accessibility and reducing social exclusion.
4	Devise objectives/policies for quality, range and affordability of housing, which can help to provide for a mixed and balanced community. DPDs should provide details of the mix of housing types and tenures to be provided, ensuring that the proposed mix is appropriate and affordable.
5	Community facilities should contribute to the sense of place in communities, provide a focal point for community interactions and social cohesion and also provide employment. LDF should promote access to and availability of services and facilities to address social exclusion, increase community interaction and provide more support for people with long-term needs.
6	Improving educational achievement, the overall skills base, access to learning opportunities across Luton and Southern Central Bedfordshire should be a key objective of the LDF.
7	Issues such as delivery of adequate water supply, measures to reduce water consumption, wastewater treatment and the need to reduce run off rates from development need to be given specific consideration as part of all LDDs
8	Water supply is a critical issue affecting the sustainability of future development. The detailed design stage of plans should clearly address how measures to reduce per capita water usage will be integrated into design.
9	The LDF should promote the protection, enhancement and improved access to the natural environment. Biodiversity measures should be incorporated into policies and plans as they safeguard key habitats and wildlife and positively contribute to the quality of life.
10	LDF should help improving air quality by promoting more sustainable modes of transport for people and freight and ensuring that jobs, shopping, leisure facilities and services are accessible by public transport, walking, and cycling, thus reducing the need to travel by private car.
11	The LDF should help minimising CO2 and other green house emissions and promote more sustainable forms of travel. The LDF could support initiatives to promote modal switch and the necessary public transport measures should be included as part of LDDs preparation.
12	Soil loss is likely to be a pertinent issue given the anticipated levels of greenfield development within Luton and Southern Central Bedfordshire. Protecting soil resources should be a key consideration within the LDF, including the remediation of contaminated land on brownfield sites. Future detailed mitigation must ensure soil re-use.
13	The LDF should promote the development of buildings that can adapt to climate change, the use of renewable energy and encourage the implementation of methods that will enable individuals to save energy, use more renewable energy and promote the use of cleaner energy. Consideration should be given to the inclusion of creative solutions for managing extreme weather events, including flood risk.
14	The LDF should support healthy lifestyles by among other means encourage walking and cycling and making provision for/improving public open space and leisure facilities.
15	Address the effects of development on public health and dealing with the social and economic implications of an ageing society
16	Avoid the erosion of recreational open spaces by new development. The LDF should help weigh up any benefits being offered to the community against the loss of open space that will occur.
17	The LDF should help minimise the adverse impacts of noise and introduce transport objectives which could lead to the reduction of noise from transport

18	Good design and efficient use of land will be key to attract new business to Luton and Southern Central Bedfordshire as well as improving the quality of existing environment and reinforcing civic pride.
19	Need to reconcile economic growth with the need to protect the historic environment to preserve historic, archaeological, environmental and cultural heritage and support the rural economy
20	Ensure that development does not cause adverse impact on sensitive landscapes and townscapes and positively contributes to local character and distinctiveness.

APPENDIX 4

Appraisal of Development Strategy

Description of sites and location map

Site A – West of Leighton Linlade: Located in Aylesbury Vale between the western edge of Leighton Linlade and the A4146

Site B – South West of Leighton Linlade: Located to the south of Leighton Linlade, the site is located within the eastern half of the triangle formed by the A418, A4146 and the railway line.

Site C – North East of Leighton Linlade: Located to the north east of Leighton Linlade between Broomshill Farm and the Clipstone Brook, with the narrow gauge railway running through the middle.

Site D – East of Leighton Linlade: Located in the southern eastern edge of Leighton Linlade, extending from Clipstone Brook in the north to the A505 in the south.

Site E – North West of Dunstable: Located to the north west of Dunstable and includes the Maiden Bower Scheduled Ancient Monument (SAM). Primary access to the A5 is gained from French's Avenue.

Site F - North West of Houghton Regis: Located between the A5 to the west and the A5120 (Bedford Road) to the east. The south of the site is bounded by the existing urban area of Dunstable and Houghton Regis and the northern boundary is the proposed A5-M1 link road.

Site G: North East of Houghton Regis Located to the north of Houghton Regis between the M1 to the east and the A5120 to the west. The southern boundary will comprise the existing urban edge of Houghton Regis and Lewsey Farm and the northern boundary will be the proposed A5-M1 link road.

Site H - North of A5 M1 Link: Located north of Houghton Regis and Dunstable beyond the proposed A5-M1 link road, extending from the M1 in the east to the A5 in the west. The site will encompass Chalton.

Site I – North of Luton: Located to the north of Luton from the M1 in the west to the A6 in the east with the proposed North Luton Bypass as the northern boundary. rephrase this

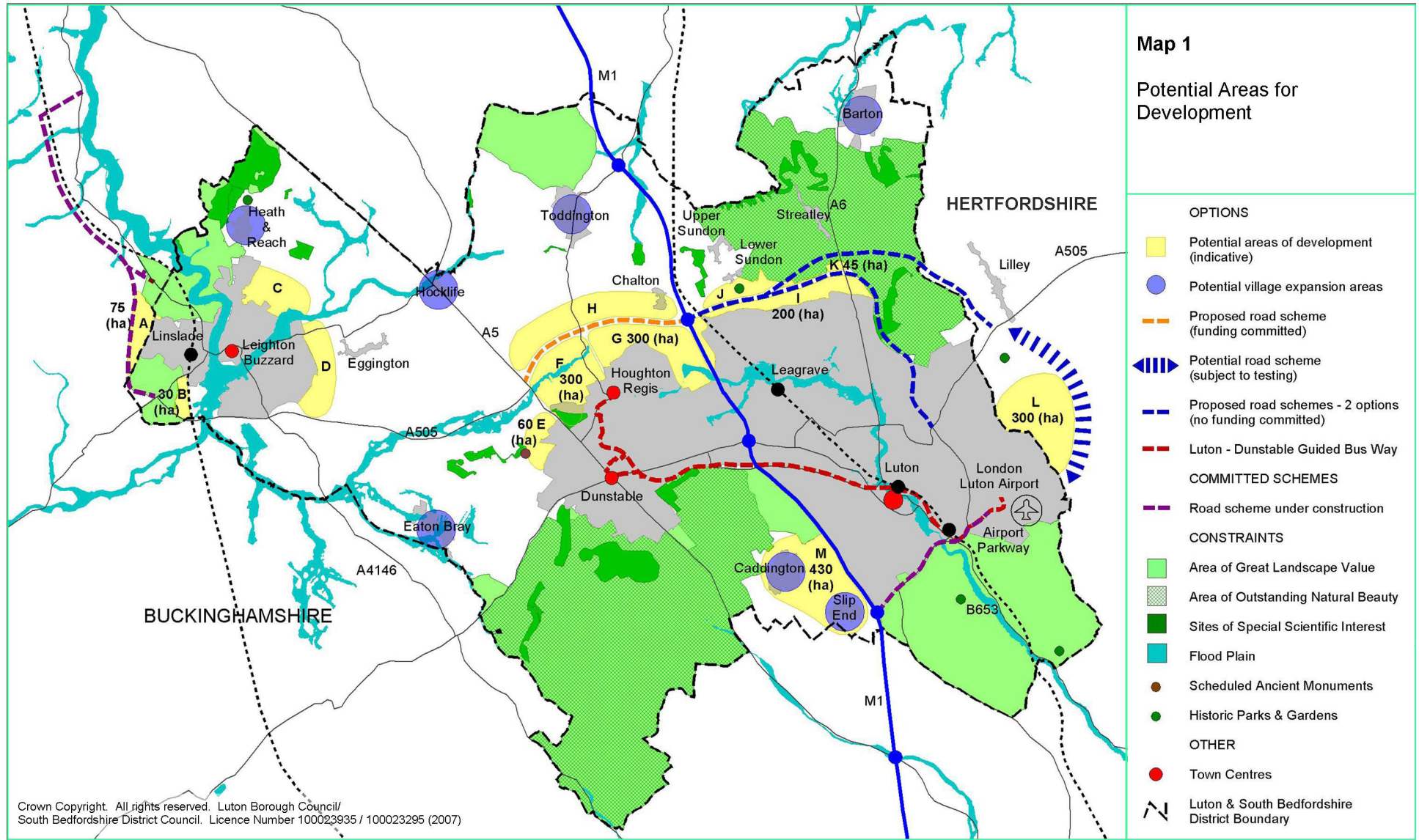
Site J – North of North Luton Bypass: Located to the north of Luton, north of Site I and the proposed North Luton Bypass, south of Lower Sundon

Site K – North East of Luton Bypass: Located to the north of Luton beyond Site I and the proposed North Luton Bypass. The site is surrounded by AONB to the north.

Site L – East of Luton: Located to the east of Luton, extending from the A505 in the north to Luton Airport in the south. The eastern boundary would be Lilley Bottom and the site encompasses the villages of Mangrove Green, Cockernhoe and Tea Green.

Site M – West of Luton: Located to the west of Luton, between the M1 and Chaul End Road and to the north of the villages of Caddington and Slip End.

Issues & Options (2007) map illustrating site location.



Sustainable Urban Extension Site Options

As explained within the SA methodology, all assessment tables should be read in conjunction with Site Assessment Matrix 2010 Update.

Table A4.1: First sieve - Major constraints and contributions to the Core Strategy from development sites

SA Objectives	Site Criteria	Sites												
		A	B	C	D	E	F	G	H	I	J	K	L	M
2 & 7	1) Impact on important areas of landscape	--	-?	-?	-?	-?	-?	0	--	-?	-?	-?	-?	-?
1 & 7	2) Impact on important areas of biodiversity	-?	-?	-?	-?	-?	-?	-?	0	0	-?	0	-?	-?
2 & 8	3) Impact on important areas of heritage/archaeological importance	-?	-?	-?	-?	-?	-?	-?	-?	-?	-	0	?	0
2 & 7	4) Impact on important views	--	-?	0	-?	-?	-?	0	-?	-?	-?	--	?	-?
9 & 12	16) Contribution to affordable and local housing needs of the area.	+	+	+	+	+	++	++	+	++	+	+	++	++
3,4,5 & 7	5) Potential to flood or impact on flood risk areas.	0	0	-?	-?	0	-?	-?	-?	0	0	0	0	0
Delivery	6) Presence of major infrastructure constraints	?	0	0	0	0	-?	-?	0	0	0	0	0	-?
3, 14 & 15	11) Contribution to the delivery of major transport infrastructure	0	0	+	+	0	++	++	+	++	+	0	++	0
3,13,14 &15	9) Contribution to the improvement and easing of congestion in known problem areas	0	?	?	?	?	+	+	+	++	+	0	++	-?
3, 5, 6, 7, 8, 9, 10, 11, 13, 14 &15	18) Contribution to the regeneration of the town centres of Luton, Dunstable, Houghton Regis	0	0	0	0	+	++	++	+	++	+	0	++	+?
3, 4, 5, 7 &11	12) Contribution to delivery of strategic Green Infrastructure provision	+	+	++	++	+	++	++	++	++	++	0	++	++
6, 9, 10 & 15	15) Contribution to provision of strategic employment land and premises.	0	0	0	++	0	++	++	++	++	++	0	++	?

SA objectives

<p>1.To maintain and enhance biodiversity</p> <p>2. To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB</p> <p>3. Protect and enhance air, soil and water resources</p> <p>4.Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk</p> <p>5. Adapt to and mitigate against the impact of climate change</p> <p>6. Increase resource efficiency and reduce resource use and waste</p> <p>7. Maintain, enhance and deliver, new green infrastructure including green open space</p> <p>8.To identify, protect, maintain and enhance the historic environment and cultural assets and their setting</p>	<p>9.Reduce poverty and inequality and promote social inclusion</p> <p>10. Reduce both crime and fear of crime</p> <p>11. To encourage healthier lifestyles and reduce adverse health impacts of new developments</p> <p>12. Provide decent, affordable and safe homes for all</p> <p>13. Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages</p> <p>14.To provide and encourage the use of sustainable integrated transport systems, improve access and mobility</p> <p>15.To promote employment, learning, skills and innovation</p>
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Commentary:

The likely effect of development in sites A, H, J and K are unlikely to be mitigated against and are not recommended to go forward to the pre-submission stage. Site C would require considerable mitigation to avoid impact on views to and from the Greensand ridge. The mitigations required would affect most of the northern part of the site and together with the need to create habitat links to the east and the wider countryside; there is limited capacity for development. It is recommended that site C is not taken forward.

Sites C&D require considerable mitigation to overcome environmental constraints. However, being adjacent sites, they could be developed together providing wider scope for mitigation and contribution to transport infrastructure. The scale of development at sites C & D combined will be substantially greater than A, B and E to contribute significantly to employment and infrastructure needs in Leighton Linlade but less than other sites adjoining the Conurbation. With regards to contribution to affordable and housing needs in the area, the town already has a great number of housing commitments which will help contributing towards local housing need and an allocation of sites C&D would not be directly addressing the wider issues of the Conurbation. However, it addresses identified strategic infrastructure shortages in the area and any allocation should be made on this basis. The sites are recommended to be progressed to the scenario testing of the pre-submission stage.

Most of site E is highly sensitive in landscape and biodiversity terms, being constrained by the setting of the Maiden Bower (SAM). Although the site could contribute to the regeneration of Dunstable, the amount of mitigation against likely environmental impacts limits considerably the site's development potential.

Site M's environmental impact could be mitigated to a similar degree as other sites. However, its contribution towards main sustainable aspects of the strategy is more limited. The separation of the site from Luton by the M1 also limits the potential regeneration benefits to the town. In view of this and the EA objection in relation to the carbon and financial costs of linking the site with Hyde Treatment Works it is recommended that Site M does not progress to the pre-submission stage. Nevertheless, given the scale of the site and the developers' proposals it would be advisable to test the site as part of different development scenarios to see whether the site shortcomings could be outweighed by its combination with other sites.

Significance of effect:

All sites will have a negative impact on the environment and due to their scale, irreversibility of their effect and the vulnerability of the area affected their impact will be significant.

Some mitigation measures for sites recommended to be progressed:

Site C

1. Development beyond the urban area up to the Shenley Hill Road is not considered appropriate.
2. Hedgerows, streams and other features of green infrastructure importance should be protected.
3. Further investigation needed to ensure there is no damage to potential remains of mediaeval settlement and Anglo Saxon cemetery.
4. High potential residual and artificial flood risk due to presence of sand pits within 1km and potential flood storage reservoir. Medium constraint risk for fluvial, groundwater and sewer flood risk. Flood risks may be reduced and managed on-site through careful site layout planning.

Site D

1. Development should avoid sensitive slope and ridge leading up to Charity Farm.
2. Ensure that the Clipstone Brook floodplain remains undisturbed with such a corridor becoming part of a green infrastructure network.
3. Area around Eggington is considered to be of high significance in heritage terms and further investigation is needed in this area.
4. Development should be contained by ridges and not extend to high ground. Historic hedgerows and watercourses should be enhanced. The setting of Eggington should be safeguarded.

5. Measures to reduce and manage flood risk on-site through careful site layout planning due to potential flood storage reservoir.

Site F

1. Houghton Quarry should be preserved.
2. Protect and link together all key sites for biodiversity (SSSI and County Wildlife Site of Houghton).
3. Preserve the setting of the SAM around Thorn Turn through limiting development in this area.
4. Potential for prehistoric, Roman and later sites in this area which should be evaluated in advance of development.
5. Density and pattern of development should be moderated to preserve and allow historic pattern of farms, homesteads to be visually recognised.
6. Key views to and from scarp should be protected.
7. Silos at Puddle Hill and sewage works are also a feature that would benefit from integration.
8. Need to avoid increasing visual impact of A5 on Thorn Turn area.
9. Constraint risk for fluvial, groundwater and sewer flood risk. Flood risks may be reduced and managed on-site through careful site layout planning.
10. Sewage treatment works in the northwestern corner of the area and its 'cordon sanitaire' of 400 metres would need to be introduced early in master planning.

Site G

1. Potential for prehistoric, Roman and later sites in this area which should be evaluated in advance of development.
2. The site is extremely prominent from the M1 and would be an important gateway to Houghton Regis.
3. Medium constraint risk for fluvial, groundwater and sewer flood risk. Flood risks may be reduced and managed on-site through careful site layout planning.
4. Presence of power lines across the site an issue for consideration in master planning. The Environment Agency wish to safeguard land in the South East corner of this site for a Flood Storage Area (FSA) to help minimise flood risk in Luton. These will need to be integrated early in the master planning process.

Site I

1. Protect open views to wooded Sundon Ridge and farmland (part of AONB).
2. Establish links encompassing habitat fragments between Sundon and Bramingham ancient woods.
3. Prevent harmful impact on the setting of Lower Sundon Church and protect setting of Sundon Manor and SAM of Drays Ditches.
4. Views south from the AONB important. Crucial to avoid large scale, high-rise development or development where the land is elevated.

Site L

1. Development beyond the ridgeline and in Lilley bottom is not recommended. The area is a strong representation of the district character area.
2. Expand buffer, and link existing woods to reverse current fragmentation; ensure strong habitat linkages to parkland to the north, habitat within the fringes of Luton and woods and grassland to the south.
3. Comprehensive archaeological investigation will be needed of the areas identified as having archaeological remains.
4. Significant visual constraints beyond ridgeline.
5. Maintain limited inter-visibility with the edge of Luton and protect key views within the area between the ridge and the urban area.

Some mitigation measures if the combination of site M with other sites in a development strategy were to overcome site M's constraints.

Site M

1. Location of Stadium, P&R and employment as to minimise their intrusiveness on the landscape.
2. Preserve chalk landscape to the north of the site.

Table A4.2: Second tier sieve- potential contribution of sites

SA objective	Criteria	A	B	C	D	E	F	G	H	I	J	K	L	M
3, 5, 6 & 14	7) Proximity to neighbourhood centre or local centre	++	++	++	+	+	++	++	-	++	-	-	++	++
6 & 9	8) Proximity to core facilities	++	++	++	++	+	++	++	-	++	-	-	++	++
3, 5, 9 & 14	10) Contribution to the improvement of existing public transport provision	+	0	+	+	+	++	++	-?	++	0	+	++	+
9 & 15	13) Contribution to meeting social and community infrastructure needs	+	0	+	+	0	++	++	0	++	0	0	++	+
7 & 11	14) Contribution to meeting existing open space needs	+	+	++	+	0	++	++	0	++	0	0	++	+
3, 5 & 6	17) Contribution to the delivery of an integrated sustainable infrastructure system	0	0	+	+	0	+	++	+	+	+	+	++	++
9, 10, 12, 13 & 15	19) Contribution to reinvigoration and rejuvenation of deprived wards	+	+	+	+	+	++	++	?	++	+	+	+	+
2, 7, 8, 9, 10, 14	20) Potential to contribute to place making.	-	+	++	++	0	+	++	-	+	-?	-	++	--
3 & 6	21) Contribution to retention Green Belt principles	0	-	-	-	-?	-	--	--	-?	-?	-?	--	--

SA objectives

1. To maintain and enhance biodiversity 2. To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB 3. Protect and enhance air, soil and water resources 4. Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk 5. Adapt to and mitigate against the impact of climate change 6. Increase resource efficiency and reduce resource use and waste 7. Maintain, enhance and deliver, new green infrastructure including green open space 8. To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	9. Reduce poverty and inequality and promote social inclusion 10. Reduce both crime and fear of crime 11. To encourage healthier lifestyles and reduce adverse health impacts of new developments 12. Provide decent, affordable and safe homes for all 13. Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages 14. To provide and encourage the use of sustainable integrated transport systems, improve access and mobility 15. To promote employment, learning, skills and innovation
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Commentary:

All sites will result in the loss of Green Belt with the exception of site A and the development of most of them would result on the loss of openness and some of them have the potential of resulting on the coalescence of existing settlements mainly sites G, H, M and L. Physical barriers are likely to constrain the integration of sites H, K and M with the existing urban area. This physical constrains are also likely to affect sites ability to contribute to the wider social needs of the existing settlements.

Site M is not sufficiently separated visually from existing settlements (Luton and Caddington) to become a clear and distinct new community on its own. On the other hand, a lack of cohesion with the urban area of Luton makes this approach equally negative when assessing the site's potential to contribute to

place making. Site M does not fall within the Noise Exposure Category C were permission should not normally be granted but the development of the site could affect future airport expansion by limiting future rerouting choices for the airport or the implementation of an increased use of the existing runway. The limited connectivity of Site M public transport services may result on a greater level of patronage which may not be sustainable in the long term.

Robust Green Belt boundaries are essential to the retention of Green Belt principles and the M1 creates a strong edge to the urban area while the Slip End Valley also helps to create a natural limit to the urban form. Large scale Green Belt land review elsewhere in the Luton and Southern Bedfordshire may have a lesser impact on the future of the Green Belt in the area and the regeneration of Luton as a result of re-using previously developed land. Notwithstanding this, and given Site M's scale and readiness to delivery it is recommended that the site is tested in the context of wider development scenarios.

The development of sites C&D together are likely to provide wider significant opportunities to provision of open space, sustainable infrastructure and renewable energy and social and community infrastructure within the site and Leighton Linlade town centre to address existing shortfall.

The development of sites F&G together are likely to bring a greater level of positive contributions towards infrastructure and social needs as well as greater opportunities to mitigate against likely impact on the environment.

Site A is likely to have a negative impact on the western setting of Linlade and on settlements like Soulbury. It is considered that development in this location lacks the potential to contribute to place making.

Considering site's E scale and the mitigation required there will be limited capacity for development there.

Significance of effect:

All sites will have a negative impact on the environment and due to their scale, irreversibility of their effect and the vulnerability of the area affected their impact will be significant.

Some mitigation measures for sites recommended to be progressed:

Site B

1. Avoid negative impacts on Southcott Conservation area and respond to its setting.

Sites C & D

1. Develop linkages with the town centre and the train station capable of overcoming the constraints of the existing narrow roads to provide public transport access.
2. Reinforce linear green infrastructure along watercourses, particularly the Clipstone Brook.
3. Reinforce biodiversity links.
4. Safeguard the setting of Clipstone Farm.
5. Identify suitable site boundary for sites C and D to avoid coalescence of Clipstone and Eggington respectively.

Site E

1. Protect key views and provide appropriate landscape.
2. Existing development set back from important ridgeline.
3. Skyline development should be minimised.

Sites F & G

1. Contributions to the on site and off site provision / funding of Green Space to respond to existing deficit in the area.
2. The Houghton Regis area has been identified as an area, which would benefit from additional affordable housing and investment in the existing provision.
3. Funding towards investment on existing affordable housing in Houghton Regis.
4. Contribute towards sustainable infrastructure and renewable energy technology Integrate the sewage works and increase wetland area.
5. Contribute to public transport services to provide new services, particularly from this area to the town centres of Houghton Regis, Dunstable and Luton.
6. Notably, the site could benefit from an extension to the guided busway.
7. Contributions to the on site and off site provision/ funding of Green Space in an area of existing deficit.
8. Improve interface with countryside in site G.

Site I

1. Contributions to the on site and off site provision/ funding of Green Space in an area of existing deficit.
2. Provide new sustainable infrastructure and renewable energy technology if developed alongside sites F and G.
3. Take into account the setting of Lower Sundon and make use of the likely connectivity of the urban area to the AONB.
4. Minimise loss of separation between Luton and Lower Sundon.

Site L

1. Contribute towards a link into the Luton – Dunstable guided busway and on road measures to improve public transport efficiency within the existing urban area.
2. Minimise potential of coalescence to Tea Green and Cockernhoe.

Site M

1. Contribute towards new busway linked the Luton Dunstable Guided Busway but no evidence to demonstrate that this would overcome these problems.
2. Link with urban area to overcome M1 barrier effect.
3. Minimise impact of development on the rural character of the villages and the small rural settlements.
4. Proposals to relate to the village scale of Caddington and its associated settlements rather than an expansion of Luton.

Table A4.3: Third sieve - Deliverability within the plan period

	A	B	C	D	E	F	G	H	I	J	K	L	M
22)Availability of the land for development	+	?	+	+	+	?	+	+	?	+	+	+	+
23)Contamination of the land	0	-?	0	0	0	0	0	0	0	0	0	0	0
24)Availability of utilities infrastructure	+	-?	+	+	+	+	+	+	-?	+	+	-?	-?
25)Suitability of access arrangements	+	+	+	+	+	-?	-?	-?	-?	-?	+	+	-?
26)Physical Constraints addressed	0	0	-?	-?	0	-?	-?	-?	-?	0	0	0	-?
27)Dependence on Major Transport Infrastructure	0	0	-?	-?	-?	-	-	--	-	--	--	--	-?

Commentary:

The deliverability of sites is mainly related to their scale and dependence on major infrastructure. Given the cuts on public spending and uncertainty over the transport infrastructure projects which will receive funding, sites E, F, G, H, I and K will be unlikely to be delivered in their entirety within the next 15 years. The strategy needs to reconsider whether the RSS plan period to 2031 would provide a reasonable prospect of delivery. This needs to be informed by a delivery plan supporting the Core Strategy and setting out the commitments and timeline for the delivery of infrastructure to support the sites taken forward to the pre-submission stage and any contingency arrangements.

All sites are available for development, however, sites A, B, C&D and M performed better against dependence on Major Transport Infrastructure. A better performance against this criterion does not override the sustainability issues identified earlier but may mean that the strategy could mitigate against it by re-thinking the phasing of development, the time period of the strategy and monitoring mechanisms to ensure the delivery of both Sustainability and Core Strategy Objectives.

Significance of effect:

The impact of deliverability although significant and long lasting is not necessarily irreversible if a strategy is in place to ensure the most sustainable sites under the most sustainable development scenarios is in place to provide certainty to private investors and confidence to public funding providers when Government spending is finally decided. If such strategy is not in place the effects will be irreversible.

Mitigation measures and contingency arrangements should be developed with a Delivery Plan in place.

Development Options – Mixed-use SSSAs

Option 1: High level of development (34,700 dwellings) with four SSSAs: North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade.

Option 2: Medium-high level development with 3 SSSAs: a) North of Houghton Regis, West of Luton and East of Leighton Linlade (26,850 dwellings) or b) North of Houghton Regis, North of Luton and West of Luton (26,150 dwellings).

Option 3: Low level development with 3 SSSAs: a) North of Houghton Regis, North of Luton and East of Leighton Linlade (23,150 dwellings) or with 2 SSSAs: b) North of Houghton Regis and West of Luton (24,350 dwellings)

Option 4: Reduction of the urban capacity

Summary of significant effects:

SA objective 1

At strategic level all the sites will have similar impact on biodiversity the only difference is the scale of the land take and level of development. Although all sites will have the capacity to address Green Infrastructure deficits in the area which could help enhance biodiversity, Options 1, 2a and 3a would help deliver Leighton Linslade's Green Wheel and identified need for green corridors north of Luton. West of Luton. No corridors have been identified to the West of Luton and any links are likely to be difficult to the barrier created by the M1.

Potentially, a lower urban capacity would reduce pressure on urban green spaces and help maintaining biodiversity in the urban area.

SA objective 2

Reducing the land allocation in North Luton and West of Luton would reduce pressure on AONB and sensitive landscapes to the east of Luton and North of West of Luton.

At the proposed scale, West of Luton would result on the coalescence of Caddington and Slip End with Luton to the detriment of townscape and character aims in objective 2.

A reduction in urban capacity presents potential positives and potential negatives for objective 2. The higher the urban capacity the greater the pressure on townscapes and historic built environment. The smaller scale of urban sites may mean less capacity to mitigate against loss of local character and negative effect on townscape which cumulatively could have a significant effect. On the other hand it alleviates development pressures to build non previously developed land.

Given the level of development needed even if scenarios were limited to natural growth, planned urban extensions may have a greater scope to respond to this objective than small urban sites subject to individual planning applications. However, the cumulative effect of smaller urban sites is better deal with through development management policies.

SA objectives 1& 2

Options 2a) and 3a) provide opportunities to restore and enhance former quarry areas at Houghton Regis and East of Leighton Linlade.

SA objective 3

The location of sites in and around the urban areas is likely to minimise pollution of these resources but need to consider the effect of pollution from construction stage.

Option 1 is unlikely to mitigate against pollution and enhance air quality given the lack of transport infrastructure to support the level of growth proposed. Any

scenario with West of Luton (1, 2a, 2b and 3b) will have a negative effect on water resources unless a solution is found for the transfer to East Hyde.

Sites in and around the urban areas are likely to minimise use of resources but need to consider the effect of pollution from construction stage.

Sites in and the urban areas are likely to minimise use of resources but need to consider the effect of pollution from construction stage.

On the other hand, the ability of smaller urban sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative negative effect on this objective could be significant.

SA objective 4

The screening of possible SSSAs eliminated sites in areas at risk of flooding. All sites could accommodate integrated sustainable infrastructure measures and renewable energy technology, which would minimise their effect on objective 4 and may be able to incorporate measures to help reduce flood risk in some areas.

Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water.

SA objectives 5 & 6

The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change with the exception of Option1 which is unlikely to be accompanied by the required transport infrastructure. The rest of the climate change elements are addressed as part of development management environmental policies.

With regards to land efficiency, the Core Strategy sets clearly its development strategy and, considering the level of development needed to support natural growth as a minimum, the strategy generally supports the preservation of the Green Belt's openness through its direction of growth.

Option 1 proposes a maximum distribution of development across the area with maximum land take which is no longer supported by major transport infrastructure. This was a given during the Preferred Options due to the RSS figures. Other lower scenarios can now be explored that provide a more balanced approach between needed growth and environmental priorities.

Decreasing urban capacity will weaken the strategy's commitment to prioritise the development of previously developed land and enhance town centre services and facilities. The concentration of population on established service centres has associated efficiencies with the use of resources. The significance of the effect would depend on the level of the reduction on urban capacity and on whether that reduction were to be directed to increase environmental conditions on identified pressure areas. Although, this would be better addressed in development management documents.

There is less capacity to incorporate integrated sustainable infrastructure as part of smaller urban and rural sites and therefore their cumulative effect should be assessed through the monitoring of development management policies.

SA objective 7

Option 1 provides the greatest opportunity to address green infrastructure and green corridor deficiencies across the plan's area. Although the effect of the locational approach of development options contributes to this objective, the direct effect is contained in development management policies.

While focusing development within the urban area reduces the impact on the surrounding countryside, it could lead to increased development pressure for urban green spaces which are important features of local green infrastructure.

The shortage of existing green space the urban area would make any further loss significant. A reduction on urban capacity could have a positive effect against

this objective.

SA objective 8

This is a site-specific issue relating to the design and layout of proposals. Master planning of SSSAs to ensure that historic and architectural assets and their setting are protected, preserved and enhanced. Policy CS8 on quality of design provides the principles to guide development to respect local character while providing high quality of design. This will be developed further through Development Management policies and a Design SPD.

SA objective 9

Distribution of development and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address social inequalities. However, it is through employment Policy SC9 and Policy SC7 on social and community infrastructure where the Core Strategy addresses this objective.

Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites.

The causes of deprivation are varied and approaches other than spatial policies such as housing management, health and skill programs may be better suited to reduce deprivation.

SA objective 10

Distribution of development to in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address crime and fear of crime. However, it is through design Policy CS8, masterplanning for the Strategic Site Allocations a forthcoming design SPD and town centre master planning which the Core Strategy addresses this objective.

SA objective 11

With the exception of Option 1, the distribution of growth in all options and their focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, it is through Design Policy CS8, Green Infrastructure Policy CS10 and Social and Community Infrastructure Policy CS7 that improved access to services and facilities is provided for.

SA objective 12

The scale of development proposed is likely to result in a significant step change in the provision of affordable housing in the area. When preparing the master plans of SSSAs, proposals should have regard to the tenure mix in the surrounding area to maximise opportunities to create sustainable mixed communities. Option 1 provides the greatest benefit against this objective.

A decrease in urban capacity is likely to increase certainty on the provision of affordable housing and minimise the reliance on urban capacity and the use of thresholds which could preclude smaller sites coming forward or being developed below the threshold.

SA objective 13

Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, given the lack of transport infrastructure to support the level of growth in option 1, and the potential coalescence of settlements to the West of Luton only option 3a) performs well against this objective.

A decrease in urban capacity may lead to less pressure to use urban sites for housing purposes rather than other town centre or commercial uses.

SA objective 14

Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, it is unlikely that infrastructure will be available to deliver

option 1 within the plan period. The other options have not been tested through transport modelling and not scoring is given in the appraisal table. It can only be assumed based on existing modelling findings that a reduction on number of dwellings with a scaled down transport infrastructure would provide the highest environmental gain. The assessment did not provided evidence which would favour a site over another but there remain concerns with the impact of West of Luton on the transport Network showed in the transport modelling work..

Scenarios without West of Luton would remove concerns on the impact on the transport network.

SA objective 15

Distribution of growth in and around existing centres together with employment allocated in the SSSAs is likely to have a positive effect on employment, skills and innovation. However, it is through employment policy CS9, that the Core Strategy will meet this objective.

A decrease in urban capacity could reduce pressure on the release of employment and commercial uses in the urban areas.

See also site-specific mitigation in Tables A4 to A43 in **Appendix 4**.

Key for likely option effect															
++	Significant positive	+	Positive not significant	+ ?	Depends on implementation but if there is an impact is likely to be positive	--	Significant negative	-	Negative not significant	- ?	Depends on implementation but if there is an impact is likely to be negative	0	Neutral effect	?	Uncertain effect

Table A4.4: Development Options – Mixed-use SSSAs

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity	
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade	2a) North of Houghton Regis, West of Luton and East of Leighton Linlade	2b)) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linlade	3b) North of Houghton Regis and West of Luton
SA objectives	-?	-?	-?	-?	+?
<p>SA objective 1 - To maintain and enhance biodiversity</p> <p>At strategic level all the sites will have similar impact on biodiversity the only difference is the scale of the land take and level of development. Given their location and the amount of land allocated, the sites could mitigate their effect against this objective with the provision of strategic green infrastructure and green corridors linking into the urban areas. All of them could address open space deficiencies identified in their adjacent urban areas which could contribute to biodiversity. The effect on existing biodiversity could be mitigated through sensitive location and layout of buildings and infrastructure. There are opportunities to provide green corridors and green infrastructure which could enhance biodiversity.</p> <p>Significance of effect: Given the scale of growth and that the consequences would be long lasting and irreversible, the effect would be significant.</p>	<p>Issues the same as option 1 but the lower number of houses would mean less pressure on existing open space but there will be less capacity to address current deficiencies. Not including North of Luton could mean a lost opportunity to create a green corridor from Bramingham Park to the wider countryside or provision of amenity green space in the deficient areas in the north of Luton which could benefit biodiversity.</p> <p>Significance of effect: Although the scale of growth is lower than option 1 the consequences would still be long lasting and irreversible in those areas accommodating development if careful site layout is not planned. Any</p>	<p>Issues the same as option 1 but less houses would mean less pressure on existing open space outside the urban areas. Like option 1, this option addresses most areas of deficiency of open space identified in the green space strategy with potential enhancement to biodiversity.</p> <p>Not allocating East of Leighton Linlade will not help the creation of the Green Wheel (green infrastructure network around the town).</p> <p>Significance of effect: Same as Option 2a)</p>	<p>Issues the same as option 1 but would place the least amount of pressure on existing open space outside the urban areas. Not having West of Luton could mean a lost opportunity to provide for identified deficiencies on seminatural space West of Luton. However, the M1 would make addressing this deficiency difficult as part of this option. No green corridors have been identified in the Green Spaces Strategy to link to the west.</p> <p>Significance of effect: Although the scale of growth is lower than options 1 and 2 .</p>	<p>Issues same as option 1 but there will be less capacity to address existing current deficiencies North of Luton which could enhance biodiversity. Not allocating East of Leighton Linlade would not help the creation of the Green Wheel around the town.</p> <p>Significance of effect: Same as Option 3a)</p> <p>Significance of effect: The significance of the effect would depend on the</p>	

	Option 1 High level of development	Option 2 Medium-high level development		Option 3 Low level development		Reduction of urban capacity
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives		enhancement to biodiversity in the area coming from green infrastructure related to these sites is unlikely to be provided at the same scale without them. The effect would be significant.				level of the reduction and on whether the reduction on urban capacity would have to be accommodated on non previously developed land.
SA objective 2 - To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	-	-	-?	-?	-	-? /+?
	Given their scale, the SSSAs are likely to have a detrimental effect on local character. However, the sites are capable to mitigate against their effect on sensitive areas of landscape subject to sensitive location of development, use of green infrastructure and desing. However, West of Luton (Site M) could only accommodate limited development on the edge of Caddington and Slip End if impact is to be mitigated. This would considerably reduce the number of dwellings to be provided under option 1. See mitigation measures for each site. Although not within the AONB North of Luton needs to mitigate against	Issues generally the same as for Option 1. However, With a smaller allocation of land Option 2a will decrease pressure on landscape sensitive areas and AONB to the north of Luton. The lower number of dwellings may result on a lesser impact on this objective than Option 1 although this will depend on the location, layout and design of development and the use of green infrastructure. At the proposed West of Luton development scale, the option could result on the	Issues generally the same as for Option 1. However, Option 2b will decrease pressure on landscape sensitive areas in Leighton Linslade. The lower number of dwellings may result on a lesser impact on this objective than Option 1 although this will depend on the location, layout and design of development and the use of green infrastructure. Mitigating against this objective could reduce considerably the housing capacity at West of Luton. A smaller land	Issues generally the same as for Option 1. However, with a smaller land allocation at North Luton and not allocating land West of Luton option 3a will decrease pressure on AONB north and West of Luton. The lower number of dwellings may result on the least impact on this objective and the AONB in particular of all the options although this will depend on the location, layout and design of development and the use of green infrastructure. See site specific mitigation measures	Issues generally the same as for Option 1. However, Option 3 will decrease pressure on landscape sensitive areas in Leighton Linslade and North of Luton. The lower number of dwellings may result on a lesser impact on this objective than options 1 and 2 although this will depend on the location, layout and design of development and the use of green infrastructure. Mitigating against this objective could reduce considerably	This option presents potential positives and potential negatives for objective 2. The higher the urban capacity the greater the pressure on townscapes and historic built environment. The smaller scale of urban sites may mean less capacity to mitigate against loss of local character and negative effects on townscapes

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade	2a) North of Houghton Regis, West of Luton and East of Leighton Linlade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linlade	3b) North of Houghton Regis and West of Luton	
SA objectives	impact on AONB and highly sensitive landscape to the east of the A6 There are opportunities in West of Luton to reinforce AONB setting, conserve views and vistas, provide stronger mitigation to M1 motorway. Large scale development West of Luton would result in the coalescence of Luton and Caddington and Slip End. See site specific mitigation measures Significance of effect: Given its scale, long term effect and irreversibility the effect is significant.	coalescence of settlements west of Luton. See site specific mitigation measures Significance of effect: Same as Option1.	allocation North of Luton would reduce pressures on AONB. Coalescence of settlements west of Luton. See site specific mitigation measures Significance of effect: Same as Option 1.	Significance of effect: Same as Option 1.	the housing capacity at West of Luton. Depending on the reduction, the option could provide less than the development needed to accommodate natural growth of population in the area. Coalescence of settlements west of Luton. Significance of effect: Same as Option 1.	which cumulatively could have a significant effect. On the other hand it alleviates development pressures to build non previously developed land. Given the level of development needed even if scenarios were limited to natural growth, planned urban extensions may have a greater scope to respond to this objective than small urban sites subject to individual planning applications. However, the cumulative effect of smaller urban sites is better deal with through

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
					development management policies. Significance of effect: Same as Option 1.	
SA objective 3 - Protect and enhance air, soil and water resources	-	-?	-?	-?	?	
	The level of growth required will increase pressure on air, soil and water resources. The screening of possible SSSAs eliminated sites that could not accommodate measures to mitigate against this objective. Given their location and scale, the proposed areas in Option 1 (subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology to minimise their effect on objective 3. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water	Issues generally the same as for Option 1 but a lower scale of development would reduce pressure on resources and accompanied by a minimum non committed transport infrastructure scenario as per the Transport Appraisal 2009, this scenario is likely to increase the use of public transport. The location of sites in and around the urban areas and intensification of urban areas in Option 2 is likely to minimise pollution of these resources but need to consider the effect of pollution from	Issues the same as for Option 1 and 2a) but a lower scale of development would reduce pressure on resources. Significance of effect: Same as Option 1.	Issues as per option 1 and 2a but provides the least amount of development and it is likely to be the least resource intensive.	Issues as per option 1 and 2a but provides the lower amount of development but it is unlikely to provide the infrastructure in the minimum non committed transport infrastructure scenario as per the Transport Appraisal 2009. Its ability to help increasing public transport use is more limited. Further information needed on transport modelling to test the new scenarios.	Sites in and the urban areas are likely to minimise use of resources but need to consider the effect of pollution from construction stage. On the other hand, the ability of smaller urban sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative negative effect on the objective could

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	<p>efficiency standards. The location of sites in and around the urban areas in this Option is likely to minimise pollution of these resources but need to consider the effect of pollution from construction stage. See also site mitigation measures. West of Luton is constrained by the lack of capacity of the Sewage Treatment Plant at Caddington and no solution has been found to the transfer to the plant at East Hydwhich would provide the EA support to the site's development.</p> <p>The Core Strategy area is a Water Stress area and development management policies will have to be developed to address this by requiring the highest level water efficiency from new development.</p> <p>Site proposals would have to address the Air Quality Management Plans in Luton and southern Central Bedfordshire. All of them relate to transport emissions and given the scale of development the impact on</p>	<p>construction stage.</p> <p>However, any option with West of Luton will encounter EA's opposition due to the lack of capacity of the Caddington SWT or the environmental cost of transferring to East Hyde. See also site mitigation measures.</p> <p>Significance of effect: Same as Option 1</p>				<p>be significant.</p>

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	<p>this areas may be considerable. Transport infrastructure will no be provided to the scale which would minimise the effects of option one on the transport network and although car development is expected to bring lower emissions over time. Option 1 is likely to have a detrimental effect on this objective.</p> <p>Significance of effect: Given the scale of growth and that the consequences would be long lasting and irreversible, the effect would be significant.</p>					
	+?	+?	+?	+?	0	
SA objective 4 - Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk	<p>The screening of possible SSSAs eliminated sites in areas at risk of flooding. Given their location and scale the proposed areas in Option 1(subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology , which would minimise their effect on objective 4 and may be able to incorporate measures to help reduce</p>	<p>Issues generally the same as for Option 1</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues generally the same as for Option 1</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues generally the same as for Option 1</p> <p>Significance of effect: Same as Option 1.</p>	<p>The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. However, they are unlikely to worsen current</p>

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives	flood risk in some areas. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water efficiency standards. Significance of effect: This Option directs development away from high-risk areas and has a significant effect in the reduction of risk. Given the scale of growth and that the consequences would be long lasting.					
	-?	+?	+?	+?	+?	
SA objective 5- Adapt to and mitigate the impact of climate change	The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change. The rest of the climate change elements are addressed as part of development management environmental policies. However, without a level of transport infrastructure to	The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change. The rest of the climate change elements are addressed as part of	Issues the same as for Option 2a. Significance of effect: Same as Option 2.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	There is less capacity to incorporate integrated sustainable infrastructure as part of smaller urban and rural sites and therefore their cumulative effect should be assessed through

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	match the level of development Option 1 is unlikely to contribute favourably towards this objective. Significance of effect: Although the lack of transport infrastructure would could lead to a negative impact on this objective, evelopment management policies contain sustainable development proposals. The effect cannot be considered significant.	development management environmental policies. Significance of effect: This growth Option complements sustainable practices but development management policies contain sustainable development proposals. The effect cannot be considered significant.				monitoring of development management policies.
	-	+	+	+	+	-
SA objective 6 - Increase resource efficiency and	Same as objective 5. With regard to land efficiency, the Core Strategy sets clearly its development strategy and, considering the level of development needed to support natural growth as a minimum, generally supports the preservation of the Green Belt's openness through its direction of growth. Option 1 proposes a maximum distribution of	Issues generally the same as for Option 1 with the exception of transport infrastructure and level of growth which result on the negative impact of option 1. Significance of effect: Similar to Option 1 with regards to SSSAs.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Decreasing urban capacity will weaken the strategy's commitment to prioritise the development of previously developed land and enhance town centre services and facilities. The concentration

	Option 1 High level of development	Option 2 Medium-high level development		Option 3 Low level development		Reduction of urban capacity
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
reduce resource use and waste	development across the area with maximum land take. This was a given during the Preferred Options due to the RSS figures. Other lower scenarios can now be explored that provide a more balanced approach between needed growth and environmental priorities. In addition, this level of growth is no longer accompanied by the transport infrastructure needed. Significance of effect: With regard to land efficiency, Option 1 proposes a distribution of growth that indirectly affects land efficiency but also proposes the integration of different uses, which will have a significant and long lasting effect.					of population on established service centres has associated efficiencies on the use of resources. Significance of effect: The significance of the effect would depend on the level of the reduction on urban capacity and on whether that reduction were to be directed to increase environmental conditions on identified pressure areas. Although, this would be better addressed in development management documents.
	++	+	+	+	+	?
SA objective 7 - Maintain, enhance and	The location of development as per Option 1 maximises the opportunity to provide	Focusing development within option 2a would provide the opportunity	Focusing development within option 2b would	Focusing development within option 3a would provide the opportunity	Focusing development within option 3b would	While focusing development within the urban

	Option 1 High level of development	Option 2 Medium-high level development		Option 3 Low level development		Reduction of urban capacity
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade	2a) North of Houghton Regis, West of Luton and East of Leighton Linlade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linlade	3b) North of Houghton Regis and West of Luton	
SA objectives						
deliver new green infrastructure including green open space	<p>Green Infrastructure in areas of identified need. However, Policy CS10 deals with green infrastructure provision.</p> <p>Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in a different policy and the effect of Option 1 is not significant.</p>	<p>to address Green Infrastructure deficiencies across the area but not north of Luton.</p> <p>Significance of effect: Same as option 1.</p>	<p>provide the opportunity to address Green Infrastructure deficiencies across the area but not East of Leighton Linlade.</p> <p>Significance of effect: Same as Option 1.</p>	<p>to address Green Infrastructure deficiencies across the area but not West of Luton. However, the barrier formed by the M1 is likely to limit access to infrastructure and the creation of green corridors within the western urban area of Luton.</p> <p>Significance of effect: Same as Option 1.</p>	<p>provide the least opportunity to address deficiencies across the area.</p> <p>Significance of effect: Same as Option 1.</p>	<p>area reduces the impact on the surrounding countryside, it could lead to increased development pressure for urban green spaces which are important features of local green infrastructure.</p> <p>Significance of effect: Depends on implementation but could be significant. The shortage of existing green space the urban area would make any further loss significant. A reduction on urban capacity could have a positive effect against this objective.</p>

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade	2a) North of Houghton Regis, West of Luton and East of Leighton Linlade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linlade	3b) North of Houghton Regis and West of Luton	
SA objectives						
SA objective 8 - To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	0	0	0	0	0	
	<p>This is a site-specific issue relating to the design and layout of proposals. Master planning of SSSAs to ensure that historic and architectural assets and their setting are protected, preserved and enhanced. See site mitigation measures.</p> <p>Policy CS8 on quality of design provides the principles to guide development to respect local character while providing high quality of design. This will be developed further through Development Management policies and a Design SPD.</p> <p>There is no significant effect.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1.</p>	<p>The effect on this objective would be mainly linked to Development Management policies and decisions on individual sites</p>

	Option 1 High level of development	Option 2 Medium-high level development		Option 3 Low level development		Reduction of urban capacity
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	+	+	+	+	+	0
SA objective 9 - Reduce poverty and inequality and promote social inclusion	<p>Distribution of development in Option 1 and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address social inequalities. However, it is through employment policy CS9 and Policy CS7 on social and community infrastructure where the Core Strategy addresses this objective. The causes of deprivation are varied and approaches other than spatial policies such as housing management, health and skill programs may be better suited to reduce deprivation.</p> <p>Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.</p>	<p>Same general effect as option 1, but it will not address deprivation on wards adjacent to North of Luton SSSA.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Same general effect as option 1, but it will not address deprivation on wards adjacent to East of Leighton Linslade SSSA.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Same general effect as option 1, but it will not address deprivation on wards adjacent to West of Luton SSSA.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Same general effect as option 1, but it will not address deprivation on wards adjacent to North of Luton and East of Leighton Linslade SSSAs.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Outside the distributional benefit of SSSAs the effect on this objective would be mainly linked to Development Management policies and decisions on individual sites.</p>

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade	2a) North of Houghton Regis, West of Luton and East of Leighton Linlade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linlade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	+	+	+	+	0	
SA objective 10 - Reduce both crime and fear of crime	<p>Distribution of development to in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address crime and fear of crime. However, it is through design policy CS8, a forthcoming design SPD and town centre master planning which the Core Strategy addresses this objective.</p> <p>Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1</p>	<p>Issues the same as for Option 1.</p> <p>Significance of effect: Same as Option 1</p>	<p>The effect on this objective would be mainly linked to Development Management policies and decisions on individual sites.</p>

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b)) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
SA objective 11 - To encourage healthier lifestyles and reduce adverse health impacts of new developments	-?	+	+	+	0	
	<p>Distribution of growth in option 1 and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, lack of transport infrastructure to accommodate its level of growth is likely to have detrimental effect on this objective. However, it is through Design Policy CS8, Green Infrastructure Policy CS10 and Social and Community Infrastructure Policy CS7 that improved access to services and facilities is provided for.</p> <p>Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.</p>	<p>Distribution of growth in option 2a and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, it is through Design Policy CS8, Green Infrastructure Policy CS10 and Social and Community Infrastructure Policy CS7 that improved access to services and facilities is provided for.</p> <p>Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.</p>	<p>Issues the same as for Option 2a.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 2a.</p> <p>Significance of effect: Same as Option 1.</p>	<p>Issues the same as for Option 2a.</p> <p>Significance of effect: Same as Option 1.</p>	<p>The effect on this objective would be mainly linked to Development Management policies and decisions on individual sites.</p>

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b)) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	++	++	++	++	++	+?
SA objective 12 - Provide decent, affordable and safe homes for all	The scale of development proposed is likely to result in a significant step change in the provision of affordable housing in the area. When preparing the master plans of SSSAs proposals should have regard to the tenure mix in the surrounding area to maximise opportunities to create sustainable mixed communities. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant.	Issues generally the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under Option 1.	Issues the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under Option 1.	Issues the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under options 1 and 2.	Issues the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under options 1 and 2.	A decrease in urban capacity is likely to increase certainty on the provision of affordable housing and minimise the reliance on urban capacity and the use of thresholds which could preclude smaller sites coming forward or being developed below the threshold.
SA objective 13 - Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	-?	-?	-?	+	-?	+?
	Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, the lack of transport infrastructure to support this	Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal	Issues generally the same as for Option 2a. However, lack of SSSA at Leighton Linslade would result on a loss of opportunities for the revitalisation of East of Leighton Linslade. Significance of effect: The Overall impact of this Option	Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal	Issues generally the same as for Option 2a. Significance of effect: The Overall impact of this Option is considered to be similar to Option 2a.	A decrease on urban capacity may lead to less pressure to use urban sites for housing purposes rather than other town centre or commercial uses.

	Option 1 High level of development	Option 2 Medium-high level development	Option 3 Low level development	Reduction of urban capacity		
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	level of growth is likely to have effects on congestion which could preclude the revitalisation of town centres and work against sustainable urban living. This Option is likely to have a long-term significant effect .	development. However, the development of West of Luton could result on the coalescence of Caddington and Slip End with Luton and the physical barrier of the M1 may difficult the integration of the site with Luton. This option is likely to have a long-term significant effect .	is considered to be similar to Option 2a.	development. This option is likely to have a long-term significant effect .		
	-?	?	?	?	?	?
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is likely to work against the aims of this objective. Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would provide the greatest shift to public transport when compared to not allocating land as part of the Core Strategy and not providing further infrastructure.	Issues are the same as per option 2a)	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on local transport network.	Issues are the same as per option 2a)	

SA objectives	Option 1 High level of development North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linlade	Option 2 Medium-high level development 2a) North of Houghton Regis, West of Luton and East of Leighton Linlade	2b) North of Houghton Regis, North of Luton and West of Luton	Option 3 Low level development 3a) North of Houghton Regis, North of Luton and East of Leighton Linlade	3b) North of Houghton Regis and West of Luton	Reduction of urban capacity
			<p>It could be assumed that a scenario with lower development than those in the former RSS and a reduction on the transport infrastructure associated with it, would provide the greatest sustainable transport gain. The assessment did not provided evidence which would favour a site over another but there remain concerns with the impact of West of Luton on the transport Network showed in the transport modelling work..</p> <p>See section on Major transport Infrastructure in the SA report.</p> <p>Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.</p>			

	Option 1 High level of development	Option 2 Medium-high level development		Option 3 Low level development		Reduction of urban capacity
	North of Houghton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Houghton Regis, West of Luton and East of Leighton Linslade	2b) North of Houghton Regis, North of Luton and West of Luton	3a) North of Houghton Regis, North of Luton and East of Leighton Linslade	3b) North of Houghton Regis and West of Luton	
SA objectives						
	+?	+?	+?	+?	+?	+?
SA objective 15 – To promote employment, learning, skills and innovation	<p>Distribution of growth in and around existing centres together with employment allocated in the SSSAs is likely to have a positive effect on employment, skills and innovation. Particularly if employment is to be located as part of mixed use sustainable urban extensions as this would take advantage of potential synergies between the different uses. However, it is through employment policy CS9 that the Core Strategy will meet this objective.</p> <p>Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.</p>	<p>Effects as per Option 1.</p> <p>Significance of effect: As per option 1</p>	<p>Effects as per Option 1.</p> <p>Significance of effect: As per option 1</p>	<p>Effects as per Option 1.</p> <p>Significance of effect: As per option 1</p>	<p>Effects as per Option 1.</p> <p>Significance of effect: As per option 1</p>	<p>Could reduce pressure on the release of employment and commercial uses in the urban areas.</p>

Employment development options

Option 1: Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and increased proportion of non-B use employment).

Option 2: Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).

Option 3: Distribution of employment on mixed use SSSAs and employment led SSSAs

Option 4: Distribution of employment mainly on employment led SSSAs

Summary of significant effects:

SA objective 1: Option 3 is likely to contribute to the enhancement of biodiversity through the large green infrastructure expected to accompany the mixed-use SSSAs

SA objectives 3, 5 and 6: Option 1 performs relatively well against the protection and management of resources while option 2 is likely to preclude opportunities to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing uses with other employment uses which may be less resource intensive. Option 3 is likely to generate more energy and resource efficiencies and respond more effectively to climate change than option 4 which would depend mainly on development management policy targets.

SA objective 7: Mixed use SSSAs are expected to be accompanied by substantial green infrastructure.

SA objective 9: All four options will have a significant positive contribution towards this objective. However, Option 3 allows synergies between different uses to build on skills and education. Providing homes and employment together may help reduce access inequalities.

SA objective 10: Only option 3 contributes to this objective. Mixed-use SSSAs are likely to create 24hour environments where surveillance occurs naturally by the transit of people.

SA objective 11: Option 3 is likely to encourage walking and cycling by bringing housing and employment together which is likely to lead to healthy lifestyles.

SA objective 13: Only option 1 is likely to have a significant positive effect on objective 13. A wider range of employment uses and a greater proportion of non-B employment uses are likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Core Strategy could provide greater certainty to business if it developed policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses. Options 3 and 4 are both likely to affect positively this objective New employment sites can free space in the town centres for regeneration by providing new suitable employment spaces for those uses which do not need or are not suited to be in the town centre.

SA objective 14: Options 1, 2 and 4 have the potential to contribute positively to the achievement of this objective but only option 3 strongly contributes to this objective by minimising car travel, create opportunities for linked journeys, concentrate infrastructure provision of infrastructure and increase patronage for public transport.

SA objective 15: Although all options will help increase employment provision, option 1 and 2 will be likely to support the required environment to support learning, skills and innovation.

Key for likely option effect

++	Significant positive	+	Positive not significant	+?	Depends on implementation but if there is an impact is likely to be positive	--	Significant negative	-	Negative not significant	-?	Depends on implementation but if there is an impact is likely to be negative	0	Neutral effect	?	Uncertain effect
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Table A4.5: Employment development options

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
SA objective 1 – To maintain and enhance biodiversity	0 The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	0 The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	+? Mixed use SSSAs are accompanied by substantial green infrastructure which could link to enhancement of biodiversity.	0 The distribution of employment on either mixed use or single use sites would not significantly affect this objective.
SA objective 2 - To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	0 The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	0 The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	0 The amount and type of new employment land would not significantly affect this objective. See site mitigation measures	0 The amount and type of new employment land would not significantly affect this objective. See site mitigation measures
SA objective 3 - Protect and enhance air, soil and water resources	+ Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure. Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.	- Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive. Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.	++ A mix of different uses particularly when some of them are high consumers of energy like schools are provided in a single site is likely to generate more energy and resource efficiencies. Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.	0 The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies on resource and energy efficiency. Significance of effect: Not significant as it will be implemented mainly through development management polices.
SA objective 4 -	0	0	0	0

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk	0 The amount and type of new employment land would not significantly affect this objective.	0 The amount and type of new employment land would not significantly affect this objective.	+? Whether the development is mixed use of employment led would not significantly affect this objective	0 Whether the development is mixed use of employment led would not significantly affect this objective
SA objective 5 - Adapt to and mitigate against the impact of climate change	+ Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure. Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.	- Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive. Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.	+? A mix of different uses in a single site is likely to address climate change mitigation and adaptation more efficiently. Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.	0 The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies . Significance of effect: Not significant as it will be implemented mainly through development management polices.
SA objective 6 - Increase resource efficiency and reduce resource use and waste	+ Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure. Significance of effect: The effect	- Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive. Significance of effect: The	+? A mix of different uses in a single site is likely to address climate change mitigation and adaptation more efficiently. Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.	0 The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies . Significance of effect: Not significant as it will be implemented mainly through development management polices.

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0 would affect the sub region and last through the short, medium and long term. It would be significant.	0 effect would affect the sub region and last through the short, medium and long term. It would be significant.	+? 	0
SA objective 7 - Maintain, enhance and deliver, new green infrastructure including green open space	0 The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.	0 The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.	++ Mixed use SSSAs are expected to be accompanied by substantial green infrastructure.	0 The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.
SA objective 8 - To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	0 The amount and type of new employment land would not significantly affect this objective.	0 The amount and type of new employment land would not significantly affect this objective.	0 The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies .	0 The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies .
SA objective 9 - Reduce poverty and inequality and promote social inclusion	+ Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures. Significance of effect: The effect	+ Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures.	++ This option would enhance the other three by allowing synergies between different uses to build on skills and education. Providing homes and employment together may help reduce access inequalities.	+ Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0 would have sub regional consequences and be long lasting. Therefore, it is significant.	0 Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	+? 	0 need to be addressed through a wider range of policy measures. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.
SA objective 10 - Reduce both crime and fear of crime	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	+ Mixed-use SSSAs are likely to create 24hour environments where surveillance occurs naturally by the transit of people. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
SA objective 11 - To encourage healthier lifestyles and reduce adverse health impacts of new developments	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	? The option is likely to encourage walking and cycling by brining housing and employment together which is likely to lead to healthy lifestyles. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0	0	+?	0
SA objective 12 - Provide decent, affordable and safe homes for all	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	0 Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
SA objective 13 - Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	++ A wider range of employment uses and a greater proportion of non-B employment uses is likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Local Development Framework could provide greater certainty to business if its Development Plan Documents contained town centre policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.	0 Although sufficient employment would be positive, Option 2 is unlikely to have a significant effect on town centres and rural economy.	+? New employment sites can free space in the town centres for regeneration by providing new suitable employment spaces for those uses which do not need or are not suited to be in the town centre. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	+? New employment sites can free space in the town centres for regeneration by providing new suitable employment spaces for those uses which do not need or are not suited to be in the town centre. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.
SA objective 14 - To	+?	+?	++	+?

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
provide and encourage the use of sustainable integrated transport systems, improve access and mobility	<p style="text-align: center;">0</p> <p>Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use.</p> <p>Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.</p>	<p style="text-align: center;">0</p> <p>Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use.</p> <p>Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.</p>	<p style="text-align: center;">+?</p> <p>Mixed use SSSAs are likely to minimise car travel, create opportunities for linked journeys, concentrate infrastructure provision and increase patronage for public transport.</p> <p>Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.</p>	<p style="text-align: center;">0</p> <p>Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use.</p> <p>Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.</p>
SA objective 15 –	++	+	++	+

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
promote employment, learning, skills and innovation	<p style="text-align: center;">0</p> <p>Provision of a wider range of employment is likely to support small firms with specialised skills and assist in the establishment of a knowledge/innovation based economy. Option 1 is more likely to help diversify the local economy making more resilient to economic downturns. The delivery of option 1 depends on a change of image and perceptions that will have to come through economic development initiatives rather than land-use ones. Although this is an aspiration, the Core Strategy looks at a long plan period to 2031 during which market conditions could change with sufficient partnership work.</p> <p>Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.</p>	<p style="text-align: center;">0</p> <p>Provision of sufficient employment will have a positive effect on Objective 14. However, it is unlikely that on its own this will help develop learning, skills and innovation.</p> <p>Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.</p>	<p style="text-align: center;">+?</p> <p>Even if not combined with any of the other options Mixed use SSSAs are likely to create the right environment for interaction between different uses to create knowledge/skills hubs.</p> <p>Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.</p>	<p style="text-align: center;">0</p> <p>The performance of this option depends on whether it is combined with option 1 or option 2.</p> <p>Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.</p>

Development Options – Employment Led SSSAs

Sundon Quarry: Located north east of Luton

Junction 10A: Located south of the built up edge of Luton and the East Luton corridor at Junction 10A (J10A).

Butterfield Park expansion: Located to the north of Luton, the site is bounded to the north by the AONB, to the east by the Butterfield Green Road and to the south by Stopsley Common

Century Park expansion: Located

Table A4.6: First sieve: Major constraints and contributions to the Core Strategy from development sites

SA Objectives	Site Criteria	Sundon Quarry	Junction 10A	Butterfield Park expansion	Century Park extension
2 & 7	1) Impact on important areas of landscape	-	--	--	0
1& 7	2) Impact on important areas of biodiversity	--	0	-?	0
2 & 8	3) Impact on important areas of heritage/archaeological importance	--	-?	-?	0
2 & 7	4) Impact on important views	-?	-?	--	0
3, 4, 5 & 7	5) Potential to flood or impact on flood risk areas.	0	0	-?	0
Delivery	6) Presence of major infrastructure constraints	-?	-?	-?	?
3, 14& 15	11) Contribution to the delivery of major transport infrastructure	++	+	0	+
3,13,14 &15	9) Contribution to the improvement and easing of congestion in known problem areas	+	+	?	?
3, 5, 6, 7, 8, 9, 10, 11, 13, 14 &15	18) Contribution to the regeneration of the town centres of Luton, Dunstable, Houghton Regis	++	++	++	++
3, 4, 5, 7 &11	12) Contribution to delivery of strategic Green Infrastructure provision	+	+	+	+
6, 9, 10 & 15	15) Contribution to provision of strategic employment land and premises.	++	++	++	++

Sundon Quarry Commentary

The major impacts with regard to Sundon Quarry, relates to direct built development impact on a habitat complex of major importance including an SSSI within the Quarry, and linking up to the Sundon Hills SSSI. In addition, there are significant woodland and other wildlife features, the Chilterns AONB landscape and Green Belt, together with adjacent settlements with historic features.

Road transport access would significantly impact smaller adjacent settlements e.g. at Lower Sundon, unless strategic road improvements are provided i.e. planned major transport infrastructure including the A5-M1 Link Road and the proposed M1 junction 11a. There would be a significant beneficial contribution to major infrastructure and modal shift via rail freight facility.

Sundon Quarry would bring a unique opportunity for the allocation for a rail freight terminal and associated distribution development. It is well located to provide B8 uses, the largest employment growth sector in the Core Strategy area, and take advantage of the Midlands Mainland train line. No other rail linked distribution exists in Luton and southern Central Bedfordshire and the rail terminal could serve a wider area with economic and environmental benefits associated with transferring freight from road to rail..

The site may generate significant traffic (including HGVs) on the local network and so phasing of development with existing and planned transport capacity improvements will be critical to managing delivery.

The site is located within an area of G1 sensitivity for Landscape, biodiversity and Historic Buildings and areas. These constraints are of such significance that development is not considered appropriate.

There is potential to contribute to the regeneration of Sundon Chalk Pits (former industrial site) for green infrastructure purposes.

Significance of effect:

The scale and irreversibility of the effects are significant. Given the landscape and biodiversity constraints of this site any allocation in the Core Strategy would have to be 'in principle' and subject to further detailed work on either a Site Allocations DPD or a Masterplan for the site.

Some recommendations for further work and mitigation measures:

1. Detailed EIA of the impacts on statutory SSSI designations;
2. Landscape screening, visual
3. Containment of built development to Sundon Quarry;
4. Investigate, safeguard, enhance key habitat assets or relocate where impact unavoidable;
5. Limiting the scale, density and pattern of development to protect the setting of Lower Sundon and associated heritage assets;
6. Protect key habitat complex of major importance around Sundon quarry SSSI linking north-eastwards to Sundon hills SSSI.
7. Phasing of development with existing and planned transport capacity improvements.
8. Ensure the site contributes to the regeneration for Sundon Chalk Pits as part of the provision of Green Infrastructure

Junction 10A Commentary

The site has three distinct parcels:

- Triangular parcel to the east of the M1 and north of Airport Way
- Large parcel to the east of the M1 and south of the Airport Way
- Parcel to the west of the M1 and adjacent to Slip End.

There are significant landscape sensitivity issues associated with the development of this site (Woodland and hedgerows, Stockwood Park and Wildlife sites all feature in the proposed development footprint), whilst adjacent is the Historic Park and Garden of Luton Hoo with a conservation area and listed buildings..

With the exception of land to the north of Airport Way and east of the M1, the remainder of the site area falls within Landscape sensitivity area G1, at this level of sensitivity the constraints are such that development is not considered appropriate.

Land to the east of the M1 is within a locally designated AGLV.

The site is reliant on Junction 10A improvements for access but no other major new infrastructure is needed according to developers' proposals.

It is well located for aviation-related businesses and a B1/business park location with good transport accessibility and there is a potential significant contribution towards enhancement of Luton Town Centre Regeneration although it may have an impact on existing employment land at Capability Green.

Allocation of land would have to be considered against the provision of employment land as part of mixed-use SSSAs in similarly well connected locations such as Junction 11a.

Significance of effect:

Significant effect due to the scale of development and its irreversibility.

Some mitigation measures for sites recommended to be progressed:-

1. Detailed EIA of the impacts of the on the environment and wildlife designations;
2. Investigate, safeguard, enhance key habitat assets or relocation where impact unavoidable;
3. Increase access to the surrounding countryside , parks and recreational amenities;
4. Maintain spatial links with Stcokwood Park as part of green infrastructure development;
5. Limiting the scale, density and pattern of development to avoid adverse effects on Luton Hoo historic Park;
6. Significant investment in landscape screening, visual mitigation from the M1 corridor; and
7. Early delivery of J10A improvements.
8. Phasing of development with existing and planned transport capacity improvements.

Butterfield Expansion Commentary

The proposed development will intrude visibly, in any direction, north east or west from the existing Butterfield development envelop, into the sensitive Chilterns AONB, although the local landscape quality is variable, characterised by arable farming. There is a significant potential impact on local nature conservation designations to the north west (Upshot Wood) and to the north east (Oaket Wood) and potentially intrusion adjacent to heritage areas to the north and east. The sites falls within a grade 1 landscape sensitivity area where constraints are such that it is not appropriate for development. With regards to biodiversity, archaeology and historic landscape, some development maybe appropriate with adequate mitigation.

Significant expansion at Butterfield may impact severely on the local road network but there is insufficient information to assess this criteria given the uncertainties of transport infrastructure since the preparation of the Preferred Options Core Strategy.

There is a potential significant contribution towards diversification and restructuring the Luton economy with technology business, the regeneration of the town's employment base and the improvement and vitality of Luton Town Centre. This site with its university focus would have an important role in the diversification of the local economy.

Significance of effect:

The effect would be significant and irreversible. The site would support one of the key objectives of the Core Strategy by supporting the diversification of the local economy. However, the level of detail required to ascertain whether mitigation measures could overcome the environmental impact of the development and its effect on the transport network is not available. If allocated in the Core Strategy this should be done 'in principle' with further work done through a Site Allocations DPD or Masterplan.

Some mitigation measures if recommended to be progressed:-

1. To restrict mass, scale and extent of development footprint, to retain the open landscape character of the area and minimise any visual intrusive impact on local heritage areas;
2. Investigate, safeguard local designations, enhance key habitat assets, hedgerows and areas of boundary woodland or relocate where impact unavoidable;
3. Investigate archaeological importance and extent in advance of any development proposals followed potentially by rescue archaeology or in situ preservation;

Extension to Century Park

This landscape has a strong and distinctive character forming a rural context to the villages east of Luton, a strong wooded setting to the eastern edge of Luton and the setting of the Lilley Valley. No major constraints have been identified with regards to landscape, biodiversity, archaeology and historic environment. However, any development should relate to the rural character of the landscape.

Scale of site, reasonable proximity to M1 and Luton Airport and absence of incompatible uses suggest distribution and other industrial uses would be appropriate on this site if local road links to M1 can be improved. The potential for the site to contribute to knowledge base and skills industries with the allocation of a small office park would have to be supported by improved public transport.

Since the Core Strategy Preferred Options, the Local Plan employment allocation at Century Park has gained outline planning permission and although the access to the site still has to be formally agreed and will be the subject of further Section 106 agreements, involving the Airport Operator it seems that a viable access could be provided for the site. This would potentially remove uncertainties over the delivery and transport infrastructure reliance of an extension to this site. However, no details were available at the time of writing and it has been marked as an 'unknown'.

There is potential to increase green corridors to Wigmore Park County Wildlife Site (CWS) and Winch Hill Wood CWS if linked with current outline permission.

Site lies entirely within North Hertfordshire District and although a large mixed use SSSA at this location has been strongly opposed by the administration and the public, this should not in principle preclude an extension to Century Park to support Airport related industries subject to further joint working between authorities.

Some mitigation measures if recommended to be progressed:-

- Avoid tall or large scale developments which would impinge on the distinctive chalk valley landscape around the Lilley Bottom Valley.
- Ensure development is well related to the existing settlement edge and does not extend onto the steeper valley side slopes to the east;
- Repair and extension of hedgerows along field boundaries to contribute to screening and visual connection of areas of woodland;
- Provide additional screening of (any new) settlement edge to Luton through increased tree cover and creation of new or extended areas of woodland;
- Conserve the network of narrow sunken lanes and associated hedge banks, verges and hedges;
- Promote the creation of buffer zones between intensive arable farmland/new development and semi-natural wildlife habitats;
- Conserve rural settlement pattern around village green and road junctions.
- Early agreement required on alternative road access to Century Park,

Table A4.7: Second tier sieve- potential contribution of sites

All sites are out of centre employment-led potential allocations and although ancillary uses may be present as part of proposals these are not the main purpose for the selection of a particular site. Also different types of employment require locations which avoid conflict with other uses for their operations and therefore sites may not be comparable under some criteria.

All sites are located within the green belt and the test refers to how the site would retain Green Belt principles avoiding coalescence of settlements and providing robust and defensible boundaries for the future.

All sites will have the potential to reduce deprivation by increasing employment close to the urban area but it will mainly depend on development management policies and Council skills initiatives.

All sites will be expected to contribute to public transport provision and prepare travel plans.

Given to the limited uses (employment led) and smaller scale, the ability to contribute to the delivery of an integrated sustainable infrastructure systems is likely to be smaller than the mixed-use SSSAs but it is expected that all sites will make a contribution as per development management policies.

SA Objectives	Site Criteria	Option 1: Sundon Quarry	Option 2: Junction 10A	Option 3: Butterfield Park expansion	Option 4: Century Park
3, 5, 6 & 14	7) Proximity to neighbourhood centre or local centre	N/A	N/A	N/A	N/A
6 & 9	8) Proximity to core facilities	N/A	N/A	N/A	N/A
3, 5, 9 & 14	10) Contribution to the improvement of existing public transport provision	+	+	+	+
9 & 15	13) Contribution to meeting social and community infrastructure needs	N/A	++	N/A	N/A
7 & 11	14) Contribution to meeting existing open space needs	+	+	+	+
9 & 12	16) Contribution to affordable and local housing needs of the area.	N/A	N/A	N/A	N/A
3, 5 & 6	17) Contribution to the delivery of an integrated sustainable infrastructure system	+	+	+	+
9, 10, 12, 13 & 15	19) Contribution to reinvigoration and rejuvenation of deprived wards	+	+	+	+
2, 7, 8, 9, 10, 14	20) Potential to contribute to place making.	-?	-	?	0
3 & 6	21) Contribution to retention Green Belt principles	-?	-	?	0

Sundon Quarry Commentary

Although the contribution to place making of these sites is not comparable or considerable, the site may contribute towards place making objectives with enhancement of, and access to, local services through the integrated (modal transfer) road and rail transport infrastructure facilities. There may be also some opportunities to open up private land for open space.

The site will be developed in conjunction with major public transport infrastructure at the new M1 J11a and the freight rail interchange.

The development should be contained within existing physical and visual boundaries to avoid adverse effects on the wider landscape and without compromising the function of the green belt in preventing coalescence with Lower Sundon.

Over and above the benefits that contributing towards the strong demand for B8 uses and the creation of local employment, the contribution towards deprived wards will depend on skills and training dealt with in Development Management policies and other Council skill related priorities.

Significance of effect:

Given the scale and irreversibility of any proposal on this site the effect is significant.

Some mitigation measures for sites recommended to be progressed:-

1. Contain development within existing physical and visual boundaries to minimise adverse effects on the wider countryside;
2. Green Belt Review should be carried out in order to bring the site forward for development and ensure that development does not compromise the purposes of the green belt in this location;
3. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centres of Luton should be investigated; and
4. An assessment should be made as to whether the attributes of the site offers particular opportunities for sustainable technologies and innovative sustainable design for renewable, energy conservation and passive energy.

Junction 10a commentary

As per current development proposals, the site would result on the coalescence of Luton, Harpenden and Slip End and would erode the robust boundary set by the M1. Electricity transmission pylons affect the tip of the northern site and extend south down the M1 corridor along the edge of the southern site. This is a place making constraint to be discussed with National Grid.

Development to provide relocated stadium for Luton FC in the parcel to the north of Airport Way as per the allocation in the Luton Local Plan.

Some Significance of effect:

Given the scale and irreversible effect on neighbouring villages and Green Belt boundaries the effect is significant.

Some mitigation measures for sites if recommended to be progressed:-

1. Contain development within existing physical and visual boundaries to minimise adverse effects on the wider countryside;
2. A Green Belt review would be needed to ensure that the function of the Green Belt in this location, in preventing coalescence of Luton, Harpenden or smaller adjacent settlements (e.g. Slip end) is not compromised;
3. Ensure early engagement with National Grid on the electricity transmission pylons to inform design solutions.
4. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centres of Luton should be investigated.

Butterfield Park Expansion Commentary

Depending on the direction the development on this site may take it could result in risk of development in open countryside and coalescence with smaller settlements e.g. Lilley.

Significance of effect:

The full significance of the effect is uncertain until the boundaries of the site are defined. If allocated it should be done 'in principle' with further work developed through a Site Allocations DPD or masterplan.

Some mitigation measures for sites recommended to be progressed:

1. Contain development within existing physical and visual boundaries to minimise adverse effects on the wider countryside and integrate natural features with provision of enhanced open space facilities;
2. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centres of Luton should be investigated; and

Extension to Century Park

Existing road bordering the site would contain the proposal and provide a robust Green Belt boundary. It would narrow the gap between Luton and Tea Green.

Significance of effect:

The effect will be long lasting and irreversible and therefore is significant.

Some mitigation measures for sites recommended to be progressed:

1. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centre of Luton should be investigated; and
2. Conserve rural settlement pattern around village green and road junctions.

Table A4.8: Third sieve - Deliverability within the plan period

Significance of effect:

The impact of deliverability although significant and long lasting is not necessarily irreversible if a strategy is in place to ensure the most sustainable sites under the most sustainable development options is in place to provide certainty to private investors and confidence to public funding providers when Government spending is finally decided. If such strategy is not in place the effects will be irreversible.

Mitigation measures and contingency arrangements should be developed with a Delivery Plan in place.

Site criteria	Option 1: Sundon Quarry	Option 2: Junction 10A	Option 3: Butterfield Park expansion	Option 4: Extension to Century Park
22)Availability of the land for development	++	++	?	++
23)Contamination of the land	-?	?	0	0
24)Availability of utilities infrastructure	?	+?	+?	?
25)Suitability of access arrangements	+?	+?	?	?
26)Physical Constraints addressed	?	?	?	0
27)Dependence on Major Transport Infrastructure	-?	-?	-?	--

Sundon Quarry Commentary

The site is being actively promoted but the delivery and phasing of the development may be delayed due to required mitigation measures and phasing of transport infrastructure investment and need to consider flood risk management measures.

There is potential site contamination from previous mineral extraction operations.

Junction 10A Commentary

The northern site is being actively promoted to potentially provide an office park. The larger southern sites again, are actively being promoted for a proposed mixed use B1-B8 employment area and could accommodate aviation related uses.

The proposed sites are located in an area affected by visual and noise intrusion (M1 motorway and Luton airport). Electricity transmission pylons affect the tip of the northern site and extend south down the M1 corridor along the edge of the southern site.

Access to this proposed development is dependent on future Junction 10A improvements to access the land and support the development. The proposers do not consider additional transport measures will be necessary.

Some mitigation measures for sites if recommended to be progressed:

1. A landscape assessment and design brief would be needed to ensure that the proposed development would be contained within existing physical and visual boundaries and ensure to that design addresses noise and vibration issues; and

2. Phasing and traffic modelling is also critical to the southern sites to ensure market viability subject to airport growth, and careful phasing of development with Century Park and to ensure minimal traffic impact on existing roads and communities

Butterfield Commentary

The site is on the edge of the urban area and has, until recently, been used as agricultural land. There are no physical constraints identified as this is an extension of the existing Butterfield complex. No expansion direction has yet been identified.

The proposal is not actively promoted and so the exact extent of the proposed extensions are not yet known. However, the only feasible extensions to the existing Butterfield development envelope are to the west, north or east but all such extensions involve greenfield arable land with hedgerows and woodland features and farmsteads. There are no other physical constraints.

Access would be via the existing Butterfield link round and roundabout onto the A505. Extending the site may generate significant additional traffic (including HGVs) on the local network.

Significance of effect:

Given potential scale long term and irreversible consequences the effect is significant.

Some mitigation measures for sites recommended to be progressed:

1. Transport modelling and scope for public transport to identify necessary improvements which will ensure minimal traffic impact on existing roads and communities; and
2. Phasing of development with existing and planned orbital road transport capacity improvements (proposed Luton northern Bypass MI-A6, M1 J10A and J11A) including public transport access, will be essential to managing delivery

Extension to Century Park

The site is likely to be available for delivery early in the plan subject to access road arrangements for current planning permission.

APPENDIX 5

Appraisal of Thematic Policies

Table A5.1 – Summary of impact of Thematic Policies on Sustainability Objectives

SA Objective	CS5	CS6	CS7	CS8	CS9	CS10	CS11	CS12	CS22
1	0	?	0	+	-?	+	+	+	+
2	0	?	0	++	-?	+	+	+	-?
3	+	-?	0	+	-?	+	++	+	-?
4	0	?	0	+	?	+	+	++	+
5	+	?	+	+	-?	+	++	+	-
6	0	-?	0	+	-?	0	++	+	-
7	0	+	0	++	?	++	0	+	+
8	0	?	0	+	?	+	0	?	-?
9	+	+	+	?	+	?	0	0	+
10	0	?	0	++	+	?	0	0	+
11	+	?	0	++	?	+	0	0	+
12	0	++	0	++	0	0	+	+	+
13	+	+	?	++	+	+	0	+	?
14	++	?	+	++	?	+	0	0	+
15	0	0	+	0	+	0	0	0	0

SA objective 1	To maintain and enhance biodiversity
SA objective 2	To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB
SA objective 3	Protect and enhance air, soil and water resources
SA objective 4	Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk
SA objective 5	Adapt to and mitigate against the impact of climate change
SA objective 6	Increase resource efficiency and reduce resource use and waste
SA objective 7	Maintain, enhance and deliver, new green infrastructure including green open space
SA objective 8	To identify, protect, maintain and enhance the historic environment and cultural assets and their setting
SA objective 9	Reduce poverty and inequality and promote social inclusion
SA objective 10	Reduce both crime and fear of crime
SA objective 11	To encourage healthier lifestyles and reduce adverse health impacts of new developments
SA objective 12	Provide decent, affordable and safe homes for all
SA objective 13	Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages
SA objective 14	To provide and encourage the use of sustainable integrated transport systems, improve access and mobility
SA objective 15	To promote employment, learning, skills and innovation

Table A5.2: Linking Places CS5

Summary of significant effects: The policy will have a positive impact in terms of sustainability. In particular, the policy will have some positive impacts in terms of air quality and mitigating against climate change through encouraging a modal shift away from the private car. The policy also has the potential to reduce inequality through enhancing access to services and facilities, particularly in town centres. In addition, the policy encourages healthier lifestyles through the provision of new and enhanced cycling and walking routes. Finally, the policy should have a particularly positive impact in terms of providing a sustainable integrated transport strategy.

SA objective 1 – To maintain and enhance biodiversity	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 3 – Protect and enhance air, soil and water resources	+?
	Significance of effect: Dependent on impact of policy
	Mitigation: The policy encourages a modal shift in transportation from the private car to more sustainable forms such as bus, rail, walking and cycling. Should this modal shift be achieved, then it is likely that air quality would be improved due to an overall reduction in emissions.
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	0
	Significance of effect: No direct impact.
	Mitigation: None
SA objectives 5 – Adapt to and mitigate against the impact of climate change	+?
	Significance of effect: Dependent on impact of policy
	Mitigation: The policy encourages a modal shift in transportation from the private car to more sustainable forms such as bus, rail, walking and cycling. Should this modal shift be achieved, it would assist in the mitigation of climate change due to an overall reduction in emissions.
SA objective 6 – Increase resource efficiency and reduce resource use and waste	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 8 – To identify, protect, maintain and enhance the historic environment and	0
	Significance of effect: No direct impact
	Mitigation: None

cultural assets	
SA objective 9 – Reduce poverty and inequality	+
	Significance of effect: The policy advocates the creation of new and enhanced bus routes, including extensions to the guided busway, and a new railway station. This will help reduce inequality by improving access to facilities and services for those who do not own a private car.
	Mitigation: Successful implementation of policy.
SA objective 10 – Reduce both crime and fear of crime	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	+
	Significance of effect: Points 6 and 7 of the policy identify the need to improve walking and cycling routes and also walking and cycling links to public transport nodes. These new and improved routes should encourage healthier lifestyles.
	Mitigation: Walking and cycling routes need be well designed so that they are pleasant to use and safe.
SA objective 12 – Provide decent, affordable and safe homes for all	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	+
	Significance of effect: Better public transport facilities should allow a greater number of people to access the services and facilities that exist in the town centres. An increase in visitors should help to revitalise the town centres.
	Mitigation: Successful implementation of policy.
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	++
	Significance of effect: The purpose of the policy is to provide a sustainable integrated transport system with improved access and mobility.
	Mitigation: This will be achieved through a variety of initiatives such as park and rides, bus priority measures, and a new railway station in Luton. In addition, new cycling and walking routes will be provided. Railway stations will also be provided with multi-modal interchanges.
SA objective 15 – To promote employment, learning, skills and innovation	0
	Significance of effect: No direct impact
	Mitigation: None

Table A5.3: Housing for all needs CS6

<p>Summary of significant effects:</p> <p>Overall, this policy will have a positive impact on sustainability particularly in terms of social and economic factors. The impact of this policy, in particular for the environmental objectives, will be dependent on a range of factors, such as the scale and location of the housing development, provision of community services and facilities, use of sustainable design methods and construction techniques and access to sustainable integrated transport systems. It is considered that this policy will have a positive impact on the social objectives as it aims to ensure housing for all through the provision of a range of housing types and the provision of affordable housing. Improving access to housing will indirectly improve social mobility having a positive impact on social and economic issues, such as employment. The impacts on the economic objectives are more limited and will depend again on the scale and location of the housing development.</p> <p>There are some aspects of this policy where the effects are unknown at this stage. These include;</p> <ul style="list-style-type: none"> • Housing mix size – not overall housing mix is sought in the policy although the supporting text makes clear the priority to tackle overcrowding and provision of family housing. The policy opts for a flexible approach by addressing housing mix on a site by site basis. For such an approach to work the Council would have to put in place strong monitoring of housing mix provision against housing register needs and an overall annual monitoring target. • Gypsy and Traveller – this is only addressed as part of a generic commitment to meet housing for all needs. This on its own does not fulfil current national guidance requirements. 	
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SA objective 1 – To maintain and enhance biodiversity	?
	<p>Significance of effect: It is not clear what the effect of this policy will have on biodiversity. This policy is for the development of new housing, which in itself implies building on either Greenfield or Brownfield land. However, it will depend on how the development is implemented in terms of location, design, layout and inclusion of sustainability measures.</p> <p>Mitigation: New developments should be located in areas where there are no known areas of high biodiversity and the developments should incorporate green space and infrastructure to encourage greater biodiversity within the urban area.</p>
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	?
	<p>Significance of effect: It is not clear what the effect of this policy would have on landscape. This policy is for the development of new housing, which in itself implies building on either Greenfield or Brownfield land. Any development has the potential to impact upon landscape and townscape and it will depend on how the development is implemented in terms of location, design, layout and inclusion of sustainability measures.</p> <p>Mitigation: New developments within the urban area should be designed taking into account the local character to enhance the townscape and areas on Greenfield sites should pay respect to the local landscape in terms of character and natural features to enhance and conserve it.</p>
SA objective 3 – Protect and enhance air, soil and water resources	-?
	<p>Significance of effect: It is not clear what the effect of this policy will have on resources. This policy is for the development of new housing, which in itself implies building on either Greenfield or Brownfield land and thus potentially more residents to utilise water resources. Any development has the potential to impact upon</p>

	<p>resources and it will depend on how the development is implemented in terms of location, design, layout and inclusion of sustainability measures.</p>
<p>SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas</p>	<p>Mitigation: New developments will need to ensure that they introduce mitigation measures to reduce the impact on air, soil and water resources. These would need to be included from the design process through construction and completion to ensure that the residents and the resulting development is designed to protect and enhance the resources where possible.</p>
<p>SA objective 5 – Adapt to and mitigate against the impact of climate change</p>	<p>?</p> <p>Significance of effect: It is unclear what the effect of this policy will have on flood risk. Developments proposed in areas at risk of flooding will not be supported and all new developments will need to include appropriate flood prevention and SuDs to reduce the run-off from the site. Policy CS12(Flood Risk) of the Core Strategy will aim to ensure that developments reduce the risk of flooding.</p> <p>Mitigation: To reduce flood risk, new housing development will not be encouraged to be developed on areas at risk of flooding and measures to reduce run off should be encouraged, inline with national guidance</p>
<p>SA objective 6 – Increase resource efficiency and reduce resource use and waste</p>	<p>?</p> <p>Significance of effect: It is unclear what the effect of this policy will have on climate change. New development, including housing, will have some impact on climate change but it will depend on how the development is built and what sustainability measures are included to reduce its impact on climate change. This policy does specify that new housing will be required to meet the requirements of the Code for Sustainable Homes and thus should include measures to reduce impact on climate change.</p> <p>Mitigation: New development, include housing development, will need to adhere to the Code for Sustainable Homes and other sustainability measures to reduce the impact of climate change.</p>
<p>SA objective 6 – Increase resource efficiency and reduce resource use and waste</p>	<p>-?</p> <p>Significance of effect: New development, by its nature, will increase resource use and waste. This will begin from the construction phase when resources will be used to build the development through to when the development is occupied as residents will use consume resources through food and energy consumption as will the increase in waste. Measures can be introduced to increase resource efficiency and reduce resource use and waste but these will need to be implemented from the design phase to ensure that they are included at all phases of the development. There may be capacity on the urban extensions for the use of more sustainable and renewable forms of energy.</p> <p>Mitigation: Measures to increase resource efficiency and to reduce resource use and waste will need to be included in development from the outset. Policies in the Core Strategy do aim to ensure that new development include sustainable design and built methods in their design.</p>
<p>SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space</p>	<p>+?</p> <p>Significance of effect: It is not clear at this stage whether new housing development will enhance and deliver new green infrastructure. Policy CS10(Green Infrastructure) does aim to ensure that all new development maintain and enhance GI to ensure a net gain in GI across the area. For the housing development to be sustainable and attractive and to meet the needs of the residents, it will be important that GI is included in the design and layout.</p> <p>Mitigation: New housing developments will need to conform to Policy CS10 of the Core Strategy to ensure that there is a net gain</p>

	in GI in the Strategy's area and for housing developments to meet the needs of a sustainable community.
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	?
	<p>Significance of effect: It is not clear what the impact of this policy will be on the historic environment and cultural assets. The impact will depend on the location of the development and its design and layout.</p> <p>Mitigation: To protect and maintain the historic environment it will be essential that new developments respect the local area in which they are developed. New developments will also need to adhere to the Guidelines in the Design Guides for Central Bedfordshire and Luton to protect and enhance the historic environment.</p>
SA objective 9 – Reduce poverty and inequality	+?
	<p>Significance of effect: It is anticipated that this policy will have a positive impact on reducing poverty and inequality due to its requirement for affordable housing. However, it will depend on the deliverability of affordable housing on all housing sites, although this will depend on the economic viability of the site. An increase of affordable housing will ensure that more people will have access to a decent home to live in reducing inequality and improving social mobility that is prevalent within Luton in particular.</p> <p>Mitigation: In order for this policy to have a positive impact on this SA objective, it will be essential that all housing developments include an affordable housing element to ensure that more people have access to a decent home. Where affordable housing provision on site is not possible, off site contributions should be sought to continue the provision of affordable housing within the Strategy's area.</p>
SA objective 10 – Reduce both crime and fear of crime	?
	<p>Significance of effect: It is unclear what the direct impacts of this policy will be on crime, as this will depend on the type of housing delivered, location and amount of affordable housing. Should there be the delivery of affordable housing and a range of housing types in line with the Policy and the findings of the SHMAA, it will enable more residents' access to a decent home and thus provide them with the opportunity and stability to gain employment or further education. This in turn will encourage less people to get involved in crime i.e. improving social mobility.</p> <p>Mitigation: To ensure a positive impact, even if a slight positive impact, it will be important that affordable housing is delivered in line with the Policy.</p>
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	?
	<p>Significance of effect: It is unclear what the impacts of this policy will be on health, as this will depend on the location of the new housing development, the layout and design and access to local services and open space. To encourage healthier lifestyles, new developments need to be designed to encourage movement by more sustainable forms of transport, such as walking and cycling, be connected to a bus network, and GI network to ensure a pleasant environment for walking and cycling. This will also have a positive impact on the natural environment.</p> <p>Mitigation: To make a positive impact, new developments will need to be designed to encourage more walking and cycling and large developments will need to contribute towards community facilities, such as local shops and services, so residents will not have to travel by car to access these.</p>
SA objective 12 – Provide decent, affordable and safe homes for all	++
	Significance of effect: This policy is aimed at providing housing to meet the needs of the population and will therefore have a

	<p>significant positive impact on this SA objective. Residential developments will be encouraged to provide a range of housing types and affordable housing in sustainable locations and to include sustainable design measures to ensure sustainable housing for all residents.</p> <p>Mitigation: To ensure that this policy continues to have a positive impact on this SA objective, it will be important that all developments comprise a range of housing types and an element of affordable housing. In addition, developments should be of a high quality design incorporating sustainable design measures to make it more attractive to residents and less harmful to the natural environment.</p>
<p>SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages</p>	<p>+?</p> <p>Significance of effect: Additional housing should have a positive impact on town centre and village revitalisation due to the increase in population. This will however depend on the location of the new housing developments as those located within the town or village boundary and those on good access routes will have a positive impact whereas those that are located on the edge of settlements with poor access to local centres will have less of a positive impact.</p> <p>Mitigation: To ensure a continuous positive impact, housing developments need to be located first on Brownfield sites within urban boundaries before Greenfield sites outside of the urban areas are developed. New developments will also need to ensure that they are accessible to the town centre by walking, cycling or other sustainable modes of transport to ensure that residents use the town centre as opposed to commuting to larger settlements by car.</p>
<p>SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.</p>	<p>?</p> <p>Significance of effect: It is uncertain what the impact of this policy will be on sustainable integrated transport systems. The impact will be dependent on the scale of the housing development, location and design and layout. A housing development located within the town centre with good access to sustainable modes of transport and within easy walking/cycling distance to shops and services will have a significant positive impact in comparison to a housing development on a Greenfield site on the edge of the urban settlement where there is a poor service in terms of public transport. Edge of town developments could potentially provide limited services and facilities within their site to not only benefit the new residents but those living within the area and ensure that they are located on the local bus network to allow residents to get to centres.</p> <p>Mitigation: Where possible, housing should be located within access to sustainable integrated transport systems and within easy access to services and facilities. Where this is not possible, new development should contribute to improve existing sustainable transport and provide local facilities and services, depending on the scale, so that residents can walk/cycle to services and facilities.</p>
<p>SA objective 15 – To promote employment, learning, skills and innovation</p>	<p>0</p> <p>Significance of effect: It is considered that this policy will have very little impact on employment and skills. There could be a potential positive impact from the construction of the new housing in terms of employment opportunities and possible learning of skills for apprentices in the construction field.</p> <p>Mitigation: Developers and builders could be encouraged to recruit from local colleges to improve local employment and skills. However, this cannot be enforced due to Employment Laws.</p>

Table A5.4: Increasing Access to Social and Community Infrastructure CS7

Summary of significant effects: The policy will have no direct impact upon many of the sustainability appraisal objectives. What impacts there are, are considered to be generally positive in nature. Nevertheless, the co-location of such facilities could help to mitigate against the effects of climate change by reducing private car use, while also making these facilities more accessible, particularly if they can be accessed using public transport. The impact on the town centres by providing such facilities will vary depending on location. However, there is potential to promote employment, learning and skills, particularly if facilities such as schools and libraries are provided.

SA objective 1 – To maintain and enhance biodiversity	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 3 – Protect and enhance air, soil and water resources	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	0
	Significance of effect: No direct impact
	Mitigation: None
SA objectives 5 – Adapt to and mitigate against the impact of climate change	+?
	Significance of effect: The policy advocates co-location of social and community infrastructure. This has the potential to reduce carbon emissions through reduced car use.
	Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities.
SA objective 6 – Increase resource efficiency and reduce resource use and waste	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space	0
	Significance of effect: No direct impact
	Mitigation: None
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	0
	Significance of effect: No direct impact
	Mitigation: None

SA objective 9 – Reduce poverty and inequality	+
	<p>Significance of effect: Inequality can be reduced through the provision of new social and community infrastructure by giving people access to facilities that they may not have been able to access before</p> <p>Mitigation: This can be enhanced through the design of the facilities themselves to allow wheelchair access and also by ensuring that the facilities can be accessed by public transport.</p>
SA objective 10 – Reduce both crime and fear of crime	0
	<p>Significance of effect: No direct impact</p> <p>Mitigation: None</p>
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	0
	<p>Significance of effect: No direct impact</p> <p>Mitigation: None</p>
SA objective 12 – Provide decent, affordable and safe homes for all	0
	<p>Significance of effect: No direct impact</p> <p>Mitigation: None</p>
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	?
	<p>Significance of effect: Dependent on implementation. Services and facilities in town centre locations could help to revitalise these areas by attracting more people. However, facilities provided as part of large-scale new developments outside of the town centres could impact upon their vibrancy and vitality. Nevertheless, providing such facilities in new developments such as the SSSAs will help to provide sustainable urban living by reducing the need to travel.</p> <p>Mitigation: When providing such facilities, the impact on the existing facilities in town centre locations should be considered. Facilities should be linked to the public transport network in order to promote sustainable urban living.</p>
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	+?
	<p>Significance of effect: The policy could impact positively through improved access to social and community infrastructure.</p> <p>Mitigation: This can be enhanced by linking such facilities to the public transport network.</p>
SA objective 15 – To promote employment, learning, skills and innovation	+?
	<p>Significance of effect: Dependent on what facilities are provided. The provision of 'skills centres' whereby members of the public can learn computer skills etc have the potential to have a positive impact. In addition, provision of new facilities such as schools and libraries would increase learning and skills innovation and provide employment opportunities.</p> <p>Mitigation: Gaps in existing facilities and services of this nature should be identified at an early stage and incorporated into any masterplanning that takes place.</p>

Table A5.5: Quality of design CS8

Summary of significant effects: This policy will have a positive impact in terms of sustainability as good design is at the heart of adaption to and mitigation against climate change and flood risk, facilitating accessibility, designing out crime and fear of crime and using resources more efficiently. Well designed large developments can have a positive affect on the larger area by providing opportunities for more sustainable travel and green infrastructure, also resulting in healthier lifestyles for residents. High quality design will be used to regenerate and invigorate town centres and protect the identity and character of villages. The policy recognises the importance of historic, environment and architectural assets and aims to protect preserve and enhance their character, appearance and context. Good design will be used to create a 'sense of place' in urban extensions. All proposals will be required to incorporate sustainable design principles and meet recognised national industry design standards such as the Code for Sustainable Homes.

<p>SA objective 1 – To maintain and enhance biodiversity</p>	<p style="text-align: center;">+</p> <p>Significance of effect: Whilst any development, particularly those on green field and Green Belt land could result in a loss of biodiversity, well-designed developments can provide opportunities for integrating new and existing green spaces within the development with surrounding green spaces/infrastructure, which will protect and enhance biodiversity. Development on farmland could provide enhanced biodiversity through more varied planting and creation of higher quality green open spaces. Opportunities also exist for creating new green spaces and increasing biodiversity on previously degraded land (e.g. industrial sites) through good design. Developments that incorporate sustainable design features such as green roofs and sustainable drainage systems can enhance biodiversity in areas that might not otherwise be able to support any useful wildlife habitats such as in urban areas.</p> <p>Mitigation: Identify and protect areas of biodiversity at the start of the design/master planning stage and integrate with new green spaces. Ensure all new development incorporates green spaces suitable for enhancing the biodiversity of the area. Use sustainable design features to increase biodiversity in urban areas.</p>
<p>SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB</p>	<p style="text-align: center;">++</p> <p>Significance of effect: New proposals will be required to recognise the importance of historic and architectural assets and protect and enhance their character, appearance and context. They will also be expected to enhance local character and distinctiveness and ensure the highest quality townscape, landscapes, public buildings and public spaces. All new proposals will need to respect and respond to the character of the site, its surroundings, its context and scale and demonstrate this through a Design and Access Statement. Developments in or close to the Chilterns AONB will need to demonstrate how they will enhance the landscape. For previously developed land, e.g. land with functional farm or storage buildings, this could be an opportunity to replace the buildings with ones that are more sensitive to the landscape, character and context of the area.</p> <p>Mitigation: na</p>
<p>SA objective 3 – Protect and enhance air, soil and water resources</p>	<p style="text-align: center;">+?</p> <p>Significance of effect: Well-designed developments can incorporate features such as SuDS, which can help protect water resources and enhance the quality of water runoff. Other sustainable design measures such as re using grey water and rainwater harvesting and water metering can make a significant</p>

	<p>contribution to reducing water consumption, helping to protect water resources. Planting and soft landscaping in and around new developments will help protect air resources by absorbing carbon and releasing oxygen. Soil resources might be damaged by development initially due to building processes but if adequate green space and soft landscaping is provided, soil resources will eventually be restored and enhanced.</p> <p>Mitigation: Design of new development will need to incorporate green space and soft landscaping as well as sustainable design measures to reduce water consumption.</p>
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	<p>+?</p> <p>Significance of effect: New developments should not be sited in areas that are at risk of flooding and any development proposed in such an area will need to go through the Sequential Test as identified in PPS 25. The policy requires all new developments to incorporate sustainable design principles that meet recognised national industry design standards such as Code for Sustainable Homes. These standards encourage flood risk measures with points gained for building in low flood risk areas or design, which mitigates against flooding.</p> <p>Mitigation: Any development in areas at risk of flooding will need to incorporate SuDS and other flood risk mitigation measures in their design.</p>
SA objectives 5 – Adapt to and mitigate against the impact of climate change	<p>+?</p> <p>Significance of effect: Sustainable design should have a positive impact on mitigating against climate change. New developments will be expected to meet recognised national industry design standards such as Code for Sustainable Homes that includes minimum standards for energy efficiency leading to reduction in greenhouse gas emissions, better adaption to climate change through solar gain, water efficiency and better surface water run off management.</p> <p>Mitigation: Good sustainable design will ensure that new developments can adapt and mitigate against the impact of climate change.</p>
SA objective 6 – Increase resource efficiency and reduce resource use and waste	<p>+</p> <p>Significance of effect: The policy requires well designed developments that will provide opportunities to use resources such as water and energy more efficiently through features such as dual flush WCs, grey water recycling, solar gain and wall insulation. Using locally sourced and recycled materials for building will also help to reduce resource use and waste.</p> <p>Mitigation: Ensure that new developments include design measures that reduce resource use and increase resource efficiency.</p>
SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space	<p>++</p> <p>Significance of effect: The policy specifically states that new proposals will need to demonstrate how they will integrate open spaces and link with green infrastructure. A management plan for the upkeep and maintenance of green open spaces within new developments will be required for all planning proposals.</p> <p>Mitigation: All new developments, particularly the urban extensions will need to include green open space, link to and enhance existing green infrastructure.</p>
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	<p>+</p> <p>Significance of effect: The policy requires new proposals to recognise the importance of historic, environment and architectural assets and protect, preserve and enhance their character, appearance and context.</p> <p>Mitigation: All planning applications will need to include a Design</p>

	and Access Statement that demonstrates how the proposal will protect, preserve and enhance the character, appearance and context of any historic, environment and architectural assets.
SA objective 9 – Reduce poverty and inequality	<p>?</p> <p>Significance of effect: Well-designed housing can help reduce poverty in many ways such as being more energy and water efficient thereby reducing bills. Well designed developments will also enable more sustainable forms of transport thereby reducing travel costs. Developments that are designed to ‘Lifetime Homes’ standards create homes and environments that are accessible and adaptable for disabled people and other disadvantaged people. Many large developments will include a percentage of affordable housing and have the opportunity to provide a mix of social and private housing that can reduce inequality.</p> <p>Mitigation: Poverty and inequality can be reduced by using design to reduce living expenses and provide a mix of housing in developments that are ‘tenure blind’ and accessible for all members of the community.</p>
SA objective 10 – Reduce both crime and fear of crime	<p>++</p> <p>Significance of effect: ‘Secured by Design’ and other similar design initiatives have been developed specifically to reduce both crime and fear of crime through better design. The policy explicitly advocates design that incorporates features to deter crime and fear of crime, ensuring that buildings and development layouts are designed to be safe for all users and reduce crime and fear of crime.</p> <p>Mitigation: All developments to adhere to ‘Secured by Design’ or similar ‘designing out crime principles’ and show how this will be achieved through the Design and Access Statement.</p>
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	<p>++</p> <p>Significance of effect: The design and layout of new developments, particularly the urban extensions and good links with other areas will encourage people to walk and cycle rather than use cars. Provision of new green spaces within new developments with links to green infrastructure should encourage more outdoor activity and have a positive impact on health. Well designed play spaces for children and incorporating ‘home zones’ will encourage them to play outside and develop healthier lifestyle habits. More formal recreation areas such as football pitches will encourage the uptake of healthier lifestyles.</p> <p>Mitigation: Developments should be designed to maximise formal and informal play space and set aside areas specifically for outdoor recreational activity. Layouts should encourage people to walk and cycle more, particularly for shorter trips.</p>
SA objective 12 – Provide decent, affordable and safe homes for all	<p>++</p> <p>Significance of effect: The cornerstone of providing decent affordable and safe homes is high quality design. The policy requires residential development to be of a high design standard, able to provide a range of housing types and tenures that are safe and secure. Industry design standards such as ‘Building for Life’ and ‘Secured by Design’ will be used in conjunction with local design guidance to ensure all developments are attractive, accessible, adaptive, safe and secure.</p> <p>Mitigation: New proposals will be required to include a Design and Access Statement that demonstrate the highest standards of design and architectural quality, including designing out crime. The proposals will need to meet recognised national industry design standards.</p>
SA objective 13 –	++

<p>Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages</p>	<p>Significance of effect: Enriching and enhancing the quality of place through design will play a large role in revitalising town centres. Areas with a poor or degraded urban quality will use design to create a strong sense of place and vibrancy through excellent new and refurbished buildings, well-designed public spaces and inspired landscaping that builds on existing strengths and character. The design of development in villages will need to bring through local qualities, character and distinctiveness to foster integration and retain a strong sense of identity.</p> <p>Mitigation: Ensure that town centre regeneration uses the highest quality design for both buildings and public spaces, respects and responds positively to the urban fabric. Development in villages will need to be sensitive to the local qualities and character and foster a unique and strong sense of identity.</p>
<p>SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.</p>	<p>++</p> <p>Significance of effect: Well-designed new developments, particularly the urban extensions, can improve access and mobility within the area. The layout of new residential areas will encourage walking and cycling and links with green infrastructure will help this.</p> <p>Mitigation: The Design and Access Statement will need to show how design and layout encourages sustainable travel and good access and mobility. Large developments will be required to produce a Green Travel Plan.</p>
<p>SA objective 15 – To promote employment, learning, skills and innovation</p>	<p>0</p> <p>Significance of effect: No direct impact</p> <p>Mitigation: None</p>

Table A5.6: Delivering Economic Prosperity CS9

Summary of significant effects:
Overall, this policy is expected to have a positive impact on sustainability in particular social and economic factors. The impact of this policy will however be dependent on a range of factors, such as location and scale of the new employment areas, accessibility to residential areas and town centres, use of sustainable construction techniques and access to sustainable integrated transport systems.
This policy has the most positive impact on the economic objectives due to the ability of this policy to create employment and deliver economic prosperity. It will be important that this policy seeks to attract and deliver a range of businesses offering a variety of jobs to suit the skills available locally and which offer the potential to enhance local skills. Learning linkages between the schools, colleges and businesses could be explored to ensure that the skills required by businesses are taught at a local level. The economic benefits of this policy will lead to a positive impact on the social factors as by creating employment, people will be earning an income, which should lead people out of crime and reduce poverty in the area. This policy does not take advantage of airport, tourism related to the airport and the natural assets of the area. Strategic issues such as town centre boundaries, primary and secondary frontages and the Core Strategy approach to out of centre development is not indicated in the policy and will need to be addressed through the Development Management DPD or area/site-specific action plans or master plans and appraised accordingly.
Sundon Quarry has been appraised in Appendix4.

<p>SA objective 1 – To maintain and enhance biodiversity</p>	<p style="background-color: #f4a460; text-align: center;">-?</p> <p>Significance of effect: It is not clear what the effect of this policy would have on biodiversity. However, new development, in particular Greenfield development, could potentially have a negative impact on biodiversity. It will depend on how the development is implemented in terms of location, design, layout and inclusion of sustainability measures. The proposal for a Rail Freight Interchange adjacent to Sundon quarry could also have the potential to negatively affect local biodiversity, as it will be located adjacent to a County wildlife Site.</p> <p>Mitigation: New developments, in particular Sundon quarry and those that are located near areas of biodiversity value need to ensure that they incorporate appropriate measures to reduce to impact on biodiversity.</p>
<p>SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB</p>	<p style="background-color: #f4a460; text-align: center;">-?</p> <p>Significance of effect: No development is proposed in the Chilterns AONB. New development, in particular those proposed in the new urban extensions will be on Greenfield land and in the rural areas, have the potential to impact upon the landscape and townscape. New employment areas will likely comprise large buildings, such as warehouses, which will not enhance the landscape or townscape. The impact will depend on how the development is planned in terms of location, design, and layout.</p> <p>Mitigation: New development on Greenfield land should be designed taking into account the local character to enhance the townscape and pay respect to the local landscape in terms of character and natural features. Those on Brownfield sites within the existing urban area should be designed to reduce its impact on adjoining uses and the townscape.</p>
<p>SA objective 3 – Protect and enhance air, soil and water resources</p>	<p style="background-color: #f4a460; text-align: center;">-?</p> <p>Significance of effect: New development, especially new employment development, will result in a high usage of resources especially water. The impact will depend on the type of employment use and technology used during the industrial processes. There will be a high usage of resources from the</p>

	<p>construction through to the completion right through to the actual use of the site. It will be essential that new employment development incorporate measures to reduce resource use and new developments will be encouraged to adhere to BREEAM.</p> <p>Mitigation: New developments will need to ensure that mitigation measures to reduce the impact on air, soil and water resources. These would need to be included from the design process through construction and completion to ensure that the resulting development is designed to protect and enhance resources where possible.</p>
<p>SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas</p>	<p>?</p> <p>Significance of effect: Developments proposed in areas at risk of flooding will not be supported, in line with Policy CS12(Flooding). New development will need to include appropriate flood prevention and SuDs to reduce run off from the site. Policy CS12 will aim to ensure that developments reduce the risk of flooding however, the effects will not be known until the location and details of the development are known.</p> <p>Mitigation: To reduce flood risk, new employment development will not be encouraged to be developed on areas at risk of flooding and measures to reduce run off should be encouraged, inline with national guidance.</p>
<p>SA objectives 5 – Adapt to and mitigate against the impact of climate change</p>	<p>-?</p> <p>Significance of effect: It is considered that this policy will have a likely negative impact on climate change. This will however, be dependent on implementation. The degree of impact will depend on how the new development is built and what sustainability measures are included in the design to reduce the impact.</p> <p>Mitigation: To reduce the impact on climate change, new developments will be encouraged to be build according to BREEAM.</p>
<p>SA objective 6 – Increase resource efficiency and reduce resource use and waste</p>	<p>-?</p> <p>Significance of effect: It is not clear what the impact of this policy will be on resource efficiency. Development, by its nature, will increase resource use and waste. This will begin from the construction phase when resources will be used to build the development through to when the development is occupied, as employment uses will utilise more energy and waste. Measures can be introduced to increase resource efficiency and reduce resource use and waste but these will need to be implemented from the design phase to ensure that they are included. There may be some capacity on the urban extensions for the use of more sustainable and renewable forms of energy.</p> <p>Mitigation: Measures to increase resource efficiency and to reduce resource use and waste will need to be included in the development from the outset.</p>
<p>SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space</p>	<p>?</p> <p>Significance of effect: GI Policy in the Core Strategy aims to ensure that new developments maintain, enhance and deliver GI to provide a net gain in GI across the Strategy's area. The provision of GI will be essential in areas where there are natural features that could be incorporated into a local GI network and could be used to encourage more sustainable modes of transport both in the existing areas and in urban extensions. The GI policy should apply to all developments and thus employment areas should also contribute to the GI network however, this will depend on the location, design and layout of the proposed employment area.</p> <p>Mitigation: New development, in particular those in the proposed urban extensions, need to incorporate GI into their design to contribute to the overall GI network in Luton and southern Central</p>

	Bedfordshire.
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	?
	Significance of effect: It is not clear at this stage what the impact of this policy will be on the historic environment and cultural assets. The impact will depend on the location and design of the new development.
	Mitigation: To protect and maintain the historic environment it will be essential that new developments respect the local area in which they are developed. New developments will also need to adhere to the Guidelines in the Design Guides for Central Bedfordshire and Luton to protect and enhance the historic environment.
SA objective 9 – Reduce poverty and inequality	+
	Significance of effect: It is considered that this policy will promote economic prosperity in the area will have a positive impact on reducing poverty and inequality due to its ambition to create employment opportunities. The nature of impact will depend on the type of employment opportunities created in the area and the level of skill required and whether this will match the skills within the local workforce. It will be essential that a variety of employment businesses be encouraged to relocate to the area to offer a range of skills and employment opportunities. An increase in employment opportunities will ensure that more people have access to jobs, increasing their monthly income and thus leading to a reduction in poverty.
	Mitigation: It will be essential that a range of businesses are encouraged to relocate to the area to ensure that a range employment opportunities are on offer to cater for the skills level in the Strategy's area and to encourage potential new residents to the area.
SA objective 10 – Reduce both crime and fear of crime	+?
	Significance of effect: It is considered that this policy will have a positive impact on the reduction of crime and fear of crime due to the anticipated impacts this policy will have on job creation in the area. By encouraging a range of businesses to relocate to the area, employment opportunities will increase leading to more people in work and will thus encourage less people to get involved in crime i.e. improving social mobility.
	Mitigation: To ensure a positive impact, it will be essential that a range of businesses are encouraged to relocate to the area to ensure that a variety of employment opportunities are on offer to cater for the skills level in the Strategy's area.
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	?
	Significance of effect: It is unclear what the impacts of this policy will be on health, as this will depend on the location of the new employment land and the layout and design and access to local services and open space. To encourage healthier lifestyles, new developments need to be designed to encourage movement by more sustainable forms of transport, such as walking and cycling, be connected to a bus network and GI network to ensure a pleasant and safe environment for walking and cycling. This will also have a positive impact on the natural environment.
	Mitigation: To ensure a positive impact, new developments will need to be designed to encourage more walking and cycling, be designed to include limited local facilities and services so as not to impact on the town centres to employees who could walk to these before, during or after work and also design these areas to be connected to the local GI network.
SA objective 12 – Provide decent, affordable and safe	0
	Significance of effect: It is considered that there is no direct

homes for all	<p>impact between this policy and objective 12 as the provision of employment will not lead to the provision of more housing. Indirectly, it could lead to people who find employment with the new businesses that are encouraged to relocate to the area to save money for a deposit or renting for housing. Alternatively, land allocated for employment could be used for housing, thus having a potential negative impact. It is considered that through the Master Planning work, the best land suitable for housing and employment will be allocated and a balance of land uses is considered to create a sustainable community.</p> <p>Mitigation: To ensure that the provision of employment land does not negatively affect upon the provision of housing, there needs to be careful consideration in the Master Planning work to ensure a sustainable community and balance of land uses.</p>
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	<p>+?</p> <p>Significance of effect: Town centre revitalisation – By encouraging more businesses to the area on new and redeveloped employment sites will lead to an increase in businesses relocating both on the allocated employment sites and within the town centre as these will service the needs of the businesses. As a knock-on effect due to the investment in the town centre, other retail and services will open in the town centres thus revitalising the town centre.</p> <p>Villages – Existing employment sites will be protected in the village locations as they provide vital employment opportunities for these areas. Policy CS22 (Rural Settlements) encourages proposals that provide new jobs in these areas. This will lead to the villages being able to sustain themselves thus protecting their identity.</p> <p>Mitigation: To revitalise the town centre, retail and other town centre uses should only be permitted within the town centres and not on employment sites where the focus should be on B class uses. Employment proposals in villages need to be in keeping with the village size to keep in character with the village.</p>
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	<p>?</p> <p>Significance of effect: It is uncertain what the impact of this policy will be on sustainable integrated transport systems. The impact will be dependent on the scale, design and layout of the employment areas. The location of the area in terms of distance from town centres and housing and access to a bus or rail network and connectedness to a local GI network will be particular important as these factors could either encourage and discourage employees to use more sustainable modes of transport depending on ease of access.</p> <p>Mitigation: Where possible, new employment areas should be incorporated into existing or new bus networks and through the proposed urban extensions to encourage people to use more sustainable modes of transport.</p>
SA objective 15 – To promote employment, learning, skills and innovation	<p>+</p> <p>Significance of effect: It is anticipated that this policy will have a positive impact on the promotion of employment, learning and skills. Policy CS9 aims to delivery economic prosperity by creating an environment that will attract and support business investment and job creation. It is not clear what the impact will have on skills and learning as it is not known what types of businesses will move and what training and skills they would offer to prospective employees. It is considered that there will be some training for new businesses, which employees will be able to use to enhance their career prospects.</p> <p>Mitigation: Businesses should be encouraged to recruit locally to promote employment opportunities to local residents. The Colleges in the area could be linked with new businesses to find out what</p>

	<p>skills they require and these in turn could be taught at the colleges. This in turn would enhance the skills of the local residents and job seekers and thus improve their chances are gaining meaningful employment.</p>
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Table A5.7: Green Infrastructure CS10

Summary of significant effects:
It is considered that this policy has a positive impact in terms of sustainability. Through the provision of more GI assets that are connected and multi-functional will result in general positive impacts relating to health, wellbeing, environmental protection, historic environment protection, encourage the use of sustainable transport and protect biodiversity. The GI assets need to be carefully planned into the new development in particular the urban extensions in ensure that they are fully integrated into the development and community and making use of existing features and assets in the area. If not, it is feared that the GI assets will become separated from the community and not used to their potential thus attracting anti-social behaviour instead of being used as a feature to develop and foster the community. In addition, when the GI network ins planned, in particular, in the new urban extensions, it is vital that the management of these areas is also considered so that these areas continue to provide the benefits for the community.

<p>SA objective 1 – To maintain and enhance biodiversity</p>	<p style="text-align: center;">+</p> <p>Significance of effect: Through seeking a net gain in GI and encouraging the creation of multi-functional areas this would have a positive impact on biodiversity in the area. It is acknowledged that the development of the urban extensions on green field land will result in the loss of biodiversity however, if developments take into account GI and integrate this into developments and create connected multi-functional areas this would protect and enhance areas of biodiversity. The ongoing management of local green infrastructure will also ensure the biodiversity at the more local level can be protected and maintained, this is particularly relevant for the existing urban areas.</p> <p>Mitigation: Areas of known biodiversity need to be identified before development commences and protected from development. The connected areas of GI also need to be planned in such a way so as to protect key features of the natural environment. This could be dealt with during the master planning stage for the urban extensions.</p>
<p>SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB</p>	<p style="text-align: center;">+</p> <p>Significance of effect: Through seeking a net gain in GI and encouraging the creation of multi-functional areas that promote and enhance the local landscape and historic assets such as the Chilterns AONB and villages, will have a positive impact on this SA objective. No urban extensions are planned for in the AONB. It is acknowledged that the development of the urban extensions on green field land will impact on the local landscape if not planned correctly from the outset. However, if developments take into account GI and integrate this into developments and create connected multi-functional areas this would protect and enhance landscape and townscape.</p> <p>Mitigation: Areas of known landscape and townscape value need to be identified before development commences and protected from development. The connected areas of GI also need to be planned in such a way so as to protect areas of landscape and townscape value. This could be dealt with during the master planning stage for the urban extensions.</p>
<p>SA objective 3 – Protect and enhance air, soil and water resources</p>	<p style="text-align: center;">+?</p> <p>Significance of effect: Through the protection and enhancement of the GI asset and the policy requirement to seek a gain in the GI asset, air, soil and water resources should be protected. This is because the green spaces would not be developed on allowing for natural water run-off and provides soft landscaping to absorb carbon and release oxygen thereby protecting and enhancing the air, soil</p>

	<p>and water resource. This will however depend on how the developments are planned. New development in particular the urban extensions will need to include adequate GI, as required by this policy.</p>
	<p>Mitigation: New development in particular the urban extension will need to be planned in such a way so as they provide a net gain in the GI asset. These areas will also need to be strategically located to include areas that have been identified to have a high natural/biodiversity importance and these areas need to be planned themselves to ensure less development on them and carefully planned soft landscaping. This could be dealt with during the master planning stage for the urban extensions.</p>
<p>SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas</p>	<p>+?</p> <p>Significance of effect: This policy seeks to ensure that new GI assets create connected multi-functional areas of green space that reduce the risk of flooding. GI can be located in areas at risk of flooding and should therefore encourage developers to not develop new housing in areas at risk of flooding.</p> <p>Mitigation: Through the master planning process it will be important to ensure that new development is not located in areas at risk of flooding but that the strategic GI network is planned in such a way so as the reduce the risk of flooding.</p>
<p>SA objectives 5 – Adapt to and mitigate against the impact of climate change</p>	<p>+?</p> <p>Significance of effect: The provision of new GI and the protection and enhancement of the existing GI asset should have a positive impact on climate change. This policy seeks to develop a connected multi-functional GI asset, which should encourage local residents to access local services and facilities either on foot or by bike using the GI network reducing the use of the private car. The GI asset will include the protection of areas rich in biodiversity and the local landscape thus aiming to protect and enhance the natural environment. It is important to ensure that the impact is positive that all developments are planned in such a way to enhance and develop the GI asset of the area.</p> <p>Mitigation: Through the master planning process it will be important to ensure that new development strategically plan for the GI asset and ensure that it is connected and designed in such a way to encourage use.</p>
<p>SA objective 6 – Increase resource efficiency and reduce resource use and waste</p>	<p>0</p> <p>Significance of effect: There are usually very few buildings within the GI asset and thus directly this policy will have little impact on this objective. This policy encourages the development of strategically located and connected multi- functional areas of GI that promote recreation and tourism. GI should also be planned for at the local level to improve access to open space therefore this policy should positively impact on this objective, as residents should be able to access open space and the countryside through the network of GI therefore relying less on the private motor vehicle. This would be an indirect benefit.</p> <p>Mitigation: To encourage greater use of more sustainable modes of transport in particular cycling and walking, GI assets need to be well connected and provide useable links to key facilities and services and the countryside to ensure greater access for local residents.</p>
<p>SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space</p>	<p>++</p> <p>Significance of effect: This policy seeks a net gain in GI assets thus directly benefitting this objective.</p> <p>Mitigation: It will be essential that new developments, in particular the urban extensions, plan for the GI asset during master planning.</p>
<p>SA objective 8 – To</p>	<p>+?</p>

<p>identify, protect, maintain and enhance the historic environment and cultural assets</p>	<p>Significance of effect: This policy seeks to create a GI asset that enhance the local landscape and historic assets thus this policy should benefit this objective. It will how be dependent on how the urban extensions and other developments are implemented. New developments will need to be planned carefully to ensure that they are able to enhance and protect the local landscape and historic and cultural assets.</p> <p>Mitigation: It will be essential that new developments, in particular the urban extensions, are planned carefully during master planning to ensure that they do not negatively impact against the historic and cultural assets of the area.</p>
<p>SA objective 9 – Reduce poverty and inequality</p>	<p>?</p> <p>Significance of effect: It is unknown what the impact of this policy will be on reducing poverty and inequality. It is considered however, that should the GI assets within urban areas be enhanced and the new GI asset in the urban extensions are accessible for both the existing and new residents, then this could ensure all green spaces are accessible by all residents regardless of where they live.</p> <p>Mitigation: The overall GI Plan and emerging Green Space Strategy need to ensure that there is equal access to the GI across the whole of Luton and Southern Central Bedfordshire so that all residents have access to it.</p>
<p>SA objective 10 – Reduce both crime and fear of crime</p>	<p>?</p> <p>Significance of effect: It is not known what the impact of the provision of new GI will be on this objective. The impact will depend on where the GI is located in relation other facilities and services and how well the area is planned. It will be essential that new GI assets are designed to be integrated with the development and are not isolated from it. Facilities developed on GI assets such as recreational facilities could be developed as a focal point for communities to foster a sense of community.</p> <p>Mitigation: New green and open spaces will need to follow the principles of 'Secured by Design' to ensure that these areas do not encourage anti-social behaviour.</p>
<p>SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development</p>	<p>+?</p> <p>Significance of effect: The provision of new open space should encourage healthier lifestyles and positive health impacts as under this policy new development, including the urban extension, new GI will be created that will have multi-functional purposes including recreational purposes. It is also proposed that new GI will be connected thus encouraging residents to use these corridors by cycling or foot instead of the private motor vehicle. Local level GI assets will need to be provided by new development and in the existing urban areas existing open spaces could be upgraded to encourage greater use.</p> <p>Mitigation: It will be important that new GI assets are planned to ensure that they provide enough space for both informal and formal recreation and specific areas are set aside for formal recreational uses, for example, football pitches. New developments will also need to ensure that new GI assets are connected to existing GI assets and a strategic approach to the provision of GI is taken. This will ensure a balanced approach to getting both local GI assets and the more strategic country parks.</p>
<p>SA objective 12 – Provide decent, affordable and safe homes for all</p>	<p>0</p> <p>Significance of effect: Little direct impact on the provision of housing. Ensuring that all housing, including new homes, is accessible to GI assets could contribute to ensuring that new homes are located in sustainable locations.</p> <p>Mitigation: During the master planning work, it will be essential to ensure that new homes are accessible to GI.</p>

<p>SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages</p>	<p>+?</p> <p>Significance of effect: by ensuring that a connected network of GI is created through the new urban extensions and within the existing area could contribute to revitalising town centres by giving local residents the opportunity to access the town centres by more sustainable modes of transport. Supporting the strategic GI networks identified in the GI Plans, will protect the identity of villages through the enhancement of green buffers and corridors. Under this policy, new GI assets will be sought that enhance the local landscape and historical assets that are usually found within town centres and villages.</p> <p>Mitigation: It will be essential that new development both in the urban extensions and within the urban area take into account the use of green corridors, which can be used to access the town centres to encourage more people to access the town centres. The urban extensions will need to contribute to the strategic GI networks as identified in the GI Plans.</p>
<p>SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.</p>	<p>+?</p> <p>Significance of effect: This policy supports the creation of a connected network of GI assets. These corridors, if planned well, should encourage local residents to use more sustainable modes of transport such as cycling and walking to get to town centres and other key services and facilities. This would also have a beneficial impact on health and well-being and the environment through reducing carbon emissions. Through a balanced approach to providing for GI, the creation and maintenance of local GI assets should also encourage more people to access the GI asset.</p> <p>Mitigation: It will be essential that new development both in the urban extensions and within the urban area take into account the use of green corridors, which can be used to access the town centres to encourage more people to access the town centres. It will be essential for all development to contribute to the provision or maintenance of local GI to ensure most residents have equal access to GI assets.</p>
<p>SA objective 15 – To promote employment, learning, skills and innovation</p>	<p>0</p> <p>Significance of effect: It is not considered that there will be any impact on this objective. Opportunities could potentially arise from the development of educational centres within strategic GI assets such as the Country Parks. These centres could be used for employment and learning. The provision of formal recreational facilities in a strategic GI network could also potentially create employment opportunities through the management of these centres.</p> <p>Mitigation: Developments within the GI network should be encouraged to be multi-functional to encourage greater use of the building and to enable the community to benefit through employment and learning opportunities.</p>

Table A5.8: Resource Efficiency CS11

Summary of significant effects: Overall, the policy should contribute positively to the SA objectives. The approach of implementing the Code for Sustainable Homes standards will most directly impact upon objectives 5 and 6 relating to adapting to climate change and resource efficiency. Whilst the policy primarily seeks to address new developments, the concept of an offset fund means that existing development should also benefit.

	+?
SA objective 1 – To maintain and enhance biodiversity	Significance of effect: The policy is likely to assist in reducing the impact of climate change. It is recognised that climate change will impact upon different species. The policy should therefore assist in maintaining and enhancing biodiversity
	Mitigation: To ensure that the standards set out in the policy are met.
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	+
	Significance of effect: Climate change is likely to have an impact on the landscape over a period of time. The policy seeks to mitigate against climate change and so should help to protect, conserve and enhance these landscapes in the long term. Mitigation: To ensure that the standards set out in the policy are met.
SA objective 3 – Protect and enhance air, soil and water resources	++
	Significance of effect: The policy promotes the implementation of renewable energy schemes and water efficiency measures in order to protect and enhance existing natural resources. It also promotes sustainable building under the Code for Sustainable Homes initiative. Mitigation: The successful implementation of this policy will contribute greatly to this objective.
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	+
	Significance of effect: The Code for Sustainable Homes includes an assessment of surface water run off and associated flood risk for all new developments. Implementation of this policy should therefore ensure that new development avoids areas at risk from flooding Mitigation: Enforce the standards of the policy and use in conjunction with evidence studies such as the SFRA and Water Cycle Study.
SA objectives 5 – Adapt to and mitigate against the impact of climate change	++
	Significance of effect: The overall purpose of this policy is to adapt to and mitigate against the impact of climate change through the requirement to meet CfSH standards. Where these standards cannot be met, the policy advocates the implementation of a carbon offset fund. The money from this fund would be used to help adapt existing buildings. Mitigation: To ensure that the standards set out in the policy are met.
SA objective 6 – Increase resource efficiency and reduce resource use and waste	++
	Significance of effect: The policy requires new development to meet CfSH criteria, which will have a positive effect on increasing resource efficiency and reducing resource use and waste. Where these standards cannot be met, the policy advocates the implementation of a carbon offset fund. The money from this fund would be used to help adapt existing buildings. Mitigation: To ensure that the standards set out in the policy are met.

SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space	0
	Significance of effect: It is not anticipated that the policy would impact upon the delivery of green infrastructure. Mitigation: None
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	0
	Significance of effect: It is not anticipated that the policy would impact upon the protection of the historic environment. Mitigation: None
SA objective 9 – Reduce poverty and inequality	0
	Significance of effect: It is not anticipated that the policy would impact upon poverty and inequality. Mitigation: None
SA objective 10 – Reduce both crime and fear of crime	0
	Significance of effect: It is not anticipated that the policy would impact upon crime Mitigation: None
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	0
	Significance of effect: No direct impact Mitigation: None
SA objective 12 – Provide decent, affordable and safe homes for all	+?
	Significance of effect: Depending on how the policy is implemented, the standard of homes could be improved through better insulation etc Mitigation: To ensure that the standards set out in the policy are met.
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	0
	Significance of effect: No direct impact Mitigation: None
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	0
	Significance of effect: No direct impact Mitigation: None
SA objective 15 – To promote employment, learning, skills and innovation	0
	Significance of effect: No direct impact Mitigation: None

Table A5.9: Adapting to and Mitigating Flood Risk CS12

Summary of significant effects:
 Policy CS12 will have a positive impact on sustainability and the Strategy's area will benefit from the implementation of this policy. By avoiding development in areas of flooding, new development will be concentrated around the urban areas of Luton, Dunstable and Houghton Regis and Leighton Buzzard. This will aid the regeneration of these town centres protecting the countryside from inappropriate development. More development in and around the town centres will facilitate the use of more sustainable modes of transport thereby reducing the impact on the climate change.
 The river restoration works proposed on the River Lea in Luton will also contribute to the regeneration of the town centre by making it a more attractive town centre. Opening up the river in parts will make an attractive focal point in the town centre encouraging more and longer visits to the town centre and improving the biodiversity and natural environment of this river and reducing the risk of flooding.
 Linking Policy CS12 with Policy CS10 (Green Infrastructure) will also have a positive impact on the natural environment as areas at risk of flooding could be included within the GI network, enhancing this asset. Increasing the GI asset in the area will encourage healthier lifestyles due to the improved access to open space. The management of the GI network including the areas at risk of flooding will be important to ensure that they do not become areas attracting anti-social behaviour.
 New developments, particularly the urban extensions, should be planned to include measures to reduce run-off and with sustainable measures to reduce the impact on the environment. Liaison with the Environment Agency for strategic developments and the urban extensions will be essential to ensure that there is a reduced risk of flooding across the Strategy's area.

<p>SA objective 1 – To maintain and enhance biodiversity</p>	<p>+?</p> <p>Significance of effect: This policy should have a positive effect on biodiversity as areas rich in biodiversity are likely to be found along watercourses that are at risk of flooding. If development is not built on these areas, biodiversity will be enhanced. Along the River Lea the long-term ambition to explore river restoration works will also enhance the biodiversity along this river, however is dependent on the type of river restoration implemented. The river restoration and habitat creation programmes to manage flood risk will also aid the enhancement of biodiversity.</p> <p>Mitigation: Whilst areas at risk of flooding are not developed, it will be equally important that these areas are maintained through inclusion into the GI network to enhance the biodiversity.</p>
<p>SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB</p>	<p>+?</p> <p>Significance of effect: The effect of this policy on Objective 2 should be positive but is dependent on how proposals are implemented. Proposals to restore the River Lea in Luton could potentially enhance the townscape of Luton town centre by opening the river channel up and utilising it for recreational/leisure purposes. An absence of development in areas at risk of flooding could also potentially be used to compliment the GI asset and in turn be used to enhance the landscape and nationally protected areas.</p> <p>Mitigation: Areas at risk of flooding need to be included into the GI network so that these areas can be used to enhance the landscape and local character of areas. This will need to be carried out at the Master Panning Stage.</p>
<p>SA objective 3 – Protect and enhance air, soil and water resources</p>	<p>+?</p> <p>Significance of effect: The effect of this policy on Objective 3 should be positive but is dependent on how proposals are implemented. An absence of development in areas at risk of flooding and along watercourses could be used to compliment the GI asset and in turn be used to enhance the air, soil and water</p>

	resources as they will be free of development. Mitigation: Areas at risk of flooding need to be included into the GI network so that these areas can be used to enhance the air, soil and water resources. This will need to be carried out at the Master Planning Stage.
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	++ Significance of effect: The policy seeks to avoid development in areas at risk of flooding thus direct impacts upon this objective. Mitigation: Decisions made regarding planning applications need to accord with this policy and the recommendations of the Environment Agency. It is advised that developers include the Environment Agency during the pre-planning and planning of their development to ensure that the development will aim to reduce the risk of flooding on the site and elsewhere.
SA objectives 5 – Adapt to and mitigate against the impact of climate change	+ Significance of effect: By avoiding development in areas at risk of flooding should help with mitigating against the impact of climate change which is anticipated to increase the risk of flooding. By not building in the areas at risk of flooding and for new development to ensure they conform to the policy on Resource Efficiency will help communities adapt to the impact of climate change. Mitigation: Development should avoid being developed in areas at risk of flooding at all costs. Liaison between the EA and developers is expected during the master planning stages to avoid all areas of flood risk and to ensure that development are built to take into account an increased risk of flooding and include measures to reduce run-off from the site.
SA objective 6 – Increase resource efficiency and reduce resource use and waste	+? Significance of effect: By not building on areas at risk of flooding and by including appropriate flood mitigation and drainage measures for new developments will lead to an increased resource efficiency as through improved building techniques new residents will be encouraged to recycle and reuse run-off thus helping to reduce the overall run off from the site. This will however be dependent on the Resource Efficiency Policy as to how these measures are implemented. Mitigation: The Resource Efficiency Policy needs to be forceful to ensure that all new developments must include measures to reduce run-off from the site thereby reducing the risk of flooding and increasing resource efficiency.
SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space	+? Significance of effect: This policy has links with the Green Infrastructure policy to ensure that areas at risk of flooding which are likely not to be developed will be linked in with the GI network. This will ensure that a well-connected GI is created to include a variety of areas with the additional benefit of reducing the risk of flooding. The effect of this policy on this objective will be dependent on how the developments are planned and the inclusion of the areas at risk of flooding with the GI network. Mitigation: It will be important that in the planning of the urban extensions that areas at risk of flooding are identified and included within the planning for the GI network. Liaison with the EA will be important to gain their advice and recommendations for the master planning stage.
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	? Significance of effect: It is unknown what the effect of this policy on Objective 8 will be at this stage. More detailed will be required for specific areas. In the case of Luton, the proposed river restoration works might aid the identification and protection of historic and cultural assets by 'opening' the river up reducing the built up nature

	<p>of this town centre. In the case of the urban extensions the inclusion of the areas at risk of flooding into the GI network, the GI network can also include areas of historical or cultural importance and thus having a connected network could help identify and maintain these assets for recreational and leisure purposes.</p> <p>Mitigation: It will be important that historic and cultural assets are identified early on in the planning process to ensure that these can be protected and maintained from unnecessary development and can be included into a connected GI network that is well managed.</p>
SA objective 9 – Reduce poverty and inequality	0
	Significance of effect: There will be very little impact of this policy on Objective 9. By avoiding development in areas at risk of flooding, will ensure that new homes will not be affected by the effects of flooding thus reducing the impacts of areas that could be blighted and unmarketable.
	Mitigation: All development, especially housing, should not be developed in areas at risk of flooding to avoid the detrimental impacts of flooding on communities.
SA objective 10 – Reduce both crime and fear of crime	0
	Significance of effect: There is no direct impact on this policy on Objective 10.
	Mitigation: The use of areas at risk of flooding for inclusion into the GI network can be used as green corridors. It is important that these areas are designed to reduce crime and anti-social behaviour and are integrated into the community to improve natural surveillance.
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	0
	Significance of effect: There is no direct impact on this policy on Objective 11.
	Mitigation: The use of areas at risk of flooding for inclusion into the GI network can be used as green corridors to encourage greater use of non-motorised forms of transport and a greater use of walking and cycling to get around the local area and thus encourage healthier lifestyles.
SA objective 12 – Provide decent, affordable and safe homes for all	+?
	Significance of effect: By not allowing development in areas at risk of flooding ensures that all new homes are safe from flooding and are able to serve the needs of the inhabitants for the long term.
	Mitigation: No homes should be built within areas at risk of flooding, conforming with PPS25.
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	+
	Significance of effect: It is considered that no development will take place in areas at risk of flooding which in the Strategy's area would mean concentrating the urban development around the urban conurbation. This would therefore aid the regeneration of the town centres of Luton, Dunstable and Leighton Linlade whilst protecting the identity of the villages in the countryside. The proposals to restore the River Lea in Luton will also have a positive impact on Luton town centre and it will enhance the townscape of this highly developed town centre. It will soften the townscape and enhance the natural environment in an urban environment through encouraging greater use of the river for recreation and leisure purposes.
	Mitigation: River restorations on the River Lea should be encouraged to enhance Luton town centre and no development should be allowed to be developed in areas at risk of flooding to encourage the urban extensions to be concentrated around the urban conurbation.
SA objective 14 – To provide and encourage the use of	0
	Significance of effect: There is no direct impact of this policy on Objective 14.

sustainable integrated transport systems, improve access and mobility.	Mitigation: The use of areas at risk of flooding for inclusion into the GI network can be used as green corridors to encourage greater use of non-motorised forms of transport and a greater use of walking and cycling to get around the local area.
SA objective 15 – To promote employment, learning, skills and innovation	0
	Significance of effect: There is no impact of this policy on Objective 15.
	Mitigation: NA

Table A5.10: Rural Settlements CS22

Summary of significant effects: The scale of growth in the rural areas will be limited so the impact on any of the sustainability objectives will be fairly limited. The main positive impact will be the potential to provide affordable housing in areas where homes are often unaffordable to many. Village identity should be a major consideration when identifying which sites to allocate for housing. Inevitably, new development will increase pressure on natural resources. It is therefore important for the requirements of the resource efficiency policy to be met to reduce the impact of the new development as far as possible.

SA objective 1 – To maintain and enhance biodiversity	+?
	Significance of effect: Dependent on location of growth.
	Mitigation: Avoid allocating sites for development in proximity to environmentally sensitive sites
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	-?
	Significance of effect: Small scale Green Belt reviews around rural settlements are likely to impact upon landscape and character to some extent
	Mitigation: Allocate sites in areas of lower landscape value.
SA objective 3 – Protect and enhance air, soil and water resources	-?
	Significance of effect: Would depend on implementation. New development is likely to increase demand on natural resources although the scale of rural growth is limited. Also depends on layout and design of new development.
	Mitigation: Design and layout should be considered at an early stage. Development should adhere to requirements of policy on Resource Efficiency
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	+?
	Significance of effect: Dependent on location of new development.
	Mitigation: Utilisation of SFRA and Water Cycle Study to identify areas at risk from flooding. Limited nature of rural growth means that building in areas at risk from flooding should be avoided.
SA objectives 5 – Adapt to and mitigate against the impact of climate change	-
	Significance of effect: Although development is limited in scale, the construction of new houses is likely to lead to an increase in carbon emissions.
	Mitigation: New development should adhere to the requirements of the policy on resource efficiency.
SA objective 6 – Increase resource efficiency and reduce resource use and waste	-
	Significance of effect: Although development is limited in scale, the construction of new houses is likely to lead to an increase in resource use
	Mitigation: New development should adhere to the requirements of the policy on resource efficiency.
SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space	+?
	Significance of effect: Whilst the level of rural growth will be limited, there could be potential, on developments over a certain size, to require the provision of new green space.
	Mitigation: New development should adhere to the relevant planning obligations document.

SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	<p>-?</p> <p>Significance of effect: Dependent on location of development.</p> <p>Mitigation: Avoid development in areas of historic and cultural importance.</p>
SA objective 9 – Reduce poverty and inequality	<p>+?</p> <p>Significance of effect: Although scale of development will be limited, new housing, including an affordable element, will be provided in rural areas where houses prices are generally high and unaffordable to many.</p> <p>Mitigation: Seek a suitable percentage of affordable housing in new developments.</p>
SA objective 10 – Reduce both crime and fear of crime	<p>+?</p> <p>Significance of effect: Dependent on location, layout and design of development</p> <p>Mitigation: Consider how location, layout and design could 'plan out crime' from an early stage</p>
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	<p>+?</p> <p>Significance of effect: Dependent on location, layout and design of development.</p> <p>Mitigation: Development can be designed to encourage sustainable forms of movement such as walking and cycling. Development in rural areas should also provide good access to the countryside.</p>
SA objective 12 – Provide decent, affordable and safe homes for all	<p>+?</p> <p>Significance of effect: Although scale of development will be limited, new housing, including an affordable element, will be provided in rural areas where house prices are generally high and unaffordable to many.</p> <p>Mitigation: Seek a suitable percentage of affordable housing in new developments.</p>
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	<p>?</p> <p>Significance of effect: Dependent on design, location and layout of development</p> <p>Mitigation: Development in rural areas could enhance the identity of villages through sympathetic design and location, thereby matching the character of the village. However, a small village could have its identity irrevocably changed by too much development. These issues therefore need to be considered at an early stage.</p>
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	<p>+?</p> <p>Significance of effect: Development of a certain scale could lead to greater provision of bus services etc</p> <p>Mitigation: Discuss plans with stakeholders such as bus operators.</p>
SA objective 15 – To promote employment, learning, skills and innovation	<p>0</p> <p>Significance of effect: No direct impact</p> <p>Mitigation: None</p>

APPENDIX 6

Appraisal of Development Options under RSS growth

Growth Scenarios SSSAs – Pre- RSS revocation

Scenario 1: Four urban extensions: East of Leighton Linlade, North of Houghton Regis, North of Luton and East of Luton (C&D, F&G, I and L).
Scenario 2: Three urban extensions: To the east of Leighton Linlade, north of Houghton Regis, north of Luton, increased urban capacity and smaller sites around the towns and villages (beyond the 1,500 allocated in the sub-regional strategy) (C&D, F&G, I increased urban capacity and identification of smaller sites).
Scenario 3: Four urban extensions: East of Leighton Linlade, North of Houghton Regis, North of Luton and West of Luton (C&D, F&G, I and M).

Summary of significant effects:

All three scenarios perform similarly against main environmental protection objectives (Objectives 1, 2 and 3) and require considerable mitigation to overcome potential negative impacts.

Given the scale and location in relation to existing centres, all three scenarios have the potential to contribute towards environmental and resource management objectives (4 to 7). However, it is uncertain how Scenario 2 could contribute towards these objectives at the same level as Scenarios 1 and 3. The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. Although Scenario 2 strengthens the Core Strategy commitment to develop previously developed land first, this may be undermined by the need to identify further smaller sites in the rural area and around towns.

The Core Strategy could make clearer identification of resilient Green Belt boundaries following the identification of development sites so that future Green Belt boundaries are defensible.

The same happens in relation to social objective 9 where the effect of increased urban capacity needs to be assessed so that the cumulative effect of small sites does not place undue pressure on existing facilities, nor does it result in unacceptable development densities.

Scenarios 1 and 3 are likely to provide the greatest contribution towards affordable housing (objective 12). Suitable thresholds and/or rural exception sites would be required to yield a similar level of contribution from Scenario 2.

Scenario 2 may also result in lost regeneration opportunities for Luton town centre (SA objective 13).

The SSSAs in all three scenarios are likely to positively contribute to objective 14 but given the greater reliance on smaller sites and greater dispersal of sites into the rural area Scenarios 1 and 3 perform better against this objective.

Neither of the scenarios contributes significantly to the promoting of employment and skills innovation (SA objective 15) but Scenarios 2 and 3 may reduce opportunities to build a knowledge-based economy related to Luton’s airport and University.

Key for likely option effect

++	Significant positive	+	Positive not significant	+ ?	Depends on implementation but if there is an impact is likely to be positive	--	Significant negative	-	Negative not significant	- ?	Depends on implementation but if there is an impact is likely to be negative	0	Neutral effect	?	Uncertain effect
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SA objectives	Scenario 1	Scenario 2	Scenario 3
SA objective 1 – To maintain and enhance biodiversity	-?	-?	-?
	<p>The level of growth required is likely to have a detrimental effect on biodiversity and mitigation measures should ensure that Green Infrastructure is used to provide habitat corridors and maintains and enhances biodiversity-sensitive areas.</p> <p>Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites.</p> <p>Significance of effect: Given the scale of growth and the long lasting and irreversible nature of the consequences, the effect would be significant.</p>	<p>Issues generally the same as for Scenario 1.</p> <p>Increasing urban capacity is likely to result on less pressure on biodiversity-sensitive areas to the east or west of Luton. However, pressure on urban capacity may diminish opportunities to enhance biodiversity within the urban areas. The location and number of rural sites is unknown. Their location and likely effect should be assessed against SA objectives.</p> <p>Significance of effect: Same as Scenario 1.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
SA objective 2 - To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	-?	-?	-?
	<p>The level of growth required is likely to have a detrimental effect on sensitive areas of landscape and local character. Given their location and scale, the SSSAs in Scenario 1 could accommodate mitigation measures, which would minimise their effect on objective 2. See mitigation measures for each site.</p> <p>Significance of effect: Given the extent of landscape and environmental designations in the plan area, scale of growth and its location in non-previously developed land the consequences would be long lasting and irreversible. The effect would therefore be significant.</p>	<p>Issues generally the same as for Scenario 1. However, Scenario 2 will decrease pressure on landscape and townscape sensitive areas to the east of Luton. However, increased urban capacity may increase pressures on sensitive townscapes in the urban area. When identified, urban sites should be subjected to SA to assess their likely individual and cumulative effect.</p> <p>The location and number of rural sites is unknown. Their location and likely effect should be assessed against SA objectives.</p> <p>Significance of effect: Same as Scenario 1.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>

	-?	-?	-?
SA objective 3 - Protect and enhance air, soil and water resources	<p>The level of growth required will increase pressure on air, soil and water resources. The screening of possible SSSAs eliminated sites that could not accommodate measures to mitigate against this objective. Given their location and scale, the proposed areas in Scenario 1 (subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology to minimise their effect on objective 3. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water efficiency standards. The location of sites in and around the urban areas in this Scenario is likely to minimise pollution of these resources but need to consider the effect of pollution from construction stage. See also site mitigation measures.</p> <p>Significance of effect: Given the scale of growth and that the consequences would be long lasting and irreversible, the effect would be significant.</p>	<p>Issues generally the same as for Scenario 1. However, an increase in urban capacity will decrease pressure on soil resources but its cumulative effect on air and water would need to be assessed.</p> <p>The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant.</p> <p>The location of sites in and around the urban areas and intensification of urban areas in Scenario 2 is likely to minimise pollution of these resources but need to consider the effect of pollution from construction stage. See also site mitigation measures. The location and number of rural sites is unknown. Their location and likely effect should be assessed against SA objectives.</p> <p>Significance of effect: Same as Scenario 1</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
SA objective 4 -	+?	+?	+?

<p>Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk</p>	<p>The screening of possible SSSAs eliminated sites in areas at risk of flooding. Given their location and scale the proposed areas in Scenario 1(subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology , which would minimise their effect on objective 3 and may be able to incorporate measures to help reduce flood risk in some areas. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water efficiency standards.</p> <p>Significance of effect: This scenario directs development away from high-risk areas and has a significant effect in the reduction of risk. Given the scale of growth and that the consequences would be long lasting.</p>	<p>Issues generally the same as for Scenario 1. However, the ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant.</p> <p>Significance of effect: Same as Scenario 1.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
<p>SA objective 5 -</p>	<p>+</p>	<p>+</p>	<p>+</p>

Adapt to and mitigate against the impact of climate change	<p>The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change. The rest of the climate change elements are addressed as part of environmental policies, CS10.</p> <p>Significance of effect: This growth scenario complements sustainable practices but the policy CS10 contains sustainable development proposals. The effect cannot be considered significant.</p>	<p>Issues generally the same as for Scenario 1. However, there is less capacity to incorporate integrated sustainable infrastructure as part of smaller urban and rural sites and therefore their cumulative effect should be assessed as part of the identification of sites.</p> <p>Significance of effect: Same as scenario 1</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
SA objective 6 - Increase resource efficiency and reduce resource use and waste	<p style="text-align: center;">+</p> <p>Same as objective 5. With regard to land efficiency, the Core Strategy sets clearly its preferred growth strategy and, considering the level of growth required, generally supports the preservation of the Green Belt's openness through its direction of growth. However, the Core Strategy could make clearer the identification of resilient Green Belt boundaries following the identification of development sites.</p> <p>Significance of effect: With regard to land efficiency, Scenario 1 proposes a distribution of growth that indirectly affects land efficiency but also proposes the integration of different uses, which will have a significant and long lasting effect.</p>	<p style="text-align: center;">?</p> <p>Issues generally the same as for Scenario 1. However, increasing urban capacity will strengthen the strategy's commitment to prioritise the development of previously developed land, although there may be knock-on impacts of this approach.</p> <p>Significance of effect: Similar to Scenario 1 with regards to SSSAs. However, increasing urban capacity may place pressure on the release of necessary employment sites in the urban area and proposing smaller sites is unlikely to create as great land efficiency as Scenario 1. The significance of the effect is unknown.</p>	<p style="text-align: center;">+</p> <p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
SA objective 7 -	+	-?	+

Maintain, enhance and deliver new green infrastructure including green open space	<p>The location of development as per Scenario 1 maximises the opportunity to provide Green Infrastructure in areas of identified need. However, Policy CS9 deals with green infrastructure provision.</p> <p>Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in a different policy and the effect of Scenario 1 is not significant.</p>	<p>While focusing development within the urban area reduces the impact on the surrounding countryside, it could lead to increased development pressure for urban green spaces which are important features of local green infrastructure.</p> <p>Significance of effect: Depends on implementation but could be significant. The shortage or existing green space within in the urban area would make any further loss significant.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
	0	0	0
SA objective 8 - To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	<p>This is a site-specific issue relating to the design of proposals. Master planning of SSSAs to ensure that historic and architectural assets and their setting are protected, preserved and enhanced. See site mitigation measures. Policy CS7 on quality of design provides the principles to guide development to respect local character while providing high quality of design. This will be developed further through Development Management policies and a Design SPD.</p> <p>There is no significant effect.</p>	<p>Issues generally the same as for Scenario 1. The effect of increased housing capacity in built up areas on conservation areas, listed buildings should be assessed as part of the identification of non-strategic sites.</p> <p>There is no significant effect.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
SA objective 9 -	+	+?	+

<p>Reduce poverty and inequality and promote social inclusion</p>	<p>The Core Strategy preferred distribution of growth in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address social inequalities. However, it is through employment policy CS8 and policy CS6 on social and community infrastructure where the Core Strategy addresses this objective.</p> <p>Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.</p>	<p>Issues generally the same as for Scenario 1. However, the effects of increased urban capacity have to be assessed to ensure incremental effect of development does not place undue strain on existing facilities nor result in the loss of employment land not recommended for release to other uses.</p> <p>Significance of effect: Same as Scenario 1.</p>	<p>Issues generally the same as for Scenario 1. However, the location of the proposed urban extension west of Luton makes it closer to the most deprived wards in the area than the proposed eastern urban extension.</p> <p>Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.</p>
+	+	+	+
<p>SA objective 10 - Reduce both crime and fear of crime</p>	<p>The Core Strategy preferred distribution of growth to in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address crime and fear of crime. However, it is through design policy CS7, a forthcoming design SPD and town centre master planning which the Core Strategy addresses this objective.</p> <p>Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
+	+	+	+
<p>SA objective 11 -</p>	+	+	+

<p>To encourage healthier lifestyles and reduce adverse health impacts of new developments</p>	<p>The Core Strategy preferred distribution of growth in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, it is through Design Policy CS7, Green Infrastructure Policy CS9 and Social and Community Infrastructure Policy CS6 that improved access to services and facilities is provided for.</p> <p>Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.</p>	<p>Issues generally the same as for Scenario 1. However, the effects of increased urban capacity have to be assessed to ensure incremental effect of development does not place undue strain on existing facilities nor result in inappropriate development densities.</p> <p>Significance of effect: Same as Scenario 1.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
	++	+	++
<p>SA objective 12 - Provide decent, affordable and safe homes for all</p>	<p>The scale of development proposed is likely to result in a significant step change in the provision of affordable housing in the area. When preparing the master plans of SSSAs proposals should have regard to the tenure mix in the surrounding area to maximise opportunities to create sustainable mixed communities.</p> <p>Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant.</p>	<p>Issues generally the same as for Scenario 1. However, the provision of affordable housing through increased urban capacity and smaller sites relies on such capacity being available and needs suitable affordable housing policy thresholds and/or rural exemptions sites. Provision is less predictable than scenarios 1 and 3.</p> <p>Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under scenarios 1 and 3.</p>	<p>Issues the same as for Scenario 1.</p> <p>Significance of effect: Same as Scenario 1.</p>
<p>SA objective 13 -</p>	++	+	++

<p>Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages</p>	<p>The Core Strategy preferred distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development.</p> <p>This Scenario is likely to have a long-term significant effect.</p>	<p>Although this scenario increases opportunities to increase urban living to a greater extent than other Scenarios, it may also lead to greater pressure to use urban sites for housing purposes rather than other town centre or commercial uses. There is a need for a mix of development opportunities to create sustainable urban areas. Scenario 2 does not include large urban extensions east or west of Luton, which may reduce regeneration opportunities in Luton town centre.</p> <p>This Scenario is likely to have a long-term significant effect.</p>	<p>Issues generally the same as for Scenario 1. Although the SSSA west of Luton is closer to Luton Town centre than the SSSA east of Luton, this is counterbalanced by the separation caused by the M1 motorway, which could limit the positive impact for the town centre.</p> <p>Significance of effect: The Overall impact of this scenario is considered to be similar to scenario 1.</p>
<p>SA objective 14 - To provide and encourage the use of sustainable integrated transport systems, improve access and mobility</p>	<p style="text-align: center;">++</p> <p>The Core Strategy preferred distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems.</p> <p>Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.</p>	<p style="text-align: center;">+</p> <p>Scenario 2 disperses development with the allocation of smaller sites and while the three SSSAs will have a considerable contribution to SA objective 14, its contribution is likely to be smaller than scenario 1.</p> <p>Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.</p>	<p style="text-align: center;">++</p> <p>Issues generally the same as for Scenario 1. The SSSA west of Luton is closer to Luton Town centre than the SSSA east of Luton and hence may make sustainable travel to the centre easier. However, this scenario does not provide the same degree of relief of town centre congestion and may actually add to it.</p> <p>Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.</p>
<p>SA objective 15 -</p>	<p style="text-align: center;">0</p>	<p style="text-align: center;">-?</p>	<p style="text-align: center;">-?</p>

<p>To promote employment, learning, skills and innovation</p>	<p>The Core Strategy preferred distribution of growth in and around existing centres together with employment allocated in the SSSAs is likely to have a positive effect on employment, skills and innovation. However, it is through employment policy CS8, that the Core Strategy will meet this objective.</p> <p>Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.</p>	<p>Issues generally the same as for Scenario 1. However, Scenario 2 excludes the SSSA to the east of Luton and may result in lost opportunities to develop a knowledge base economy related to the airport and University and employment provision through the expansion of Century Park.</p> <p>Significance of effect: The location of the airport and university may mean that not allocating site L may have significant effects due to the economic importance of the airport and scale of development.</p>	<p>Issues generally the same as for Scenario 1. However, Scenario 3 excludes the SSSA to the east of Luton and may result in lost opportunities to develop a knowledge base economy related to the airport and University and employment provision through the expansion of Century Park. Employment provision would be made as part of any SSSA west of Luton but the lack of a direct link to the airport may reduce the opportunities for airport-related knowledge-based development.</p> <p>Significance of effect: The location of the airport and university may mean that not allocating site L may have significant effects due to the economic importance of the airport and scale of development.</p>
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Employment growth options: Pre- RSS revocation

Option 1: Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).

Option 2: Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).

Summary of significant effects:

SA objectives 3, 5 and 6: Scenario 1 performs relatively well against the protection and management of resources while scenario 2 is likely to preclude opportunities to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing uses with other employment uses which may be less resource intensive.

SA objective 9: both scenarios will have a significant positive contribution towards this objective.

SA objective 13: Only scenario 1 is likely to have a significant positive effect on objective 13. A wider range of employment uses and a greater proportion of non-B employment uses are likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Core Strategy could provide greater certainty to business if it developed policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses.

SA objective 14: Both scenarios have the potential to contribute positively to the achievement of this objective.

SA objective 15: Although both scenarios will help increase employment provision, only scenario 1 will be likely to support the required environment to support learning, skills and innovation.

Key for likely option effect

++	Significant positive	+	Positive not significant	+?	Depends on implementation but if there is an impact is likely to be positive	--	Significant negative	-	Negative not significant	-?	Depends on implementation but if there is an impact is likely to be negative	0	Neutral effect	?	Uncertain effect
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SA objectives	Scenario 1	Scenario 2
	0	0
SA objective 1 – To maintain and enhance biodiversity	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.

SA objective 2 - To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	<p style="text-align: center;">0</p> <p>The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.</p>	<p style="text-align: center;">0</p> <p>The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.</p>
SA objective 3 - Protect and enhance air, soil and water resources	<p style="text-align: center;">+</p> <p>Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure.</p> <p>Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.</p>	<p style="text-align: center;">-</p> <p>Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive.</p> <p>Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.</p>
SA objective 4 - Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk	<p style="text-align: center;">0</p> <p>The amount and type of new employment land would not significantly affect this objective.</p>	<p style="text-align: center;">0</p> <p>The amount and type of new employment land would not significantly affect this objective.</p>
SA objective 5 - Adapt to and	<p style="text-align: center;">+</p>	<p style="text-align: center;">-</p>

mitigate against the impact of climate change	<p>Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure.</p> <p>Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.</p>	<p>Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive.</p> <p>Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.</p>
	+	-
SA objective 6 - Increase resource efficiency and reduce resource use and waste	<p>Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure.</p> <p>Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.</p>	<p>Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive.</p> <p>Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.</p>
	0	0
SA objective 7 - Maintain, enhance and deliver, new green infrastructure including green open space	<p>The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.</p>	<p>The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.</p>
	0	0
SA objective 8 - To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	<p>The amount and type of new employment land would not significantly affect this objective.</p>	<p>The amount and type of new employment land would not significantly affect this objective.</p>
	0	0
SA objective 9 - Reduce poverty	++	++

and inequality and promote social inclusion	Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.
	0	0
SA objective 10 - Reduce both crime and fear of crime	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	0	0
SA objective 11 - To encourage healthier lifestyles and reduce adverse health impacts of new developments	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	0	0
SA objective 12 - Provide decent, affordable and safe homes for all	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	0	0
SA objective 13 - Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	++	0
	A wider range of employment uses and a greater proportion of non-B employment uses is likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Core Strategy could provide greater certainty to business if it developed town centres policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses.	Although sufficient employment would be positive, Scenario 2 is unlikely to have a significant effect on town centres and rural economy.

	Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.	
	+	+
SA objective 14 - To provide and encourage the use of sustainable integrated transport systems, improve access and mobility	<p>Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use.</p> <p>Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.</p>	<p>Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use.</p> <p>Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.</p>
	++	+
SA objective 15 - To promote employment, learning, skills and innovation	<p>Provision of a wider range of employment is likely to support small firms with specialised skills and assist in the establishment of a knowledge/innovation based economy. Scenario 1 is more likely to help diversify the local economy making more resilient to economic downturns. The delivery of scenario 1 depends on a change of image and perceptions that will have to come through economic development initiatives rather than land-use ones. Although this is an aspiration, the Core Strategy looks at a long plan period to 2031 during which market conditions could change with sufficient partnership work.</p> <p>Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.</p>	<p>Provision of sufficient employment will have a positive effect on Objective 14. However, it is unlikely that on its own this will help develop learning, skills and innovation.</p> <p>Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.</p>

APPENDIX 7

SEA Directive
Compliance Checklist

Table A7.1 – SEA Directive Requirements

Environmental Report requirements	Section of this report
(a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;	Section 1.12, 1.13 and 1.14 Section 2.3, 2.4, 2.5 and 2.6 Table 2 Table 5
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Section 4.3, 4.4, 4.5 and 4.6 Table 2 Appendix 3
(c) the environmental characteristics of areas likely to be significantly affected;	Section 4.3, 4.4, 4.5 and 4.6 Table 2 Appendix 3
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	Section 4.3, 4.4, 4.5 and 4.6 Table 2
(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	Section 4.5
(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Section 4 Appendix 1 Appendix 2 Appendix 4 Appendix 5
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Section 4 Appendix 1 Appendix 2 Appendix 4 Appendix 5 Appendix 6
(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Section 4 Appendix 4

(i) a description of the measures envisaged concerning monitoring in accordance with Article 10;	Section 4 Table 6
(j) a non-technical summary of the information provided under the above headings.	