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Charnwood Local Plan (Core Strategy)

Updated Sustainability Appraisal Report

Non-Technical Summary

Prepared by LUC
August 2015

Project Title: Sustainability Appraisal of the Charnwood Local Plan (Core Strategy)

Client: Charnwood Borough Council

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Planning & EIA
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Contents

Introduction	1
The Charnwood Core Strategy	1
Sustainability Appraisal	2
Policy Context	6
Baseline Information	8
Key Sustainability Issues and Evolution without the Plan	10
Method and Sustainability Appraisal Framework	17
Likely Effects of the Policies in the Core Strategy	19
Monitoring	39
Conclusions	48

Introduction

- 1.1 Plans and strategies such as the Charnwood Local Plan (Core Strategy)¹ are subject to a process called Sustainability Appraisal (SA), which assesses the potential impacts of a plan on social, economic, and environmental issues. Charnwood Borough Council has commissioned independent consultants (LUC) to carry out SA of the Core Strategy on its behalf.
- 1.2 This Non-Technical Summary relates to the full updated SA Report for the Core Strategy (August 2015). The current version of the Core Strategy is made up of:
 - Charnwood Local Plan 2006 to 2028 Core Strategy: Pre-Submission Draft (June 2013).
 - Charnwood Local Plan 2006 to 2028 Core Strategy: Proposed Main Modifications (April 2015).
 - Charnwood Local Plan 2006 to 2028 Core Strategy: Additional Proposed Main Modification (July 2015).
- 1.3 This SA Report Non-Technical Summary should therefore be read alongside those documents.
- 1.4 The June 2013 Pre-Submission Draft Core Strategy was submitted to the Secretary of State for examination in December 2013. Initial hearing sessions took place in March 2014 and further hearing sessions were held between December 2014 and January 2015. Following those hearing sessions the Inspector wrote to the Council stating that a number of Main Modifications (i.e. changes to the Core Strategy) were required to make the plan sound. The Council published those Main Modifications for consultation in April 2015, and a further Main Modification was proposed by the Council in July 2015 in response to a Written Ministerial Statement relating to wind energy. Therefore, the Core Strategy now comprises the Pre-Submission Draft taking into account the changes that were proposed in those two sets of Main Modifications.

The Charnwood Core Strategy

- 1.5 Charnwood's Core Strategy is being produced as part of the Borough's new Local Plan, which will replace the adopted Borough of Charnwood Local Plan. The new Local Plan will also include a number of other documents including:
 - A Site Allocations and Development Management Development Plan Document.
 - An Infrastructure Delivery Plan.

¹ Throughout this document and the full SA report, the Charnwood Local Plan (Core Strategy) is referred to as the 'Core Strategy'.

- Neighbourhood Plans.
 - Supplementary Planning Documents.
- 1.6 The Core Strategy sets out the long-term spatial vision and objectives for the Borough as well as the policies that are required to deliver that vision over the period up to 2028.
- 1.7 As well as the overarching development strategy for the Borough, the Core Strategy includes a number of area-based policies relating to sustainable urban extensions on the edge of Leicester and West of Loughborough, directions for growth for the Watermead Regeneration Corridor and North of Birstall and the proposed Loughborough Science Park, as well as some topic-specific and Borough-wide policies relating to environmental issues such as biodiversity and the landscape, economic issues such as employment and regeneration and social issues such as housing need and open space, sport and recreation.
- 1.8 The Core Strategy presents a Vision which describes what Charnwood will be like in 2028 and 21 Strategic Objectives for the Borough, followed by 25 specific policies which are set out in the following sections:
- Development Strategy.
 - Meeting our Housing Needs.
 - Economy and Regeneration.
 - Our Environment.
 - Access and Travel.
 - South Charnwood: Edge of Leicester (including policies for the north east of Leicester sustainable urban extension, the north of Birstall direction of growth and the Watermead Regeneration Corridor).
 - North Charnwood: Loughborough and Shepshed (including policies for the west of Loughborough sustainable urban extension and Loughborough University and Science and Enterprise Park).
 - Infrastructure and Delivery.
- 1.9 As well as the 25 policies covering the above topics and strategic development locations, the Core Strategy also sets out three further and more specific visions for the future development of the following locations:
- North East of Leicester Sustainable Urban Extension.
 - North of Birstall Sustainable Urban Extension.
 - West Loughborough Growth Area.

Sustainability Appraisal

- 1.10 Charnwood Borough Council is required by law to carry out Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the

Core Strategy, and has appointed LUC to do this on its behalf. The Government recommends that these two requirements are met through one integrated process, referred to as Sustainability Appraisal (or SA).

- 1.11 The purpose of SA is to promote sustainable development through better integration of sustainability considerations into the preparation and adoption of plans. It should be viewed as an integral part of good plan making, involving ongoing iterations to identify and report on the potential social, economic and environmental effects of the plan and the extent to which sustainable development is expected to be achieved.
- 1.12 This Non-Technical Summary relates to the full updated SA Report for the Charnwood Core Strategy, which comprises the Pre-Submission Draft version of the Core Strategy along with two sets of Main Modifications which have been proposed by the Council since then. The SA Report has been produced alongside the emerging Core Strategy in order to provide sustainability guidance as it is developed.
- 1.13 SA should be conducted in accordance with Government guidance, and must meet the requirements of the European Strategic Environmental Assessment (SEA) Directive². A description of the method used in carrying out the SA of the Charnwood Core Strategy is set out below.

SA Stage A: Setting the context and objectives, establishing the baseline and deciding on scope

- 1.14 The SA process started with Charnwood Borough Council producing an SA Scoping Report³ in October 2005. The Scoping Report presented the following main tasks:
 - Identification of relevant plans, programmes, strategies and studies which may influence the contents of the Core Strategy.
 - Collection of baseline information and characterisation of Charnwood Borough.
 - Identification of key sustainability issues facing Charnwood.
 - Development of a framework of SA objectives against which to appraise the Core Strategy.
 - Description of the SA methodology proposed.
- 1.15 The Scoping Report was sent to the four SEA 'Consultation Bodies' that existed at that time (the Countryside Agency, English Nature, English Heritage and the Environment Agency), plus other stakeholders for a five week consultation period (note that there are now only three SEA Consultation Bodies as English Nature and the Countryside Agency were merged to form Natural England). The Scoping Report was then revised to take account of responses to the consultation.
- 1.16 Following changes in Government guidance on SA, a review of the 27 Sustainability Appraisal objectives and the associated indicators was undertaken and the revised SA framework was again consulted on with

² European Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment'.

³ Charnwood Borough Council, October 2005, Sustainability Appraisal/Strategic Environmental Assessment – Final Scoping Report

the then statutory Consultation Bodies in August 2009. The updated SA framework is presented further ahead in this Non-Technical Summary and the detailed revisions are explained in Chapter 4 of the full SA report.

SA Stage B: Developing and refining alternatives and assessing their effects

- 1.17 Developing options for a plan is an iterative process, usually involving a number of consultations with the public and stakeholders. The SA process can help to identify where there may be other 'reasonable alternatives' to the options that are being considered for a plan. The options/reasonable alternatives for Charnwood's Core Strategy included potential strategic areas for new housing and employment development as well as alternative policy approaches. There have been a number of stages in developing and refining the plan options, as summarised below. Further detailed information about the work undertaken at each stage, and the reasons for selecting and discounting alternatives can be found in Chapters 3 and 5 of the full SA report (as well as Appendices 8-10).
- 1.18 Work on the preparation of the Charnwood Core Strategy has now been going on for nearly 10 years. Inevitably, this has meant that the plan preparation process has not been straightforward, because it has had to respond to changes in planning legislation, Government policy, new and frequently updated evidence, case law, etc.
- 1.19 The Core Strategy has been through a number of iterations, starting with broad and high level issues and options, through detailed drafts of the Core Strategy, and subsequent changes to that Strategy. Throughout this process, SA has remained an important part of plan preparation. Each time there has been a formal consultation it has been accompanied by SA material. SA has also been used internally by Council officers to aid decision making and the Council has held a number of topic-based workshops with invited stakeholders, which were often accompanied by SA material to aid discussion.
- 1.20 The key stages in the consideration of options and in the development of the Core Strategy and the accompanying SA outputs are listed in **Table 1** below. Note that the SA Report which this Non-Technical Summary refers to, collates the SA outputs shown in grey in the table below into a single SA Report.

Table 1: Summary of the evolution of the Core Strategy

Core Strategy DPD - iterations	SAs of each iteration
Core Strategy Issues and Options, June 2005	Core Strategy DPD Preferred Options SA report, February 2006
Charnwood 2021 Planning for Our Next generation, Core Strategy Preferred Options, February 2006	

Core Strategy DPD - iterations	SAs of each iteration
Planning for Our Next Generation Alternative Strategies, September 2007	Core Strategy 2021: Sustainability Appraisal Report: Main Report, October 2007
Charnwood 2026 Planning for Our Next generation – Further Consultation, October, 2008	Charnwood 2026 LDF, Core Strategy DPD – Further Consultation report – SA, September 2008
Planning for Growth. Core Strategy Supplementary Consultation, June 2012	Core Strategy Supplementary Consultation, Interim SA Report, June 2012
Charnwood Draft Core Strategy, 2013	<p>Draft Charnwood Core Strategy: Sustainability Appraisal Report, March 2013</p> <p>Charnwood Core Strategy: SA Supplementary Report, October 2013</p> <p>Draft Charnwood Core Strategy: SA Report Executive Summary, December 2013</p>
Charnwood Local Plan 2006 to 2028 Core Strategy: Proposed Main Modifications (April 2015)□	Charnwood Core Strategy Main Modifications: Sustainability Appraisal Addendum (April 2015)
Charnwood Local Plan 2006 to 2028 Core Strategy: Additional Proposed Main Modification (July 2015)	Additional Proposed Main Modification to the Charnwood Core Strategy: Sustainability Appraisal Addendum (July 2015)

- 1.21 A detailed description of the options considered at each stage and the findings of the SA work undertaken is provided in Chapter 5 of the full SA Report. The SA findings at each stage identified a number of potentially positive and negative sustainability effects for all the options considered. The reasons for selecting or discounting options at each stage are set out in detail in Appendices 8, 9 and 10 of the full SA Report, and demonstrate that other factors in addition to the SA findings contributed to the decision making. Consultation comments received on the SA work undertaken at each stage, and the responses to the consultation comments, are provided in Appendices 2, 3, 4, 5, 6 and 7 in the full SA report.
- 1.22 A draft version of the SA report for the Pre-Submission Draft Core Strategy was produced in relation to an early version of the Core Strategy document and was made available to Charnwood Borough Council. The draft SA report included a number of recommendations for strengthening the wording of some policies in the Pre-Submission Draft Core Strategy, in order to help to mitigate potential negative sustainability effects identified. These recommendations were addressed in the final version of the Pre-Submission Draft Core Strategy which was

submitted for Examination, as described in Chapter 7 of the full SA Report.

SA Stage C: Preparing the Sustainability Appraisal report

- 1.23 The full SA Report and this Non-Technical Summary describe the process undertaken to date in carrying out the SA of the Charnwood Core Strategy. They both set out the findings of the appraisal, highlighting predicted sustainability effects (both positive and negative, indirect/direct, minor or significant and potential cumulative effects).
- 1.24 Each policy in the Core Strategy has been assessed against each SA objective, and a judgement made regarding the likely effect that the policy would have on that objective. The sustainability effects are presented in a matrix for each policy, in Appendix 13 of the full SA report, along with a brief justification of the judgement made.
- 1.25 The appraisal matrices presented in the full SA Report comprise updated versions of the matrices that were produced for the policies in the Pre-Submission Draft Core Strategy (2013), which have been revised to take into account the Main Modifications proposed since then (April and July 2015). The changes made to the SA matrices reflect the conclusions of the April and July SA Addenda for the Main Modifications in relation to the implications of the Main Modifications for the 2013 SA findings.
- 1.26 The SA findings for the Core Strategy (Pre-Submission Draft incorporating Main Modifications) are summarised in Chapter 6 of the full SA report and further ahead in this Non-Technical Summary.

SA Stage D: Consultation on the Charnwood Core Strategy and the SA Report

- 1.27 Charnwood Borough Council has gone to considerable lengths to encourage consultation and to engage with the public at each stage in the preparation of the Core Strategy. This has included formal consultation required under the SEA Regulations, as well as informal technical and information-gathering exercises. Workshops were held at regular intervals to provide updates on the progress of the Core Strategy, and highlight key issues and changes. At all stages of formal consultation, the accompanying SA reports have been made available to the public on the Council's website.

SA Stage E: Monitoring the significant effects of implementing the Core Strategy

- 1.28 Proposals for monitoring the sustainability effects of the Core Strategy are set out Chapter 7 of the full SA Report and are summarised further ahead in this Non-Technical Summary.

Policy Context

- 1.29 The Core Strategy should reflect the contents of other plans and programmes where relevant, to assist in their implementation. It must

also conform to environmental protection legislation and the sustainability objectives established at the international, national and regional levels. It is a requirement of the SEA process that relevant international, national, regional, sub-regional and local plans are reviewed in relation to their objectives, targets and indicators and their implications for the Core Strategy and the Sustainability Appraisal. The full review of plans, policies and programmes can be seen in Appendix 1 of the full SA Report.

- 1.30 There are a large number of plans and programmes that are potentially relevant to the preparation of the Charnwood Core Strategy. In particular, the Core Strategy must adhere to the National Planning Policy Framework (NPPF) and the online Planning Practice Guidance (PPG)⁴ in 2014, which has replaced the former suite of Planning Policy Statements and Planning Policy Guidance. The NPPF is intended to streamline national planning policy, having reduced over a thousand pages of policy down to 65 pages. The Charnwood Core Strategy must be consistent with the requirements of the NPPF, which sets out information about the purposes of local plan-making. It states that:

"Local Plans must be prepared with the objective of contributing to the achievement of sustainable development. To this end, they should be consistent with the principles and policies set out in this Framework, including the presumption in favour of sustainable development."

- 1.31 The NPPF also requires Local Plans to be *'aspirational but realistic'*. This means that opportunities for appropriate development should be identified in order to achieve net gains in terms of sustainable social, environmental and economic development; however significant adverse impacts in any of those areas should not be allowed to occur.
- 1.32 The NPPF requires local planning authorities to set out the strategic priorities for the area, which should include strategic policies to deliver:
- the homes and jobs needed in the area;
 - the provision of retail, leisure and other commercial development;
 - the provision of infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
 - the provision of health, security, community and cultural infrastructure and other local facilities; and
 - climate change mitigation and adaptation, conservation and enhancement of the natural and historic environment, including the landscape.
- 1.33 In addition, plans should:
- plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of the NPPF;

⁴ <http://planningguidance.planningportal.gov.uk/>

- be drawn up over an appropriate time scale, preferably a 15-year time horizon, take account of longer term requirements, and be kept up to date;
- be based on co-operation with neighbouring authorities, public, voluntary and private sector organisations;
- indicate broad locations for strategic development on a key diagram and land-use designations on a proposals map;
- allocate sites to promote development and flexible use of land, bringing forward new land where necessary, and provide detail on form, scale, access and quantum of development where appropriate;
- identify areas where it may be necessary to limit freedom to change the uses of buildings, and support such restrictions with a clear explanation;
- identify land where development would be inappropriate, for instance because of its environmental or historic significance; and
- contain a clear strategy for enhancing the natural, built and historic environment, and supporting Nature Improvement Areas where they have been identified.

1.34 Other policy documents that are relevant to the Charnwood Core Strategy and the SA process include The Natural Environment White Paper which sets out the Government's approach to protecting and enhancing the environment in the UK, the European Birds and Habitats Directives which seek to protect internationally important wildlife sites and species, and the Water Framework Directive, which aims to improve water quality in rivers. There are many other similar environmental protection strategies and documents, plus others that are more concerned with social and economic objectives that have been taken into account in the SA. These are set out in Appendix 1 of the full SA Report.

Baseline Information

- 1.35 It is a further requirement of the SEA Directive that consideration should be given to the current state of the environment in Charnwood, and for an integrated SEA and SA process, social and economic information should also be taken into account. A short summary of the environmental, social and economic characteristics of Charnwood is provided below, while the detailed baseline information for the Borough is provided in Chapter 4 of the full SA Report. That baseline information has been regularly updated throughout the SA process in order to ensure that it remains up-to-date, and it enabled the key sustainability issues for Charnwood to be identified, in order to develop a locally appropriate SA framework for appraising the emerging Core Strategy policies (see below).
- 1.36 Charnwood lies centrally between Nottingham, Derby and Leicester and includes Loughborough to the north, and the northern edge of Leicester to the south. It is easily accessible from the M1 as well as the Midlands mainline between Sheffield and London and nearby Nottingham East Midlands Airport. Charnwood Borough has a population of over

171,000⁵, over a third of which is concentrated in Loughborough⁶. The remaining population is either based in a series of smaller settlements which link Loughborough and Leicester running along the River Soar, or the more rural areas which include Charnwood Forest to the west and Leicestershire Wolds to the east.

- 1.37 Most of the settlements which had strong historical associations with the textile and clothing industry now act as dormitory towns to Leicester and Loughborough. Loughborough itself is the main retail and cultural centre within the Borough. It is a university town and a strong commercial centre not just for education but also for engineering and pharmaceuticals.
- 1.38 Despite the relative levels of affluence within the Borough there are high levels of deprivation in both urban and rural communities. Issues of affordable housing are exacerbated by high cost housing which is eight times higher than the average income. Accessibility is also another key issue, particularly in rural areas where public transport is limited.
- 1.39 There are no internationally designated Special Protection Areas (SPA), Special Areas of Conservation (SACs), or Ramsar sites in the Borough, although there are two European sites that are located within 15km of the Borough boundary (the River Mease SAC and Rutland Water SAC). Many of the woodland habitats of Charnwood are designated as Sites of Special Scientific Interest (SSSIs), including large parts of Charnwood Forest. Altogether there are 17 SSSIs in the Borough⁷. There are also over 200 Local Wildlife Sites, including the River Soar and River Wreake which are regionally significant as strategic wildlife corridors, in addition to Black Brook and Rothley Brook⁸. Charnwood Forest forms part of the eastern edge of the National Forest, which is a nationally designated area covering over 200 square miles.
- 1.40 The landscapes of Charnwood have evolved over time as a result of two basic influences. The first is the physical structure of the landscape, represented by the diverse geology, topography and soils of the Borough. These are permanent elements and provide stable basic patterns to the landscape. The second influence is the result of human endeavours to live within the physical constraints of these different physical conditions, producing a range of cultural patterns which are superimposed upon the basic physiographic (physical and geographic) patterns. The Charnwood Landscape Character Assessment⁹ identifies and characterises the diverse character of Charnwood's landscapes. It identified six different landscape character areas in the Borough - the Soar Valley, Charnwood Forest, the Wolds, High Leicestershire, Wreake Valley and Langley Lowlands.

⁵ <http://www.charnwood.gov.uk/pages/living>

⁶ Leicester & Leicestershire Economic Assessment 2011

⁷ <http://www.charnwood.gov.uk/pages/biodiversityandwildlife>

⁸ Charnwood 2026 - Planning for our next Generation Oct 2008, Charnwood Borough Council

⁹ Borough of Charnwood Landscape Character Assessment 2012, Charnwood Borough Council

1.41 There were 771 statutory listed buildings in Charnwood Borough at the time of writing this report¹⁰, and another 180 locally listed buildings¹¹. There are 21 Scheduled Monuments ranging from medieval villages to bridges and hundreds of places locally listed as being of historical interest. There are also three Registered Parks and Gardens¹² (Bradgate Park, Garendon and Prestwold Hall) which reflect the Borough's rich cultural heritage. There are threats facing Charnwood's cultural heritage resulting from development pressures and neglect – at the time of writing, nine designated assets were identified by Historic England as being 'at risk'¹³ including five listed buildings, two Scheduled Monuments, two Conservation Areas (at Shepshed and Shelthorpe) and a Historic Park and Garden (Garendon).

Key Sustainability Issues and Evolution without the Plan

1.42 The key sustainability issues that have been identified from the baseline information are presented in **Table 2** below. It is a requirement of the SEA process that consideration is given to the likely evolution of the environment in Charnwood if the Core Strategy were not to be implemented. This information is also set out in **Table 2** below, in relation to each of the key sustainability issues.

¹⁰ <http://list.historicengland.org.uk/results.aspx>

¹¹ http://www.charnwood.gov.uk/listed_buildings/search?location_type=settlement&listed-building_settlement=&listed-building_parish=&listed-building_ward=&listed-building_category=Locally+Listed+Building&listed-building_grade=&go=

¹² http://www.charnwood.gov.uk/pages/historic_parks_and_gardens

¹³ Historic England (2015) Heritage at Risk Register: Charnwood Borough

Table 2: The likely evolution of Charnwood’s environment without implementation of the Core Strategy

Key Sustainability Issue	Likely evolution of the trend without the Charnwood Core Strategy
<p>Loss and fragmentation of habitats and potential harm to species due to development pressures (in particular Charnwood’s habitats and species that are not afforded any legal protection including Biodiversity Action Plan priority habitats and woodlands).</p>	<p>Features of nature conservation value, including those which are subject to statutory/non-statutory protection could continue to be lost or degraded as a result of the construction and operation of development. Many priority and non-priority species are also in decline in the Borough. These species could continue to be affected by direct loss of the supporting habitat as a result of development proposals or by indirect effects during construction and operation of these developments.</p>
<p>Erosion of landscape character, settlement character and identity and loss of tranquil areas in the Borough as a result of development pressure and changes to the local building style.</p>	<p>Landscape character and tranquil areas could continue to be detrimentally affected by existing and proposed developments. New housing developments might only be constructed using standard materials and may not have regard to landscape character.</p>
<p>Threat to historic assets not afforded legal protection due to development pressure, inappropriate conversions, alterations and demolition, plus the diversity and distribution of historic landscape features not properly understood.</p>	<p>The total number of buildings listed on the ‘heritage at risk’ register is decreasing, although this trend may not continue. Buried archaeology would continue to be damaged and lost as a result of development proposals without an appropriate system of archaeological recording.</p>
<p>Water pollution (from diffuse agricultural sources as well as waste water treatment works discharges) affects the biodiversity of water</p>	<p>The Environment Agency would continue to regulate controlled waters. The Water Framework Directive will require actions to move all relevant waters to good</p>

Key Sustainability Issue	Likely evolution of the trend without the Charnwood Core Strategy
courses.	standard.
<p>Water availability is severely constrained by the lack of winter storage in the East Midlands. Climate change may reduce water availability with widespread implications on supply, most notably to agricultural production.</p>	<p>Without implementation of water use minimisation policies, household consumption rates are likely to remain high or increase in the Borough, although recent tightening of standards in the Building Regulations require the installation of more water efficient appliances (e.g. toilets) in new development.</p>
<p>Charnwood has two Air Quality Management Areas declared due to poor air quality associated with traffic pollution.</p>	<p>Air quality is likely to stay the same or worsen, although cleaner engines and fuel is leading to some reductions in pollution from individual vehicles.</p>
<p>It is predicted that the East Midlands will experience adverse effects as a result of climate change. Summers are projected to become hotter and drier and winters warmer and wetter. Extreme weather events, such as torrential rain and droughts, are thought likely to become more common and more severe.</p>	<p>This trend is likely to continue irrespective of whether the Core Strategy is adopted.</p>
<p>Without an increase in renewable energy use, fossil fuels and other non-sustainable sources will continue to diminish and will continue to generate greenhouse gases and pollutants.</p>	<p>National policy encourages a positive approach to renewable energy, but the Core Strategy provides an opportunity to promote renewable energy at the local level.</p>
<p>Past land use planning and design of drainage systems have tended to exacerbate flooding. Many floodplains in Charnwood have been drained in the past to create farmland or to accommodate development reducing the flood</p>	<p>Fluvial and groundwater flooding could increase, but the Core Strategy provides an opportunity to improve drainage systems within new development proposed.</p>

Key Sustainability Issue	Likely evolution of the trend without the Charnwood Core Strategy
storage capacity of floodplains.	
New waste recycling facilities would be required if recycling levels continue to rise. The vast majority of waste is generated by the commercial sector. This is both hard for Charnwood Borough to influence and difficult for the Borough to monitor.	Waste recycling is likely to increase due to interventions outside of the Core Strategy remit, although the Core Strategy offers an opportunity to facilitate recycling in developments and achieve higher levels.
Development pressures are resulting in the loss of areas of ' best and most versatile ' land, which represent a valuable resource for food production. Up to date statistics on soil loss rates by development type are not currently available.	Soils, including best and most versatile soils, would continue to be lost as a result of provision of developments in the Borough.
Longer life expectancy (ageing population).	Lack of health care provision to cater for an ageing population.
Increase in population , including migrants moving into the borough.	The population density is likely to increase. The East Midlands is likely to continue to see a net growth through inward migration and therefore there is likely to continue to be an increase in the demand for services such as health facilities.
High student population in Charnwood places specific demands on the local economy.	Student population will continue to be high within Charnwood due to presence of Loughborough University.
Lack of sites and pitches to meet the accommodation needs of gypsies, travellers	Assume accommodation needs of Gypsies, Travellers and Travelling show people will not be met.

Key Sustainability Issue	Likely evolution of the trend without the Charnwood Core Strategy
and travelling show people.	
Fragmented provision of new education facilities, and below national average achievement of qualifications.	The number of wards in Charnwood with a percentage of people without any qualifications above the English average will increase if the opportunities for education and further education are not made available to more people.
High need for affordable housing in the Borough – house prices can be more than eight times annual incomes, there are also high levels of homelessness in some areas. In addition, the quality of some Council owned homes are not reaching decent home standards and a very small percentage of the Charnwood population suffer from inadequate housing provision.	Assume demand would increase. Assume levels of homelessness will not improve in some areas. Housing developers would construct housing which would fetch the greatest market value. This means that affordable housing may not be provided. House prices are continuing to rise in the East Midlands although in the short – term the market is slowing. Assume number not reaching decent home standards would increase. The number of households without basic facilities is anticipated to stay constant.
Total crime rates are low in Charnwood compared to other parts of the UK.	Crime rates may increase if developments are designed without recognition of the role that the design of development proposals can play in reducing crime if the Core Strategy is not implemented.
There are problems across the UK and Charnwood in relation to increasing levels of obesity and general increases in body mass index. In recent years the proportion of the population who are obese or overweight has been rising. Charnwood also experiences problems with smoking.	Without encouraging the implementation of sustainable transport solutions such as walking and cycling in the Core Strategy, the levels of people that are overweight, obese or generally greater BMI are likely to increase. Problems associated with smoking will continue.

Key Sustainability Issue	Likely evolution of the trend without the Charnwood Core Strategy
Low level of population that either walk or cycle to work, and disproportionate number of cars used for transport to work .	Unless adequate strategies and policies are implemented, the number of people walking and cycling will continue to remain at low levels, and car use likely to continue to be high.
Potential difficulty in some parts of the Borough accessing services and facilities .	Any existing difficulties for accessing services would be compounded without the initiatives to increase access provision included in the Core Strategy.
There are some areas of built development including some villages with virtually no, or little, open space provision or recreation facilities.	The amount of greenspace provided for the Borough would be unlikely to increase dramatically as the policy framework for ensuring public open space as part of development proposals would not be in place.
Some significant pockets of income deprivation and poor access to jobs.	Income levels remain consistent – rising in line with inflation. Access to jobs for some people remains poor.
Relatively high number of vacant units in Loughborough (Charnwood’s core retail area).	Vacancy rates may continue or increase.
Some pockets of significantly high levels of unemployment , however, overall unemployment is low.	Assume that unemployment rates remain constant.
Continuation of recent trends in terms of reduction in job opportunities locally, could lead to increased levels of out commuting in the future.	In the absence of additional employment allocations the proportion of people who live in Charnwood but work elsewhere might increase.
Charnwood has considerably high proportion of	Assume that existing employment profile and skills

Key Sustainability Issue	Likely evolution of the trend without the Charnwood Core Strategy
<p>workers in unskilled / semi-skilled jobs, and a high concentration of employment in distribution industries, public administration education and health and the manufacturing sector. However, knowledge intensive industries such as banking, finance and insurance etc. are underrepresented. Charnwood district has highest NEET rate (young people “Not in Education, Employment or Training”) in the County.</p>	<p>base continues.</p>

Method and Sustainability Appraisal Framework

1.43 The review of other policies, plans and programmes and baseline data helped to identify key sustainability issues for Charnwood, as described above. These key sustainability issues, and input from stakeholders, provided the basis for developing a set of SA objectives or 'SA framework'. The SA framework, which has been the main tool used at each stage of the SA for assessing the likely effects of the options and draft policies in the Core Strategy, is set out in **Table 3** below. A number of sub-objectives and indicators have also been identified under each SA objective, as described in Chapter 4 of the full SA report.

Table 3: SA Framework for the Charnwood Core Strategy

SA Objectives
Environmental
1: To maintain and enhance biodiversity, flora and fauna and geodiversity
2: To maintain and enhance townscape and landscape character
3: To increase the vibrancy and viability of settlements
4: To conserve and enhance the historic and cultural environment
5: To protect and improve surface and ground water quality and resources
6: To improve local air quality
7: To reduce the Borough's contribution to and vulnerability to climate change including a reduction in greenhouse gas emissions
8: To reduce vulnerability to flooding
9: To reduce waste and conserve mineral resources
10: To protect soil resources and quality and make efficient use of land and buildings
Social
11: To reduce poverty and social exclusion, reduce crime, anti-social behaviour and increase community safety
12: To increase healthy lifestyles
13: To ensure that the housing stock meet the housing needs of all sections of the community
14: To increase access to a wide range of services and facilities
15: To increase access to the countryside, open space and semi urban environments (e.g. parks)
Economic
16: To encourage a sustainable economy supported by efficient patterns of movement attractive to investors
17: To reduce disparities in economic performance and improve skills and employability

Use of the SA Framework

1.44 Within the assessment matrices which set out the likely sustainability effects of the Core Strategy policies, symbols have been used against each SA objective to show whether an effect is likely to be significant, positive or negative, or uncertain, as shown in **Table 4** below.

Table 4 Key to SA scores

Symbol	Meaning
↑	Significant positive effect (i.e. a move towards the objective)
↑	Marginal or minor positive effect (i.e. a move towards the objective)
0	There is no relationship or no significant relationship between the objective and the policy/option
?	It is not known whether the policy/option will move towards or away from the objective (another form of uncertainty)
Neutral	Performance against this objective is neutral
↓	Significant negative effect (i.e. a move away from the objective)
↓	Marginal or minor negative effect (i.e. a move away from the objective)
D	Effect depends on how the policy is implemented (one form of uncertainty)
T	Denotes a temporary effect (Effects are permanent if this symbol is not used)

- 1.45 The potential effects of the Core Strategy need to be determined and their significance assessed, which requires a series of judgments to be made. Attempts have been made to differentiate between the most significant effects and other more minor effects through the use of the symbols shown above. The dividing line in making a decision about the significance of an effect is often quite small. Where either a significant positive or significant negative effect has been identified (as opposed to more minor effects), this is because the effect of the policy in question on an SA objective is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that SA objective.
- 1.46 It is a requirement to consider whether the potential effects predicted are likely to be secondary, cumulative, synergistic, short, medium or long-term, permanent or temporary. Where relevant, reference has been made to effects being either direct or indirect, the latter is taken to cover 'secondary' effects. Cumulative effects refer to the potential to increase overall effects due to adding one effect onto another. The cumulative effects of the Core Strategy policies have been considered in Chapter 6 of the full SA Report and are described further ahead in this Non-Technical Summary. Consideration is also given to the timescales over which effects are likely to occur.

Likely Effects of the Policies in the Core Strategy

What are the sustainability effects of the Core Strategy likely to be?

- 1.47 There is much to welcome in the Core Strategy and implementation of its policies is likely to have a largely positive effect on sustainability issues in Charnwood. The potential effects of each of the policies in the Core Strategy on each of the SA Objectives are summarised in **Table 5** overleaf (using the symbols and colour coding referred to in **Table 4** above).

Table 5: Summary of SA Scores for all Core Strategy Policies (including proposed Main Modifications)

SA Objectives	1: Biodiversity	2: Landscape character	3: Settlement viability	4: Cultural heritage	5: Water resources	6: Air quality	7: Climate change	8: Flooding	9: Waste and minerals	10: Efficient use of land and soil	11: Crime	12: Health	13: Housing	14: Services and facilities	15: Access to open space	16: Sustainable economy	17: Skills and Employability
	Environmental										Social				Economic		
Policy CS1	↑/ ↓?	↑/↓?	↑/↓	↑/↓?	↑?	↑/↓	↑/↓	↑/ ↓	↑/↓?	↓?	0	↑	↑	↑?	0	↑	↑
Policy CS2	0	↑	↑	↑	↑?	↑?	↑	↑?	0	0	↑	↑?	↑	↑	↑?	↑	0
Policy CS3	0	?D	↑	0	0	0	0	0	0	0	0	↑	↑	0	0	0	0
Policy CS4	0	↑	↑	0	↑	↑	↑	0	↑	0	↑	↑	↑/↓	↑	0	↑	↓?
Policy CS 5	0	0	↑/↓ D	↑?	0	0	0	0	0	↑?	↑	↑	↑?	↑	↑?	0	0
Policy CS6	↑?/ ↓?	↑?/↓ ?	↑	↑?/↓ ?	↓?	↓T/ ↑	↓T/↑	↓?	↑/↓?	↓?	↑?	0	0	0	0	↑	↑
Policy CS7	↑?	↑	↑	↑	0?	↓	↓?	↓? /↑ ?	↑/↓	↑	↑	0	↑?	↑?	↑	↑	↑
Policy CS8	↓?	↑	↑	↑?	0?	↓?	↓?	↓? /↑ ?	↓/↑	↑	↑	↑?	0	↑	↑?	↑	↑
Policy CS9	0	↑	↑	↑	0?	↓	↓	↓? /↑ ?	↓/↑	↑	↑	↑	0	↑	0	↑	↑
Policy CS10	↓?/ ↑?	↓?/↑ ?	↑	↓?/↑ ?	0?	↑	↓/↑	↓? /↑	↓?/↑ ?	↓?/↑ ?	↑	0	0	0	↑	↑	↑

SA Objectives	1: Biodiversity	2: Landscape character	3: Settlement viability	4: Cultural heritage	5: Water resources	6: Air quality	7: Climate change	8: Flooding	9: Waste and minerals	10: Efficient use of land and soil	11: Crime	12: Health	13: Housing	14: Services and facilities	15: Access to open space	16: Sustainable economy	17: Skills and Employability
								?									
Policy CS 11	↑?	↑	↑	↑?	0	0	0	↑?	0	↑?	0	0	↑	↑	↑	↑	↑
Policy CS 12	↑	↑	↑	↑?	↑	↑	↑	↑	0	↑	0	↑	0	0	↑	↑	0
Policy CS 13	↑	↑?	↑?	↑?	↑	0	0	↑?	0	↑?	0	↑	0	0	↑?	↑	0
Policy CS 14	↑?	↑	↑	↑	0	0	0	0	↑	↑	0	0	0	0	↑?	↑	0
Policy CS 15	↑	↑	↑	↑?	↑	0	0	↑	0	↑	0	↑	0	↑	↑	0	0
Policy CS 16	↑	↑	↑	0	↑	0	↑?	↑	↑	↑	0	↑	0	0	↑	0	0
Policy CS 17	↑?	↑	↑	0	0	↑	↑	0	0	0	↑	↑	0	↑	↑	↑	0
Policy CS 18	?	↑/↓	↑	?	0	↑/↓	↑/↓	?	↓?	↑/↓	0	↑	0	↑	↑?	↑	0
Policy CS 19	↑?/↓?	↑?/↓?	↑	↓?	↓?	↑?/↓?	↑/↓	↑/↓	↑?/↓?	↓	↑?	↑	↑	↑	↑/↓	↑?/↓?	↑
Policy CS 20	↑/↓?	↑?/↓?	↑	↓?	0/↓?	↑?/↓?	↑?/↓?	0?	↑/↓?	↓?	↑?	↑?	↑	↑	↑	↑?/↓?	↑
Policy CS 21	↑?/↓?	↑?/↓?	↑	0?	↓?	↑?/↓?	↑?/↓?	↓?	↑?/↓?	↑/↓	↑	↑	↑?	↑?	↑	↑	↑
Policy CS 22	↓?/↑?	↓?/↑?	↑/↓	↓?	0	↑?/↓?	↓/↑	↓/↑	↑?/↓?	↓	↑?	↑	↑	↑	↑	↑?/↓?	↑

SA Objectives	1: Biodiversity	2: Landscape character	3: Settlement viability	4: Cultural heritage	5: Water resources	6: Air quality	7: Climate change	8: Flooding	9: Waste and minerals	10: Efficient use of land and soil	11: Crime	12: Health	13: Housing	14: Services and facilities	15: Access to open space	16: Sustainable economy	17: Skills and Employability
	↑?	? Or ↓?/↑? ?				↓?T		↑	?							?	
Policy CS 23	↓/↑?	↑/↓	↑	↓?	0	↓T	↓/↑?	↑?/↓?	↑?/↓?	↓	↑?	↑	↑?	↑?	↑	↑	↑
<i>Policy CS 24 - deleted</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Policy CS 25	0	0	↑	0	↑	0	0	0	0	0	0	↑	0	↑	↑	↑	↑
Policy CS 26	↑?	↑?	↑	↑?	↑?	↑?	↑?	↑?	↑?	↑?	↑	↑	↑	↑	↑	↑	↑

1.48 A summary of the key SA findings for the strategic development locations is provided below. The full appraisal matrices for these policies as well as the topic-based policies can be found in Appendix 13 in the full SA report.

South Charnwood: Edge of Leicester

- 1.49 The Core Strategy includes three policies in this section, one relating to the North East of Leicester Sustainable Urban Extension (CS19), one relating to the North of Birstall direction of growth (CS20) and one relating to the Watermead regeneration corridor (CS21). In addition, the section includes a vision for both the North East of Leicester Sustainable Urban Extension and the North of Birstall direction of growth, and these have been taken into account as relevant in the appraisal of the associated policies.
- 1.50 The effects of the South Charnwood policies on **biodiversity** (SA objective 1) are mixed. Both policies CS19 and CS20 allocate large-scale development on greenfield land, which could have a direct effect on the plant species making up that habitat, but also on species reliant on the habitats, including priority habitats or species identified in the Biodiversity Action Plan (e.g. field margins, hedgerows, barn owls, bats etc.). However, both locations are more than 1.5km from the nearest biodiversity designations. The HRA work that was carried out for the Pre-Submission Draft Core Strategy concluded that the growth planned (including that set out under these two policies) will not have significant effects on the two European sites within 15km of the Borough boundary (the River Mease SAC and Rutland Water SAC). In addition, the policies themselves include measures aiming to enhance biodiversity. The likely effects of policy CS21 are also potentially mixed as the policy proposes some new development in this area which is of significant biodiversity value (the Watermead Country Park, which lies at the centre of the Watermead Corridor, is a designated Local Wildlife Site); however it is again recognised that new development may offer opportunities for biodiversity enhancements, and the policy states that development will be supported where it protects and enhances the wildlife corridor. The supporting text to the policy also recognises that any development within the corridor must be balanced carefully with the desire to protect the area's valuable ecology. The impacts of these policies on the **landscape** (SA objective 2) are also mixed as the proposed development could have either positive or negative effects, depending on its design. Policy 21 has particular potential to enhance the townscape in the Watermead Corridor as it is noted that the Pinfold Industrial Park and Bridge Business Park at Thurmaston are reaching the end of their design lives, and the redevelopment of these sites could therefore enhance the townscape.
- 1.51 Broadly positive effects are likely in relation to the **vibrancy and vitality of settlements** (SA objective 3) as these policies allow for new high quality development, with policies CS19 and CS20 allowing for employment development and the provision of community services and facilities within the strategic housing development planned. This will help

to ensure the creation of viable and sustainable new communities. Policy CS21 will have particularly positive effects as its overarching purpose is to regenerate the Watermead corridor, which should help to increase the attractiveness of the area and enhance the sense of place. The policy identifies two directions of growth, one within the Watermead Regeneration Corridor and one at Thurmaston Waterfront; therefore positive effects should be experienced in both of these locations, in particular at Thurmaston, where there are significant areas of deprivation in relation to income, education skills and training and the living environment¹⁴. The policy supports development that will contribute directly to the regeneration of the village centre and the waterfront as well as the Grand Union Canal and aims to meet employment needs through this regeneration, which will help to increase the vitality and viability of these areas. The supporting text to the policy notes that community cohesion is currently restricted by the physical barriers of the A607 and Midland Mainline railway, and the measures in this policy that will link Thurmaston to the Watermead corridor will help to address this historic issue. While it is recognised that there is some potential that development to the north of Birstall could compromise the separation of Birstall and Rothley to the north, which would have a negative effect in terms of settlement coalescence, policy CS20 refers to development protecting the separate identity of Wanlip, Rothley and Rothley Conservation Area. In addition, the landscape sensitivity and capacity appraisal¹⁵ found that development of the lower lying part of the land either side of the A6 would be partially enclosed by landform and vegetation. This should help to maintain separation of the new development from Rothley to the north.

- 1.52 All three of these policies could have a negative effect on **water quality** as advice received by the Council from Severn Trent Water has indicated that capacity improvements could be required at sewage treatment works in order to accommodate the proposed growth alongside other developments planned in the area. In particular, the development at the Watermead regeneration corridor (policy CS21) could have a negative effect as although there is sufficient capacity available at Wanlip sewage treatment works to accommodate the level of development proposed, there are a number of other strategic sites planned in the Wanlip catchment and if other large sites come forward, capacity improvements may be required. It was also noted that flows will have to be pumped from this area to the treatment works. The supporting text to that policy states that development will be expected to be designed so that it protects and enhances water quality, although this issue is not referred to in the policy itself. Therefore, a potential negative effect from that policy has been highlighted in relation to water quality, although this is uncertain at this stage.

¹⁴ Leicestershire County Council (December 2007) Charnwood South Priority Neighbourhood Profile: Thurmaston

¹⁵ Charnwood Landscape Sensitivity and Capacity Appraisal. Charnwood Borough Council, 2012.

- 1.53 Mixed effects are likely in relation to **air quality** and **greenhouse gas emissions** (SA objectives 6 and 7) as these policies could result in an increase in vehicle traffic in the south Charnwood area, which could be particularly harmful in proximity of Syston where there is an AQMA declared in relation to traffic. However, the policies include measures aiming to facilitate public transport use and it is also recognised that new development will be required to conform to Core Strategy policy CS16: Sustainable Construction and Energy which aims to mitigate the potential impacts of new development on climate change.
- 1.54 Significant negative effects may result from policy CS20 in relation to **soil quality** and the **efficient use of land** (SA objective 10) as it allocates large-scale new development on high quality grade 2 agricultural land which would be lost under new development. Although the policy will be required to comply with policy CS16: Sustainable Construction and Energy which requires development to protect and enhance soil quality and encourages the re-use of existing land and buildings where possible, the extent to which this will be possible in this location is currently uncertain.
- 1.55 The likely effects of these policies on the **social** SA objectives are broadly very positive. Policies CS19 and CS20 allocate large-scale **housing** development (SA objective 13), which will help to meet Charnwood's identified needs, particularly as it will include a range of housing types and tenures and will include affordable housing in line with policy CS3. The development of community services and facilities within the SUE north east of Leicester and the direction of growth to the north of Birstall will also have significant positive effects on **access to services and facilities** (SA objective 14) as it will ensure that existing facilities in those areas do not become overloaded by the growing population. However, policy CS19 is likely to have mixed effects on **access to the countryside and open space** (SA objective 15). Although it is within close proximity of open countryside and provides for significant new areas of open space within and around the SUE, as well as the extension of the Leicester Hamilton Green Wedge to continue the link out of the urban area to the wider countryside, it is noted that there may be some negative effects experienced by existing residents in the east of Thurmaston as their direct access to the greenfield land that the SUE will be developed on will be reduced. However, these negative effects should be mitigated by the incorporation of the significant areas of open space within and around the SUE provided for in the policy.
- 1.56 The effects of these policies on the economic SA objectives are broadly fairly positive but policies CS19 and CS20 may have mixed effects in relation to the creation of a **sustainable economy** (SA objective 16). On one hand they provide for up to 13ha and 15ha of new employment land respectively, which could help to encourage inward investment in south Charnwood, and will provide opportunities for people to live and work within the same area thereby reducing travel to work distances and increasing opportunities to use more sustainable modes of transport for

commuting. On the other hand, both locations offer convenient access to the strategic road network. While this may encourage and facilitate efficient commercial road transport, increased use of the road network for commercial transport and commuting will have a negative effect on sustainable transport and encouraging a greener economy. Positive effects are likely from all three policies in relation to employability and skills (SA objective 17) as they provide for new school places for the growing population and should offer opportunities for work-based training and skills development in the new employment land to be provided.

North Charnwood: Loughborough and Shepshed

- 1.57 The Core Strategy includes two policies for the North of Charnwood, one relating to the West of Loughborough Sustainable Urban Extension (CS22) and one relating to the Science and Enterprise Park (CS23). In addition, the section includes a vision for the West of Loughborough Growth Area (including the SUE and Science and Enterprise Park), and this has been taken into account as relevant in the appraisal of policies CS22 and CS23. The proposed Main Modifications have removed policy CS24 which allocated the direction for growth at Shepshed, however, this did not affect overall housing delivery as the policy was removed in recognition of recent permissions at Shepshed having met the requirement of the policy. Therefore, while the effects associated with policy CS24 in the March 2013 SA Report will no longer occur as a result of the Core Strategy, the development (along with the associated environmental, social and economic effects) is still coming forward separately to the Core Strategy.
- 1.58 The effects of policies CS22 and CS23 on **biodiversity** (SA objective 1) are mixed, as both of these policies allocate large-scale development on greenfield land, which could have a direct effect on the plant species making up that habitat, but also on species reliant on the habitats, including priority habitats or species identified in the Biodiversity Action Plan (e.g. field margins, hedgerows, barn owls, bats etc.). Both locations are within 1.5km of the nearest biodiversity designations (with the SUE west of Loughborough being located on Garendon Park Meadow Local Wildlife Site), which could be affected by development. The HRA work that was carried out for the Pre-Submission Draft Core Strategy concluded that the growth planned (including that set out under these two policies) will not have significant effects on the two European sites within 15km of the Borough boundary (the River Mease SAC and Rutland Water SAC). In addition, both policies include measures aiming to protect and enhance local biodiversity, meaning that mixed effects are likely overall and these are uncertain until specific details of development proposals are known.
- 1.59 Significant negative effects on the **landscape** (SA objective 2) and minor negative effects on the **efficient use of land and soil** (SA objective 10) are likely from policies CS22 and 23 as these policies allocate large-scale new development on greenfield land. The location of the sustainable urban extension to the west of Loughborough (policy CS22) lies across

two zones (15 and 16) which have been assessed in the landscape sensitivity and capacity appraisal¹⁶ as having medium-high capacity (zone 15) to accommodate development, due to undulating landform creating a bowl which is generally well contained, and medium-low capacity (zone 16) due to it being an area of strong landscape character and the impact on settlement separation. The Science Park (policy CS23) is located in Zone 18, which is assessed as having medium capacity to accommodate new development due to its proximity to the urban edge of Loughborough and the characteristics of the area's vegetation to be used to mitigate new development. However, the site is located within the north eastern part of Charnwood Forest Regional Park and the supporting text to the policy recognises that the extension to the Science Park is only allowed within this attractive landscape due to its outstanding economic advantage. However, both of these policies include measures that aim to mitigate the potential effects on landscape, for example policy CS23: Loughborough University and Science and Enterprise Park requires 40% of the overall site to be retained for green infrastructure, and for the development to integrate with the sensitive landscape and respects its character and appearance, which may lead to mixed effects. Similarly, policy CS22 requires developments to respect and respond to the surrounding landscape.

- 1.60 Development on greenfield land is also likely to lead to negative effects on **flood risk** (SA objective 8), especially as the proposed Science Park (policy CS23) will involve building within a flood zone (zones 2 and 3a)¹⁷. However, both of these policies include criteria that will help to alleviate flood risk. Policies CS22 and CS23 are also likely to have minor negative effects on **cultural heritage** (SA objective 4), as the developments will be adjacent to Garendon Historic Park and Garden, and so may affect the setting of the Park. However, the negative effects are not considered likely to be significant because of the mitigation included in both policies through the Main Modifications. Historic England provided a statement during the examination hearings stating that the level of harm to heritage assets at Garendon Park as a result of proposed development has reduced from substantial to less than substantial as a result of changes to the scheme and the comprehensive mitigation package, which has been included in the Main Modifications to policies CS22 and CS23.
- 1.61 By increasing the levels of traffic movements from new strategic developments there are likely to be adverse impacts on **air quality** (SA objective 6) and **greenhouse gas emissions** (SA objective 7), although some of the negative effects on air quality are likely to be temporary as they relate to construction. Both policies aim to address climate change by encouraging developments to exceed Building Regulations for carbon emissions which results in likely mixed effects on SA objective 7.

¹⁶ Charnwood Landscape Sensitivity and Capacity Appraisal. Charnwood Borough Council, 2012.

- 1.62 Both policies are likely to have positive effects on the **social** SA objectives. The large number of houses provided by policy CS22 at the SUE west of Loughborough (3,000 new homes) is likely to lead to significant positive effects on **housing** (SA objective 13), as well as significant positive effects on **access to services and facilities** (SA objective 14) and **access to open space** (SA objective 15), by providing two primary schools, community facilities, and open spaces (including 22.8ha of outdoor sports provision, 3.4ha of amenity green spaces and 1.5ha of parks).
- 1.63 The effects of both North Charnwood policies on the **economic** SA objectives are mixed. By providing knowledge based employment opportunities at the Science Park, policy CS23 in particular is likely to have a significant positive effect on both the creation of a **sustainable economy** (SA objective 16), and **employability and skills** (SA objective 17) by diversifying the local economy, providing opportunities for work-based training and supporting the expansion of Loughborough University. Policy CS22 will also have a significant positive effect as it provides for new employment land at the SUE west of Loughborough. However, policy CS22 is also likely to lead to some negative effects on efficient patterns of movement (SA objective 16) as development will be in close proximity to the strategic road network, which may encourage car transport.

Cumulative Effects and Mitigation

- 1.64 The SEA Directive requires that the cumulative effects of a plan are considered. **Table 5** above shows the SA scores for the complete set of Core Strategy policies (taking into account the Main Modifications), enabling a judgement to be made regarding the overall cumulative effect of the policies in relation to each of the SA objectives. This section summarises the potential cumulative effects of the Charnwood Core Strategy as a whole. Consideration is also given in this section to the potential for Core Strategy policies to provide mitigation for the likely negative effects that have been identified.

SA objective 1: To maintain and enhance biodiversity, flora and fauna and geodiversity

- 1.65 The effects of the Core Strategy on biodiversity and geodiversity are mixed. The large-scale housing and employment development proposed, much of which is directed to greenfield land, could lead to habitat loss and species disturbance, particularly where development is proposed within close proximity of biodiversity designations – for example, policy CS22: West of Loughborough Sustainable Urban Extension proposes development that would include a Local Wildlife Site (Garendon Park Meadow), and there is another adjacent to the south (Home Covert). Similarly, policy CS23: Loughborough University and Science and Enterprise Park proposes development adjacent to three Local Wildlife Sites (Holywell Wood and Burleigh Wood, and Longcliffe Golf Course), and is in close proximity to two SSSIs (Newhurst Quarry and Beacon Hill,

Hangingstone & Outwoods). While there are no designated European sites within Charnwood, there are two within 15km of the Borough boundary (the River Mease SAC and Rutland Water SAC). However, the HRA work that was undertaken for the Pre-Submission Draft Core Strategy¹⁸ has concluded that the growth proposed in Charnwood would not result in any significant effects on the European designated sites within close proximity of the Borough.

- 1.66 In recognition of the potential effects of development on biodiversity and geodiversity, extensive safeguards are included within individual policies in the Core Strategy to ensure no adverse effects, and all development will need to comply with Core Strategy policy CS13: Biodiversity and Geodiversity which aims to protect biodiversity and geodiversity assets in the Borough from the potential adverse impacts of development. It is also recognised that new development may offer opportunities to incorporate biodiversity enhancements, particularly given the measures in policies CS12: Green Infrastructure and CS15: Open Spaces, Sport and Recreation that will result in habitat creation and help to avoid fragmentation. Although there could be some localised impacts, provided that the identified mitigation is appropriately implemented, it is likely that the Core Strategy will have a cumulative positive effect on the Borough's biodiversity.

SA objective 2: To maintain and enhance townscape and landscape character

- 1.67 The effects of the Core Strategy on Charnwood's landscape and townscape are also very mixed. The large-scale housing and employment development proposed, much of which is directed to greenfield land, could lead to visual intrusion and a reduction in tranquillity, particularly where large-scale development on the edge of existing urban areas is proposed (e.g. the sustainable urban extensions west of Loughborough and north east of Leicester). However, it is noted that some of the locations where development is proposed have been assessed as having medium to high capacity to accommodate new development¹⁹, for example the land north of Birstall which is on low-lying land.
- 1.68 In addition, safeguards have been built into individual policies aiming to address the potential landscape-related impacts of development, and all development will need to conform with Core Strategy policy CS11: Landscape and Countryside which requires new developments to protect landscape character and reinforce sense of place and local distinctiveness by taking account of relevant landscape character assessments.
- 1.69 Generally positive effects have been identified in relation to the impacts of the Core Strategy on townscape, particularly in relation to the policies

¹⁸ LUC (March 2013) Draft Charnwood Core Strategy: Habitats Regulations Assessment Screening Record.

which specifically aim to regenerate urban areas (CS7: Regeneration of Loughborough and CS8: Regeneration of Shepshed). Where policies make reference to redeveloping old or derelict sites (such as the measures in policy CS21: Watermead Regeneration Corridor associated with the redevelopment of the Pinfold Industrial Park and Bridge Business Park at Thurmaston which are reaching the end of their design life), particularly positive effects on the townscape are expected.

- 1.70 There is little doubt that the scale of development, and the amount proposed on greenfield land, will have an impact on landscape character, not least because the extent of the built-up area will continue to expand. There are safeguards in the Core Strategy to ensure that development is of a high design quality, and that there is provision for green infrastructure. In addition, some derelict or under-used areas are likely to see improvements to the landscape as a result of new development. Impacts on the landscape are a qualitative judgement, and views will differ depending upon who is affected, who benefits and individual opinions on what adds to or what detracts from the landscape. Overall, the fairest conclusion is that the Core Strategy is expected to have cumulative mixed effects on the landscape and townscape.

SA objective 3: To increase the vibrancy and viability of settlements

- 1.71 The effects of the Core Strategy on this SA objective are broadly very positive, particularly because the proposals for large-scale new housing development (e.g. at the sustainable urban extensions west of Loughborough and to the north east of Leicester) allocate employment land and new services and facilities to be provided alongside the new housing. This will help to ensure that the new communities that are created are viable and sustainable and do not become dormitory towns for commuters into Loughborough, Leicester and elsewhere. In addition, the measures included in the Core Strategy to achieve the regeneration of existing settlements (CS7: Regeneration of Loughborough, CS8: Regeneration of Shepshed and CS21: Watermead Regeneration Corridor) will improve the vitality and economic viability of those areas.
- 1.72 The potential for new development to lead to the coalescence of settlements and affect settlement identity has been considered; however in most cases this is not a concern identified in the landscape sensitivity and capacity appraisal²⁰ and where some concerns were identified through the appraisal (e.g. at land to the north of Birstall), wording in the supporting text of the policy is considered to provide mitigation. The requirement for high quality design in all new development (policy CS2: High Quality Design) will also help to ensure that the new development improves the overall appearance of the Borough and contributes to sense of place and increased neighbourhood satisfaction levels and the provision of green infrastructure and open space within new development (policies CS12: Green Infrastructure and CS15: Open Spaces, Sport and

²⁰ Charnwood Landscape Sensitivity and Capacity Appraisal. Charnwood Borough Council, 2012.

Recreation) will help to ensure that communities have space for interaction and social activities. The fact that the new housing to be provided will include a range of sizes, types and tenures, including provision for older peoples' needs and affordable homes, means that communities should accommodate a wide range of age groups, which will further benefit their vitality. As such, the Core Strategy is expected to have cumulative significant positive effects on the vibrancy and viability of settlements in Charnwood.

SA objective 4: To conserve and enhance the historic and cultural environment

- 1.73 The effects of the Core Strategy on Charnwood's historic and cultural environment are very mixed. It is recognised that the large-scale housing and employment development proposed could have an adverse effect on the setting of heritage assets in the Borough, such as scheduled monuments and listed buildings, reflecting concerns that have been raised by Historic England (formerly English Heritage) throughout the SA process. However, the potential negative effects are uncertain until specific proposals for development come forward. It is also recognised that high quality design, which takes into account the surroundings of new development (as required by policy CS2: High Quality Design), has the potential to enhance the setting of heritage assets, particularly those that are currently 'at risk' from existing nearby development or activities (there are currently 9 heritage assets in Charnwood on the 'at risk' register²¹). Where Core Strategy policies propose development within close proximity of vulnerable heritage assets, safeguards have been built into policies (e.g. policy CS22: West of Loughborough Sustainable Urban Extension which requires the protection of, and mitigation of impacts, on historic and archaeological features including Garendon Historic Park and Garden and the scheduled monument and listed buildings within the Park). Similarly, policy CS19: North East of Leicester Sustainable Urban Extension states that historic and archaeological features will be protected, including the setting of Hamilton Deserted Medieval Village and the Roman Villa in accordance with policy CS14: Heritage, and that the separate identity of Barkby Thorpe Conservation Area will be protected.
- 1.74 In addition, all development will be required to conform to policy CS14: Heritage which requires development proposals to protect heritage assets and their setting and supports development which prioritises the refurbishment and re-use of disused or under used buildings of historic or architectural merit or incorporates them sensitively into regeneration schemes. As such, the Core Strategy is not expected to have a cumulative significant effect on heritage assets, although this conclusion is heavily dependent upon the identified mitigation being appropriately implemented, which does carry a significant element of risk. In some

²¹ Historic England (2015) Heritage at Risk Register: Charnwood Borough

cases it may be possible to achieve enhancements to the historic and cultural environment.

SA objective 5: To protect and improve surface and groundwater quality and resources

- 1.75 The large-scale housing and employment development proposed by the Core Strategy could have an adverse effect on the water environment as a result of increased demand for water consumption and treatment. However, Severn Trent Water has indicated that local sewage treatment works generally have capacity to accommodate the level of growth planned, although in some locations improvements may be required (policy CS25: Infrastructure Delivery will help to achieve this). For example, at the Watermead Regeneration Corridor, Severn Trent Water has advised that there is sufficient capacity available at Wanlip sewage treatment works to accommodate the level of development proposed; however there are a number of other strategic sites planned in the Wanlip catchment and if other large sites come forward, capacity improvements may be required. It has also indicated that Charnwood's water supply network in the vicinity of the proposed development locations is robust and resilient. The issue of water consumption and treatment is also addressed through policy CS16: Sustainable Construction and Energy, which makes reference to the Code for Sustainable Homes BREEAM water efficiency measures.

SA objective 6: To improve local air quality

- 1.76 The large-scale housing and employment development that is proposed for Charnwood could have a negative effect on air quality as a result of increased vehicle traffic in the Borough. It is assumed that this has the potential to be particularly damaging in Charnwood where there are currently four AQMAs identified, two of which (Loughborough and Syston) are in relation to emissions from traffic²² although it should be noted that the transport modelling that has been undertaken for Charnwood²³ does not describe the effect of traffic increases on specific AQMAs.
- 1.77 The improvements to highway infrastructure that are proposed in a number of the policies could be seen as potentially encouraging increased car use by making it a more convenient mode of transport; however they should also help to avoid creating or compounding congestion issues which can contribute to pockets of poor air quality (this is a particular issue in Loughborough). Temporary air quality effects could also occur from HGV traffic during the construction phase of new development.
- 1.78 However, many of the Core Strategy policies require sustainable transport improvements to be incorporated into the new developments (e.g. walking and cycle routes or improved bus services) and all development will need to conform to policy CS17: Sustainable Transport

²² Charnwood Borough Council (July 2012) 2012 Air Quality Updating and Screening Assessment for Charnwood Borough Council - In Fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management

²³ MVA Consultancy (February 2013) Setting Strategic Direction: Charnwood Core Strategy – Stage 2 Emerging Development Strategy. Report for Charnwood Borough Council.

which requires new major developments to provide safe and well-lit streets and routes for walking and cycling as well as walking, cycling and public transport access to key facilities and services. Transport modelling work that has been undertaken for Charnwood has indicated that, provided the identified public transport mitigation measures are incorporated, the likely effects of the overall development strategy for the Borough on increased pollutants would be entirely mitigated with the exception of CO₂ emissions which would be mitigated by around 60%²⁴ (this is considered under SA objective 7 below).

- 1.79 Therefore, the cumulative effect of the Core Strategy on air quality in Charnwood could potentially be negative but if the identified mitigation measures are appropriately implemented, effects could be reduced to negligible.

SA objective 7: To reduce the Borough's contribution to and vulnerability to climate change including a reduction in greenhouse gas emissions

- 1.80 The large-scale housing and employment development that is proposed for Charnwood could have a negative effect on greenhouse gas emissions as a result of increased vehicle traffic in the Borough. The improvements to highway infrastructure that are proposed in a number of the policies could be seen as potentially encouraging increased car use by making it a more convenient mode of transport. However, many of the Core Strategy policies require sustainable transport improvements to be incorporated into the new developments (e.g. walking and cycle routes or improved bus services). All development will also need to conform to policy CS17: Sustainable Transport which requires new major developments to provide safe and well-lit streets and routes for walking and cycling as well as walking, cycling and public transport access to key facilities and services. That policy also aims to achieve an overall modal shift of 6% away from private cars, with a much higher level of shift in the new sustainable urban extensions.
- 1.81 Transport modelling work that has been undertaken for Charnwood²⁵ has indicated that, provided the identified public transport mitigation measures are incorporated, the likely effects of the overall development strategy for the Borough on increased NO_x, PM₁₀ and PM₂₅ levels would be fully mitigated, although carbon emissions would only be mitigated by around 60%, which still represents a rise in carbon emissions when reductions are needed to address climate change.
- 1.82 As well as emissions from increased traffic, the Core Strategy will result in large-scale new development which will inevitably result in an increase in emissions from buildings. However, all new development in the Borough will be required to conform to policy CS16: Sustainable Construction and Energy which encourages developments to, where

²⁴ MVA Consultancy (February 2013) Setting Strategic Direction: Charnwood Core Strategy – Stage 2 Emerging Development Strategy. Report for Charnwood Borough Council.

²⁵ MVA Consultancy (February 2013) Setting Strategic Direction: Charnwood Core Strategy – Stage 2 Emerging Development Strategy. Report for Charnwood Borough Council.

viable, exceed Building Regulations for carbon emissions and to incorporate renewable energy generation.

- 1.83 Therefore, the cumulative effect of the Core Strategy on greenhouse gas emissions in Charnwood could potentially be negative but if the identified mitigation measures are appropriately implemented, effects could be reduced to negligible.

SA objective 8: To reduce vulnerability to flooding

- 1.84 The Core Strategy proposes large-scale new housing an employment development, much of which will take place on greenfield land. As such, it could be seen as having a negative effect on flood risk by increasing the overall area of impermeable surfaces in Charnwood and therefore reducing infiltration rates and increasing runoff. This could be particularly detrimental to flood risk in the floodplain of the River Soar which runs through the centre of the Borough from north to south and comprises areas of flood zones 2 and 3²⁶.
- 1.85 However, a number of the Core Strategy policies incorporate measures specifically aiming to address flood risk, with the supporting text to policies CS19, CS20, CS22 and CS23 referring to the ambition of retaining greenfield runoff rates. In addition, all development will be required to conform to policy CS16: Sustainable Construction and Energy which directs development to locations within the borough at the lowest risk of flooding and, where development is proposed in flood risk areas, requires mitigation measures to be in place to reduce the effects of flood water. It also supports developments which take opportunities to reduce flood risk elsewhere and requires developments to manage surface water run off with no net increase in the rate of surface water run off for greenfield sites. As a result, it is considered that there will not be significant cumulative effects on flood risk in the Borough as a result of the Core Strategy.
- 1.86 However, policy CS19: North East of Leicester Sustainable Urban Extension appears (from the indicative map alongside the policy) to propose a small amount of the residential development in an area classed as flood zone 3. As such, the Council has confirmed that the Master Plan for the SUE will be worked up in consultation with the Environment Agency and in accordance with the NPPF and policy CS16, such that residential development is not proposed in the area of flood zone 3 within the SUE.

SA objective 9: To reduce waste and conserve mineral resources

- 1.87 Development of the scale proposed in the Core Strategy will inevitably lead to increased use of aggregates for construction as well as increased waste generation, regardless of its location, particularly as much of the new development will be located on greenfield land which means that opportunities for reusing existing building materials will be more limited

²⁶ Entec (April 2008) Charnwood Borough Council: Charnwood Strategic Flood Risk Assessment – Final Report.

than at a brownfield site. In addition, infrastructure improvements are associated with a number of the policies (e.g. new roads and widening of existing roads), which could increase demand for aggregates as well as increasing waste generation in the short-term during the construction phase, although it is uncertain the extent to which recycled and secondary aggregates may be used. The strategic development area North of Birstall lies within a sand and gravel Minerals Consultation Area, and policies in the Leicestershire Minerals Development Framework will apply to development in such areas.

- 1.88 The impacts of the Core Strategy on waste generation will depend largely on the practices used within new housing and employment sites and it is recognised that all new development will be required to comply with Core Strategy policy CS16: Sustainable Construction and Energy which supports developments that reduce waste, provides for the suitable storage of waste and allows for convenient waste collections. It also makes specific reference to encouraging development on brownfield sites, and re-using existing buildings.

SA objective 10: To protect soil resources and quality and make efficient use of land and buildings

- 1.89 The Core Strategy proposes large-scale new housing and employment development, much of which will take place on greenfield land. As such, this is likely to result in negative effects on soil quality, particularly where development is proposed on best and most versatile agricultural land (e.g. policy CS22: West of Loughborough Sustainable Urban Extension proposes new development on grade 2 agricultural land which would be lost under the new development). Large-scale new development on greenfield sites will also have a negative effect in relation to the efficient use of land, although it is recognised that development of the scale required in Charnwood would not be able to come forward through brownfield sites alone.
- 1.90 A number of the Core Strategy policies (such as CS10: Rural Economic Development) do make reference to redeveloping existing buildings, which would have positive effects on the efficient use of land. In addition, policy CS16 includes specific reference to encouraging development on brownfield sites, and re-using existing buildings, as well as the need to protect and enhance soil quality.

SA objective 11: To reduce poverty and social exclusion, reduce crime, anti-social behaviour and increase community safety

- 1.91 Most of the Core Strategy policies will not have a direct effect on this SA objective, although the provision of a total of up to 152ha of new employment land has the potential to have a positive effect on increasing overall levels of prosperity, which could in turn have a minor indirect positive effect on reducing crime in the Borough (although this cannot be assumed). Most of the Core Strategy policies do not make reference to reducing crime, although a number of the policies for the strategic sites

refer to the provision of 'safe' walking and cycle routes (this is taken to mean that they will be appropriately sited and well-lit).

- 1.92 The measures in the Core Strategy to increase sustainable transport provision (CS17: Sustainable Travel) should help to make the strategic housing and employment sites more 'walkable' and improve access between them and surrounding neighbourhoods (this will be particularly beneficial where there are deprived neighbourhoods nearby which would benefit particularly from improved access to jobs, services and facilities. The intention to provide community facilities alongside the new housing development should also have a cumulative positive effect on reducing social exclusion in the Borough.

SA objective 12: To increase healthy lifestyles

- 1.93 The provision of green infrastructure and open space and sports facilities within new development (as required by policies CS12: Green Infrastructure and CS15: Open Spaces, Sport and Recreation) will help to encourage higher levels of activity and healthier lifestyles amongst Charnwood's residents. In addition, the provision of walking and cycle routes as part of the strategic housing sites should encourage more people to make use of active modes of transport for commuting and other journeys.
- 1.94 The policies for the strategic housing sites refer to the provision of new services and facilities within the new development, which is taken to include healthcare services such as doctors' surgeries and dentists (although this is not specified, it is referred to in the supporting text to a number of the policies). This will help to ensure that residents (including those without cars) have convenient access to healthcare services, and that existing services in nearby towns and villages do not become overloaded. Although there may be temporary impacts on public amenity during construction of the proposed development, in the long-term a cumulative positive effect on health is therefore expected to result from the Core Strategy.

SA objective 13: To ensure that the housing stock meets the housing needs of all sections of the community

- 1.95 The Core Strategy provides for a total of 13,940 new homes in Charnwood, which is adequate to meet the identified levels of need. Affordable housing will be provided in all new developments in line with the targets set out in policy CS3: Strategic Housing Needs and all of the policies for the strategic sites make reference to the provision of a range of housing types, sizes and tenures, including provision for older people. They will also be required to comply with the requirement set out in policy CS3 for new housing to incorporate the design criteria of Lifetime Homes, which aim to add to the comfort and convenience of the home and support the changing needs of individuals and families at different

stages of life²⁷. This means that a significant positive cumulative effect is expected in relation to this SA objective.

- 1.96 The Core Strategy also makes provision for Gypsies and Traveller sites in accordance with identified local need through policy CS5: Gypsies and Travellers, which is followed through into the specific policies for the strategic housing sites. Incorporating Gypsies and Traveller sites within the housing development proposed will have further positive effects on the creation of vibrant communities (SA objective 3) and access to services (SA objective 14).
- 1.97 A potential minor negative effect on housing was identified in relation to policy CS4: Houses in Multiple Occupation as it could be seen to potentially restrict the available accommodation for students in Loughborough; however policy CS23: Loughborough University and Science and Enterprise Park should provide mitigation for this potential negative effect as it allows for the provision of new student accommodation within the extension to the Science Park.
- 1.98 Overall, a significant positive cumulative effect on housing is therefore expected.

SA objective 14: To increase access to a wide range of services and facilities

- 1.99 The Core Strategy policies relating to the strategic housing sites all provide for new community services and facilities to be provided within the new development. This will have a positive cumulative effect by ensuring that new residents (including those without cars) are able easily to access services and facilities, and by ensuring that existing services and facilities in nearby towns and villages do not become overloaded as a result of population growth.
- 1.100 Particular positive effects on this SA objective are likely in relation to services and facilities at Shepshed as it is recognised that shops and other services in the town are under-utilised at present, and the measures in policy CS8: Regeneration of Shepshed should help to address this issue.

SA objective 15: To increase access to the countryside, open space and semi-urban environments (e.g. parks)

- 1.101 Cumulative positive effects on this SA objective are likely to result from the Core Strategy policies, as policies CS12: Green Infrastructure and CS15: Open Spaces, Sport and Recreation will ensure that residents of the new strategic housing developments have easy and convenient access to open space, walking and cycle routes, playing pitches and allotments. These new facilities will also benefit existing residents in nearby towns and villages.
- 1.102 The measures in policies CS10: Rural Economic Development, which encourages rural tourism, and CS21: Watermead Regeneration Corridor,

²⁷ <http://www.lifetimehomes.org.uk/pages/lifetime-homes.html>

which encourages improved connectivity and accessibility between Watermead Country Park, Thurmaston waterfront and the wider community, should combine to have a positive cumulative effect in relation to increased access to key natural assets within the Borough such as Charnwood Forest and the River Soar and Grand Union Canal Corridor.

SA objective 16: To encourage a sustainable economy supported by efficient patterns of movement attractive to investors

- 1.103 The Core Strategy policies in combination will result in the provision of up to 152ha of new employment land in Charnwood, which will have a cumulative significant positive effect on this SA objective through the provision of new and high quality employment sites which will encourage inward investment. This is to be achieved through the delivery of employment land within each strategic development location, which will provide access to existing nearby employment opportunities. In particular the expansion of the Science Park, which will accommodate a wide range of high growth businesses within the knowledge-based and high technology manufacturing sectors, should help to address the effects of the recent closure of the Astra Zeneca plant, which was a major provider of high quality jobs in Loughborough.
- 1.104 The measures in the Core Strategy to improve the efficiency of the highway network (policy CS18: The Local and Strategic Road Network and specific policies for the strategic sites) will make commuting journeys faster and less prone to congestion problems, and will help to improve the efficiency of freight travel. Transport modelling work that has been undertaken for Charnwood²⁸ highlighted the important benefits that the transport mitigation measures (sustainable transport and highway improvements) will have on increasing the efficiency of transport movements in and around the Borough. While highway improvements will not contribute to the creation of a greener economy, the measures in the Core Strategy to improve public transport provision (policy CS17: Sustainable Travel and specific policies for the strategic sites) will help to ensure that more journeys to and from employment sites can be undertaken by modes other than cars.
- 1.105 As well as improvements to the economy in urban areas, the Core Strategy should have a cumulative positive effect on the creation of a sustainable rural economy. Policy CS10: Rural Economic Development specifically addresses this issue, supporting farm diversification and small-scale rural enterprises, and rural tourism should also be enhanced through the measures in policy CS10 as well as policy CS21: Watermead Regeneration Corridor. An overall cumulative significant positive effect on this SA objective is therefore likely.

²⁸ MVA Consultancy (February 2013) Setting Strategic Direction: Charnwood Core Strategy – Stage 2 Emerging Development Strategy. Report for Charnwood Borough Council.

SA objective 17: To reduce disparities in economic performance and improve skills and employability

- 1.106 The Core Strategy policies in combination will result in the provision of up to 152ha of new employment land in Charnwood, which will have a cumulative positive effect on increasing the opportunities that are available for work-based training and skills development. Policy CS23: Loughborough University and Science and Enterprise Park will have a particularly positive effect as the employment land created will provide opportunities for work-based training in knowledge-based and high technology industries and the close links between the University and Science Park mean that there should be good opportunities for student work placements and collaborative research projects. The spread of the employment land throughout the Borough will help to ensure that opportunities are made available to all, although the extent to which the employment land will increase the diversity of employment opportunities is largely unknown as it will depend on the type of businesses that will locate there. A number of other Core Strategy policies also provide opportunities for increased skills development within the Borough, such as policy CS10: Rural Economic Development.
- 1.107 The provision of 13,940 new homes in the Borough will inevitably result in increased demand for school places, and the policies for the strategic housing sites address this issue, allowing for either new schools within the development or contributions to new school places (policy CS25: Infrastructure Delivery will help to achieve this). A cumulative significant positive effect on this SA objective is therefore likely.

Monitoring

- 1.108 The SEA Regulations require that monitoring is undertaken in relation to the significant effects of implementing the Plan in question. **Table 6** below sets out a number of suggested indicators for monitoring the potential significant sustainability effects of implementing the Core Strategy. Note that some of the indicators proposed have been drawn from those proposed in Charnwood Borough Council's monitoring framework for the Core Strategy. The Council's monitoring framework was set out in Appendix 3 of the Pre-Submission Draft Core Strategy and updated through the April 2015 Main Modifications.

Table 6: Suggested framework for monitoring potential significant sustainability effects arising from implementation of the Charnwood Core Strategy

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
1: To maintain and enhance biodiversity, flora and fauna and geodiversity	CS22: West of Loughborough Sustainable Urban Extension CS23: Loughborough University and Science and Enterprise Park	CS12: Green Infrastructure CS13: Biodiversity and Geodiversity	<ul style="list-style-type: none"> • Planning application allowed/refused in Green Wedges • Change in areas and populations of biodiversity importance, including: <ol style="list-style-type: none"> I. Change in priority habitats and species (by type); and II. Change in areas designated for their intrinsic environmental value including sites of international, national, regional or sub-regional significance. III. The area of land designated as an SSSI which is in 'unfavourable condition'. • Completed development that has resulted in the loss or creation/restoration of BAP habitats. • Change in Regionally Important Geological Sites (RIGS).
2: To maintain and enhance townscape and landscape character	CS22: West of Loughborough Sustainable Urban Extension CS23: Loughborough University and Science and Enterprise Park	CS2: High Quality Design CS4: Houses in Multiple Occupation CS7: Regeneration of Loughborough CS9: Town Centre and Shops CS11: Landscape	<ul style="list-style-type: none"> • Number of schemes granted planning permission in Areas of Separation contrary to the policy. • Reductions in areas designated for their high intrinsic environmental and landscape value • Number of major developments in Areas of Local Separation • Percentage of landscape character areas where there are marked changes or significant changes that are inconsistent with that character.

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
		and Countryside CS12: Green Infrastructure CS14: Heritage	<ul style="list-style-type: none"> • Change in number of areas defined as 'tranquil'. • % of vacant dwellings. • The number of up to date conservation area appraisals and management plans.
3: To increase the vibrancy and viability of settlements	CS22: West of Loughborough Sustainable Urban Extension	CS2: High Quality Design CS4: Houses in Multiple Occupation CS7: Regeneration of Loughborough CS8: Regeneration of Shepshed CS9: Town Centres and Shops CS15: Open Spaces, Sport and Recreation CS21: Watermead Regeneration Corridor-Direction of Growth CS25: Delivering Infrastructure	<ul style="list-style-type: none"> • Number of sites and projects delivered as identified in the Loughborough and Shepshed Town Centre Regeneration Strategies up to 2028. • Total amount of completed retail, office and leisure development in 'town centre' areas • Planning application allowed/refused in Green Wedges • Number of major developments in Areas of Local Separation • Number of opportunity sites to be redeveloped for town centre uses • Percentage of new residential development within 30 minutes public transport time of a GP, hospital, primary and secondary school, employment and a major health centre. • Amount of completed retail, office and leisure development.
4: To conserve and enhance the historic and cultural	<i>No significant negative effects identified.</i>	CS14: Heritage	<ul style="list-style-type: none"> • Number of designated heritage assets at risk in the Borough • Percentage of applications involving total or substantial demolition of a listed building

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
environment			<ul style="list-style-type: none"> • Loss of Scheduled Monuments. • Loss or damage to an historic park or garden and its setting.
6: To improve local air quality	<i>No significant negative effects identified.</i>	CS17: Sustainable Travel	<ul style="list-style-type: none"> • Rate of transport modal shift across the Borough (6% target with SUEs/SEP achieving more) • Number of days of air pollution (i.e. limits exceeded). • Population living in Air Quality Management Areas. • Number of businesses with a Company Travel Plan and percentage of workforce employed by companies with a Travel Plan. • Number of schools with a School Travel Plan and percentage of pupils attending schools with a Travel Plan. • Number of new cycle routes developed during the year. • % reduction in NOx and primary PM10 emissions through local authority's estate and operations.
7: To reduce the Borough's contribution to and vulnerability to climate change including a reduction in greenhouse gas emissions	<i>No significant negative effects identified.</i>	CS16: Sustainable Construction and Energy CS17: Sustainable Travel	<ul style="list-style-type: none"> • Renewable energy installation installed by type • Number of new homes built above 10% above Part L of Building Regulations • Amount of energy being provided from renewable or low carbon energy developments. • Number of major developments that have a green travel plan. • Amount of new development at SUEs, directions for growth and service centres with access to a half

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
			<p>hour frequency public transport service.</p> <ul style="list-style-type: none"> • CO2 reduction from local authority operations. • Per capita reduction in CO2 emissions in the LA area. • Energy use per household. • Percentage of new residential, commercial, retail and office developments built to a 'good', 'very good', or 'excellent' BREEAM or EcoHomes rating. • Number of homes meeting the building for life criteria.
8: To reduce vulnerability to flooding	<i>No significant negative effects identified.</i>	CS16: Sustainable Construction and Energy	<ul style="list-style-type: none"> • Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds • Number of developments accompanied by a water management plan • Number of new developments given planning permission that incorporate sustainable drainage systems. • Number of new developments given planning permission that mitigate against flood risk. • Number of new developments (ha) located in Flood Zone 3.
10: To protect soil resources and quality and make efficient use of land and buildings	CS20: North of Birstall Direction of Growth	<i>No significant positive effects identified.</i>	<ul style="list-style-type: none"> • Total amount of employment floorspace on previously developed land • Percentage of new and converted dwellings on previously developed land • Area of Agricultural Land Classification grading 1, 2

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
			and 3a lost to development. <ul style="list-style-type: none"> • Previously developed land that has been vacant or derelict for more than 5 years. • Number of contaminated sites. • Number of developments incorporating soil loss minimisation measures.
12: To increase healthy lifestyles	<i>No significant negative effects identified.</i>	CS15: Open Spaces, Sport and Recreation	<ul style="list-style-type: none"> • Local and sub-regional measurements of deprivation • Percentage of new residential development within 30 minutes public transport time of a GP, hospital, primary and secondary school, employment and a major health centre. • Death rates (Number of deaths per 1000 population) for cancer, circulatory disease, accidents and suicides. • All-age all-cause mortality rate. • Self-reported measure of people's overall health and wellbeing. • Healthy life expectancy at age 65. • Obesity levels. • Number of allergy related illnesses and asthma. • Number of people suffering from long term illness. • Number of people suffering from diabetes.
13: To ensure that the housing stock meet the housing needs of all	<i>No significant negative effects identified.</i>	CS1: Development Strategy CS3: Strategic Housing Needs	<ul style="list-style-type: none"> • Number of housing completions and projected completions) • Net additional Gypsy and Traveller pitches • Affordable housing completions

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
sections of the community		CS5: Gypsies and Travellers CS19: North East of Leicester Sustainable Urban Extension CS20: North of Birstall Direction of Growth CS22: West of Loughborough Sustainable Urban Extension	<ul style="list-style-type: none"> • Housing quality in new housing development based on Building for Life Assessments • Number of new homes built above 10% above Part L of Building Regulations • Number of unfit homes per 1000 dwellings. • Number of households living in temporary accommodation. • Percentage of non-decent council homes. • Supply of ready to develop housing sites.) • Local authority tenants' satisfaction with landlord services. • Number of homeless people.
14: To increase access to a wide range of services and facilities	<i>No significant negative effects identified.</i>	CS8: Regeneration of Shepshed CS9: Town Centres and Shops CS12: Green Infrastructure CS19: North East of Leicester Sustainable Urban Extension CS20: North of Birstall Direction of Growth CS22: West of	<ul style="list-style-type: none"> • Amount of residential completions within 30 minutes public transport time of a GP, a hospital, a primary school, a secondary school, an employment centre and a major health centre. • Percentage of residents defined as within a distance of 500m (15 minutes walk) of key local services. • Access to services and facilities by public transport, walking and cycling.

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
		Loughborough Sustainable Urban Extension CS25: Delivering Infrastructure	
15: To increase access to the countryside, open space and semi urban environments (e.g. parks)	<i>No significant negative effects identified.</i>	CS15: Open Spaces, Sport and Recreation CS19: North East of Leicester Sustainable Urban Extension CS21: Watermead Regeneration Corridor-Direction of Growth CS22: West of Loughborough Sustainable Urban Extension	<ul style="list-style-type: none"> • Percentage of residents that are satisfied with the quantity and quality of open space in their area. • Access to green spaces in line with the standards set out in the Open Space Strategy.
16: To encourage a sustainable economy supported by efficient patterns of movement attractive to	<i>No significant negative effects identified.</i>	CS1: Development Strategy CS6: Employment and Economic Development CS7: Regeneration of Loughborough	<ul style="list-style-type: none"> • Total amount of additional employment floorspace • Number of new jobs created • Employment land available • Total amount of completed retail, office and leisure development in 'town centre' areas • Employment land lost to non-employment uses • Employment land lost to residential use

SA objectives for which potential significant effects have been identified	Policies that are likely to lead to significant negative effects	Policies that are likely to lead to significant positive effects	Proposed indicators
investors		CS10: Rural Economic Development CS23: Loughborough University and Science and Enterprise Park	<ul style="list-style-type: none"> • Percentage of large scale town centre development within Local, District and Loughborough Town Centre. • Number of opportunity sites to be redeveloped for town centre uses • Percentage of working age people in employment. • Percentage change in VAT registered businesses. • Average earnings. • New business registration rate. • Travel to work journeys by mode.
17: To reduce disparities in economic performance and improve skills and employability	<i>No significant negative effects identified.</i>	CS6: Employment and Economic Development CS23: Loughborough University and Science and Enterprise Park	<ul style="list-style-type: none"> • Total amount of additional employment floorspace • Number of new work-based apprenticeships offered annually. • Number of new school places created annually. • Percentage of population that have attained a qualification of NVQ2 and above • Proportion of young people (18 –24 year olds) in full time education or in employment. • 16 to 18 year olds who are not in education, employment or training (NEET).

Conclusions

- 1.109 The policies in the Charnwood Core Strategy have been subject to a detailed appraisal against the SA objectives which were developed at the scoping stage of the SA process. The appraisal work that was carried out in relation to the submitted Core Strategy (the 2013 Pre-Submission Draft) has been updated to incorporate the Main Modifications proposed since then and this has resulted in only a small number of changes to the SA findings since the 2013 SA report.
- 1.110 In general, the Core Strategy has been found to have a wide range of positive and significant positive effects on the SA objectives, although a number of potential negative impacts are also associated with the scale and location of development proposed.
- 1.111 Due to the rural nature of much of the Borough, there are tensions between the need to guide development to key locations (e.g. Loughborough and the Principal Urban Area to the north of Leicester), taking advantage of economic efficiencies and more sustainable transport options that this provides, and the need to provide access to jobs, services and facilities in smaller rural communities.
- 1.112 Similarly, there is a tension between the protection of the high environmental quality of the Borough (achieved by constraining the amount and quality of development) and the encouragement of socially diverse and economically robust communities with a balance of housing types and employment opportunities. These tensions are implicitly recognised by the Core Strategy, and it is generally well equipped to balance the level, type and location of growth with the maintenance and enhancement of Charnwood's natural environment and social well-being.
- 1.113 In most instances, the environmental policies are likely to be used to help in the planning, design and management of development to ensure that the environmental effects are acceptable to Charnwood Borough Council. However, this will not always be easily achievable given the scale and location of development identified as being needed in the Borough and the reliance on developers to come forward with acceptable proposals. The Council may sometimes be left with difficult choices and will therefore need to apply appropriate weight to the relevant policies in the Core Strategy in order to achieve the most sustainable solutions across the full spectrum of economic, social and environmental objectives.

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