

Wigan Local Plan Core Strategy

Sustainability Appraisal Report

June 2013

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Appendices

Every effort has been made to ensure these appendices run in a relevant order. However, in attempting to include all relevant items in the final report, this may not have been achieved. The date of the latest document has been added.

Appendix	Title	Date
Appendix A	Policy development	Feb 2011
Appendix B	Sustainability Appraisal Implications of having no Core Strategy	Aug 2011
Appendix C	Assessment of Spatial Policies	June 2013
Appendix D	Assessment of Core Policies	Feb 2011
Appendix E	Site appraisals for preferred broad locations	June 2013
Appendix F	Sustainability appraisal of the proposed minor changes to the Draft Core Strategy, August 2011	Aug 2011
Appendix G	The alternative spatial approach	Jan 2013
Appendix H	Sustainability appraisal of alternative key strategic sites or broad locations, June 2009 / October 2010	June 2013
Appendix I	Alternative options and proposals and individual locations within proposed broad locations	June 2013
Appendix J	Post Consultation Changes to the Sustainability Appraisal, October 2012	Oct 2012
Appendix K	Sustainability Appraisal Framework	Jan 2013
Appendix L	Document / policy review for the sustainability appraisal	Feb 2008
Appendix M	Sustainability Appraisal of Strategic Spatial Options	Jan 2009
Appendix N	Sustainability Appraisal of Thematic Options	Jan 2009
Appendix O	Workshop Attendees: Issues and Options and Preferred Options stages	May 2009
Appendix P	Site Appraisal Scoring Framework	Sep 2007 / Oct 2012
Appendix Q	Sustainability Statement	Nov 2012
Appendix R	Scoping Report Contextual Review	Sep 2007
Appendix S	Policy Appraisal Matrices - Templates	Sep 2007

13 Topic Par	pers:						
Appe	endix T (4.1) – Health and Recreation						
Appendix T (4.2) – Community Safety and Neighbourhood Quality							
Appe	endix T (4.3) – Community Development and Involvemen	t					
Appe	endix T (4.4) – Education and Learning						
Appe	endix T (4.5) – Economy and Employment						
Appe	endix T (4.6) – Housing						
Appe	endix T (4.7) – Retail and Centres						
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Appe	endix T (4.9) – Built Environment and Landscapes						
Appe	endix T (4.10) – Wildlife Habitats and Species						
Appe	endix T (4.11) – Energy						
Appe	endix T (4.12) – Waste						
Appe	endix T (4.13) – Natural Resources and Pollution						
Appendix U	Letter from Hyder Consulting (UK) Ltd	Jan 2013					
Appendix V	Appraisal of the Inspectors Modifications	June 2013					

Additional Documents:

Evidence Reviews for the Core Strategy (incorporated into Topic Papers)

Index of appraised sites and locations

During the course of the Sustainability Appraisal a number of sites and locations were considered. For ease of navigation, we outline below where details of these appraisals can be found. Not all sites will have an overview included in a section of this main report. Full details can be found in the appendices indicated. Some sites were appraised for more than one reason (e.g. housing, employment, mixed use etc.) Locations taken forward are in bold. Those in bold AND Appendix I are options within broad locations.

SITE	TAKEN FORWARD	OVERVIEW OF APPRAISAL	DETAILS OF APPRAISAL
Almond Brook, Standish	Yes	-	Appendices H and I
East of Atherton	Yes	Section 10	Appendix E
East of Hooten Gardens, Leigh	No	-	Appendix I
East of Wigan Road, Landgate	Yes	Section 10	Appendices E
Garrett Hall, Tyldesley	Yes	Section 10	Appendices E
Golborne and Lowton			
combined	Yes	Section 10	Appendices E
Land at Coldalhurst Lane,			
Astley	Yes	-	Appendix I
Land at Pocket Nook Lane,		_	
Lowton	Yes	Section 10	Appendix I
Land at Rothwell's Farm,			
Golborne	Yes	-	Appendix I
Land east of Stone Cross Lane,			A
Lowton	Yes		Appendix I
Junction 25, M6 South of Wigan	No	Section 10	Appendix H
North East of Bedford, Leigh	No	-	Appendix I
North of Beech Hill, Wigan	No	-	Appendix I
North of Rectory Lane,			
Standish	Yes	-	Appendix I
North West of New Springs,			
Wigan	No	-	Appendix I
NW of Standish Lower Ground,	NI-		A company of the L
Wigan	No	Cootion 10	Appendix I
Northleigh, Leigh	Yes	Section 10	Appendix C
Rectory Lane, Standish combined	Voc		Annondiago U and I
	Yes	- Castina 10	Appendices H and I
Sandyforth Farm, Wigan	No No	Section 10	Appendix H
South East of Hawkley, Wigan		Coation 10	Appendix I
South of Atherton	No	Section 10	Appendices H and I
South of Boston Long	Yes	Section 10	Appendices E
South of Rectory Lane, Standish	Yes		Annondiy I
	No No	-	Appendix I
South of Winstanley Standish Combined	Yes	Section 10	Appendix I Appendix E
	162	Section 10	Appendix
The Bell, Lamberhead Green,	No	Section 10	Appendix H
Westleigh Canalside Leigh	No	Section 10 Section 10	
Westleigh Canalside, Leigh	No .	Section 10	Appendix H

Table 1: Index of sites and locations appraised

Introduction

This document represents the final Sustainability Appraisal Report following a number of stages and iterations. It has been conducted to be in keeping with the European Directive on Strategic Environmental Assessment (see **Chapter 1**) and the needs of Wigan's Core Strategy, which it supports.

Why we have a sustainability appraisal as part of the Core Strategy can be found in **Chapter 2**. In turn, what the Core Strategy is and the policy context within which we operated when beginning the process, is shown in **Chapter 3**.

If we did not have a Core Strategy the borough's approach to spatial planning and planning policy would be different so we set this out in **Chapter 4**.

The different stages of the Core Strategy have required different things from the Sustainability Appraisal and this has produced a wealth of information and analysis. It can be difficult to follow the process but we have attempted to aggregate all relevant information together into this one final document and its associated appendices. The structure of this document, however, is intended to follow the SEA Directive stages and tasks. You can find a table outlining the different stages within **Chapter 5**.

How we approached the Sustainability Appraisal process is set out in **Chapter 6**. In the beginning we conducted a scoping stage where we asked stakeholders what sustainability issues we should consider. We then drew together this information to create a framework against which we would assess the spatial and thematic options for the Core Strategy. This can be found in **Chapter 7**.

It is important that the sustainability appraisal framework is consistent with the objectives of the Core Strategy and we highlight this in **Chapter 8**.

Chapter 9 is where the assessment and analysis begins and where the Sustainability Appraisal begins to help shape the Core Strategy, by appraising the different spatial development options in the borough. Also, the thematic options (i.e. the policies which are focused on issues rather than being related to locations) were considered too.

This initial appraisal helped shape the Core Strategy. The next stage was to make decisions on the spatial and thematic options and to turn the principles into policies. This is the focus of **Chapter 10**. It is an iterative process and covers a lot of information and analysis. Over time, analysis can change but this final document presents the end results.

In spatial policy terms, we appraised chosen options and the most realistic alternatives. The headline analysis is presented in the main document with the detail and the appraisal of alternatives available in the appendices. For the thematic policies this was a more iterative process, where the sustainability appraisal helped further shape the policies along the way.

Once the documentation was finalised following consultation in 2011, the Sustainability Appraisal was presented in support of the Core Strategy for the Examination in Public.

However, the Planning Inspector identified a shortfall in housing land and asked the council to consider how this could be achieved.

The implication for the Sustainability Appraisal was the need to appraise more locations in the borough for housing provision. This can be found in part 10.8 in **Chapter 10**. It also meant a change to the primary spatial policy (SP1) and this can be found in **Chapter 10** as well (10.3). SP1 was amended and alternatives provided. More information on locations for housing development was provided too.

Following the subsequent Examination in Public (March 2013), the Inspector gave his final recommendations and this Sustainability Appraisal both tests and reflects these changes. Changes were made within the Spatial Policies (10.3) and selected Core Policies (10.4). Cumulative and synergistic impacts were therefore also reappraised (10.5).

1.0 Meeting the requirements of the SEA Directive

This sustainability appraisal meets the requirements of a Strategic Environmental Assessment (SEA). We have outlined where these requirements have been met in Table 2 below.

Further details about our approach can be found in section 6 of this report and in the earlier Scoping Report for the Core Strategy. You can find this Scoping Report on the Sustainability Appraisal webpages at www.wigan.gov.uk/ldfcorestrategy

Information required in Environmental Report	Where can this be found?				
Outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes.	Section 3 outlines the Core Strategy and the policy context. Appendix L provides an outline of key policies reviewed throughout the Sustainability Appraisal process. The Evidence Papers also outline key supporting policies.				
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	Baseline data and trends are included in each of the Topic Papers that support the Core Strategy and this Sustainability Appraisal.				
or programme.	Section 4 of this report outlines the implications of no Core Strategy and further detail can be found in Appendix B				
The environmental characteristics of areas likely to be significantly affected.	Details of environmental characteristics can be found in the supporting Topic Papers and in the appraisals of locations/sites.				
Any existing environmental problems which are relevant to the plan or programme.	The key sustainability issues were identified in the Scoping Report and are reproduced in section 7 of this report. Existing issues are also outlined in the Topic Papers.				
The environmental protection objectives which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.	The key policies examined throughout the Sustainability Appraisal process are outlined in Appendix L. Economic, environmental and social objectives have been drawn from this evidence and have informed both the sustainability appraisal framework and plan preparation process.				
The likely significant effects on the environment.	Broad options appraisal (section 9) and policy appraisals (section 10). This includes cumulative, synergistic and time related impacts. Full appraisal tables are available in Appendices C, D and E.				

The measures envisaged to prevent, reduce and offset any significant adverse effects on the environment of implementing the plan or programme.	Considered as part of the policy appraisal (section 10). See Appendices C, D and E for full appraisal tables.
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information.	Reasoning behind the inclusion of the broad spatial and thematic options can be found in section 8. Reasons for selecting the preferred policy options are in section 9. Alternatives are considered in section 10 and are also available in Appendices G, H and I.
A description of measures envisaged concerning monitoring.	Section 12 outlines our approach to monitoring. Topic Papers contain baseline indicators. The annual monitoring will contain contextual indicators which overlap the sustainability issues.
A non-technical summary of the information provided under the above.	This is available as a separate document. It can be downloaded from the Council website on the sustainability Appraisal webpages at www.wigan.gov.uk/ldfcorestrategy

Table 2: Meeting the requirements of the Strategic Environmental Assessment Directive.

2.0 Purpose of the sustainability appraisal

This document reports on a sustainability appraisal of the Core Strategy Development Plan Document.

We carried out the sustainability appraisal to help ensure that the economic, social and environmental implications of the Core Strategy were identified, considered and well-balanced.

To make sure we concentrate on the most important sustainability issues for the borough, we collected lots of evidence and consulted widely to help inform and back-up our decisions.

We also considered a range of options for how the borough should develop; comparing how 'sustainable' these different approaches would be to find out what the best way forward for Wigan might be. Once we had identified the 'preferred' options we carried out more detailed appraisals of the environmental, social and economic impacts of our finalised plan.

This report should be read in conjunction with the Core Strategy and supporting documents, which can all be found at www.wigan.gov.uk/ldfcorestrategy.

In summary, this sustainability appraisal report:

- Describes the Core Strategy and sets the policy context within which it sits.
- Outlines our approach to and methodology for sustainability appraisals.
- Signposts to the evidence we collected to inform our decisions.
- Reports on the 'sustainability' of a range of broad spatial and thematic options.
- Outlines the reasons for choosing the 'preferred options' and the reasons for not pursuing other options.
- Checks the compatibility of the Core Strategy objectives with the Sustainability Objectives established as part of the appraisal process.
- Outlines and evaluates the environmental, economic and social impacts of the draft Core Strategy.
- Suggests mitigation and enhancement measures for the Core Strategy.
- Sets out monitoring arrangements.
- Explains how the sustainability appraisal has influenced the Core Strategy.

This Sustainability Appraisal Report (January 2013) is the final submission version following the request by the Inspector to suspend the examination of the Core Strategy to address a shortfall in housing land.

This version of the Sustainability Appraisal Report brings together all previous versions and relevant appendices; appraises the suggestions for addressing the shortfall in housing land; and updates previous assumptions/assessments made in the sustainability appraisal process. A full list of Sustainability Appraisal Report versions and appendices is available in Chapter 5.

3.0 The Core Strategy and policy context

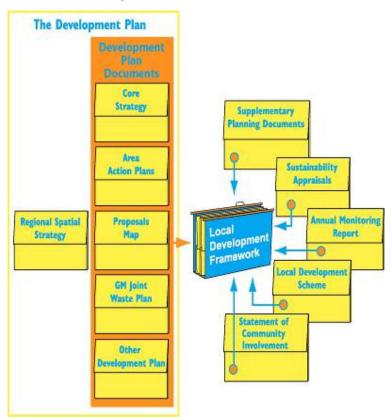
Wigan Local Development Framework

A local development framework is the plan strategy for a borough or district. It was introduced by the Planning and Compulsory Purchase Act 2004.

Our Local Development Framework will replace the Wigan Unitary Development Plan (April 2006) that was prepared under the previous planning system.

It will set out things like how many houses, jobs and shops we'll need in Wigan - and where they should be located. It will also aim to preserve our countryside and architectural heritage, tackle climate change and reduce deprivation and inequalities. It will be underpinned by the principles of sustainable development.

The Local Development Framework is made up of a 'portfolio' of local development documents, as illustrated in the diagram below.



Development Plan Documents: These are the important legal documents that set out policies and allocate sites for different types of development. There are different types of development plan documents including a Core Strategy and Area Action Plans.

Supplementary Planning Documents: These are more informal documents and give supplementary detail and guidance in respect of policies in Development Plan Documents.

Wigan Core Strategy

The Core Strategy is the principal development plan document in our Local Development Framework. It sets out what development is needed in the next 10-15 years, where this will go and how it can be achieved. For the most part, the details will be determined in other policy documents that will make up the Local Development Framework. These will include site allocations plans, area action plans and supplementary planning documents. All of these other documents will have to conform to the Core Strategy. Therefore, the Core Strategy sets the principles and the policies for planning in the borough.

The Core Strategy has to be in general conformity with the Regional Spatial Strategy and should reflect Wigan's Sustainable Community Strategy. It should also draw on other strategies that have implications for the development and use of land, including the Local Transport Plan.

All other policy documents produced as part of our Local Development Framework, such as Supplementary Planning Documents or Area Action Plans will have to be 'in conformity' with the Core Strategy.

How the Core Strategy has developed

Work on the Core Strategy began as early as 2006, involving lots of preparatory work and evidence gathering. This took place alongside the scoping stage of sustainability appraisal. As a key part of this evidence gathering, we commissioned a number of specialised studies to help us understand the baseline position.

We also produced a series of topic papers summarising our evidence and contributing to the scoping stage of our sustainability appraisal.

Using the evidence we gathered, we were able to identify the key issues for the borough, set out a spatial vision and develop a number of discrete options for tackling these issues.

A key feature of the planning system is to involve stakeholders early in the process. We published an issues and options report in February 2008. This report outlined our findings at that stage and the options for consideration. We consulted extensively on this report to seek the views and input from stakeholders and the wider community. We also carried out sustainability appraisal of the broad options and consulted on those results.

These previous stages all helped to inform our 'preferred options' for the Core Strategy, including a core spatial approach, spatial and thematic policies and key strategic sites. We also carried out extensive sustainability appraisals on all aspects of the preferred options.

After consulting on our findings at the preferred options stage, changes have been made to the plan and these too have been through the sustainability appraisal process.

This sustainability appraisal report accompanies the final draft of our Core Strategy, or Submission Version, including the council's proposals for addressing the shortfall of housing land.

The key components of the Core Strategy

The key components of the Core Strategy are (chapter numbers refer to chapters in the Core Strategy):

- A 'Short spatial portrait' that describes briefly and clearly what the borough is like now and what its role is (chapter 3).
- The 'Key evidence' on which the Core Strategy is based (chapter 4), with reference to the Topic Papers where more detail can be found.
- The 'Key issues' that the borough faces (chapter 5), again with reference to the Topic Papers where more detail can be found.
- A 'Spatial vision' of what we want the borough to be in 2026 (chapter 6).
- Our 'Strategic objectives' for how we will achieve our vision and resolve the issues
 the borough faces (chapter 7). These are set out under 14 headings in line with
 our 13 Topic Papers and climate change that is included in each Topic Paper.
- Five 'Spatial policies' which set out the overall spatial direction for development in the borough (chapter 8), including:
 - The Spatial strategy for the borough, directing development primarily towards the east-west core of the borough, amended to include Astley, and Golborne and Lowton (policy SP1).
 - Our town and local centres, focusing in particular on Wigan as our principal town centre and Leigh and Ashton-in-Makerfield as our main town centres, but also 6 smaller town centres and other local and neighbourhood centres (policy SP2).
 - Allocating land at Northleigh Park as a key strategic site for housing, employment development and green infrastructure (policy SP3).
 - Designating 6 broad locations for new development at South of Hindley; East of Atherton; Garret Hall, Astley; East of Wigan Road, Landgate, Ashton-in-Makerfield; Golborne and Lowton; and Standish (policy SP4).
 - Developing an area north to south through the core of the borough as a high quality countryside park: Greenheart (policy SP5).
- 18 'Core policies' which cover the full range of social, economic and environmental 'topics' relevant to spatial planning (chapter 9), including:
 - Health and well-being (policy CP1)
 - Open space, sport and recreation (policy CP2)
 - Community facilities (policy CP3)
 - Education and learning (policy CP4)
 - Economy and employment (policy CP5)

- Housing (policy CP6)
- Accessibility (policy CP7)
- Green Belt and safeguarded land (policy CP8)
- Strategic landscape and green infrastructure (policy CP9)
- Design (policy CP10)
- Historic environment (policy CP11)
- Wildlife habitats and species (policy CP12)
- Low-carbon development (policy CP14)
- Waste (policy CP15)
- Minerals (policy CP16)
- Flooding (policy CP17)
- Environmental protection (policy CP18)
- Developer contributions (policy CP19).

Policy CP13 'Low-carbon, decentralised energy infrastructure' has been deleted.

- Under each policy and the associated reasoning and explanation, there is a table
 of 'Key delivery items', which sets out what is needed, its cost and funding, who
 needs to do it, how and when.
- A 'Monitoring framework' against which the performance of each of the policies will be assessed (chapter 10).

A Statement on the likely significant effects of the Core Strategy

The Core Strategy is likely to have a positive effect in a number of areas. The most significant effects will be related to:

- Ensuring access to good quality, sustainable, affordable housing by providing sufficient land for housing development and increasing the amount of affordable housing completions secured as a percentage of all completions.
- Supporting local employment and sustainable economic growth by providing sufficient land for economic development in the right locations, and safeguarding existing employment land and accommodation where it can continue to provide that function.
- Protecting and enhancing accessibility for all to essential services and facilities by locating them in accessible, sustainable places.
- Protecting and improving the quality and character of places, landscapes, townscapes and the Green Belt whilst maintaining and strengthening local distinctiveness and sense of place by focusing on the regeneration of the eastwest core of the borough; previously developed sites as far as possible; protecting green spaces and the borough's Greenheart; and ensuring high design quality.

- Protecting, managing and improving local amenity and local environmental quality including land, air and controlled waters and reducing the risk of flooding; and
- Ensuring the sustainable and prudent use and management of natural resources including the promotion of sustainable drainage and water conservation by focusing development on sustainable, accessible locations that make the best use of existing infrastructure.

4.0 Sustainability Appraisal implications of having no Core Strategy

The SEA Directive requires that we consider the how the environment would fare if there was no Core Strategy. It states we should consider:

"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme."

The baseline data and trends are included in each of the Topic Papers that support the Core Strategy and also assisted the initial Scoping Report.

Without the Core Strategy, Wigan would continue along the route of the Unitary Development Plan (UDP). However, the UDP runs only until 2016 and naturally for a document produced in 2006, is out of date with key issues and policy changes.

The UDP primarily considered land use planning which is narrow in its approach – concentrating mainly on how we develop and use land. The Local Development Framework – although building on that initial UDP work – goes further and considers the whole "spatial planning" approach seeking to address issues such as health, education, crime, environmental sustainability and accessibility.

The UDP would be amended or supplemented by other issues such as the National Planning Policy Framework and changes to population projections / housing need, for instance. However, the Core Strategy is also affected by these issues and so they are not a consideration for this purpose.

Should we continue to take the approach of the UDP, there would be an increasing disconnect between land use and wider socio-economic and environmental issues. The local environment would not be degraded as such, but Wigan would not be making best use of the environment as an asset.

One clear example is the use of greenspace for tackling climate change. Greenspace not only serves to protect an area – through shading – from increased heat, but also acts as a carbon store. Recognising this ensures that the planning process considers the wider impacts of development.

A full analysis in available in Appendix B.

Conclusions drawn

The borough would still develop in the absence of the Core Strategy but there would clearly be areas of concern that would prevent the borough from developing in a more sustainable way. The absence of a number of the policies contained within the Core Strategy would be detrimental to progress in a number of key areas covering all aspects of sustainability – economic, environmental and social.

In comparison to Local Plans that have gone before, and accepting the caveats that such a comparison requires, we can see that there is an overall improvement for sustainability objectives of the borough and a better balance across the criteria. There is a greater emphasis on achieving a balance between those three aspects of sustainability.

The key point for development is ensuring there is consistency with national policy and clarity at a local level – the considerations above taken with the Topic Papers, reveal that the Core Strategy delivers that. Overall, the borough will develop better, and the environment will improve, with the Core Strategy than without it.

5.0 Stages in the Development of the Sustainability Appraisal

As covered briefly in Chapter 3, there have been a number of stages to the Sustainability Appraisal process. These are outlined below.

Stage	Scoping	Issues and Options	Preferred Options	Proposed Submission	Submission	Shortfall in Housing Land	Final Documentation
Date	September 2007	January 2009	May 2009	February 2011	August 2011	July 2012	January - June 2013
Description	Sets out the context and objectives of the Sustainability Appraisal having collected the baseline information, analysed relevant plans and programmes, identified the sustainability issues and established a framework for appraising the Core Strategy	This was a stage of the core Strategy which set out the issues facing the borough and the available options for development. The Sustainability Appraisal considered these options against the sustainability objectives	This stage set out the Council's preferred spatial options and policy principles for the Core Strategy. These were appraised against the sustainability objectives and all sustainability issues considered.	This was the final formal consultation stage before submission and the documentation set out what the Council wished to submit to the Inspector. All elements had been sustainability appraised.	This was the final set of documentation which was submitted to the Inspector and was subsequently Examined in Public. The Sustainability Appraisal had analysed and supported the proposals and policies it contained.	The Inspector identified a shortfall in housing land in the borough and so the spatial options and broad site options were considered to help address this shortfall. These sites were appraised according to the sustainability objectives. This was then consulted on.	All elements of the Sustainability Appraisal are brought together as another final submission to the inspector and then his decisions were considered. We took the opportunity to review the Sustainability Appraisal to ensure we had included all relevant documentation and to arrange it appropriately
Documents	Scoping Report	Broad spatial options	Preferred Options Sustainability Appraisal Report	Sustainability Report - Consultation Version	Final Sustainability Report for Submission	Sustainability Appraisal Update for Shortfall in Housing Land	Final Sustainability Appraisal Report
L.	Non Technical Summary	Thematic options	Workshop Attendees	Workshop Attendees	Workshop attendees		Policy development and changes
			Changes made to policy principles Appraisal tables for Spatial	Policy development and changes Sustainability Appraisal	Policy development and changes Assessment tables for		Sustainability Appraisal implications of no Core Strategy Assessment tables for
			Policy Principles Appraisal tables for Core Policy Principles	implications of no Core Strategy Sustainability Appraisal of the Proposed Minor Changes to the Draft Core	Spatial Policies Assessment tables for Core Policies		Spatial Policies Assessment tables for Core Policies
			Appraisal tables for key Strategic Sites	Strategy Sustainability Appraisal of Alternative Broad Locations / Strategic Sites	Site Appraisals		Site Appraisals
			Appraisal table for key sites	Non Technical Summary	Sustainability Appraisal implications of no Core Strategy		Sustainability Appraisal of the Proposed Minor Changes to the Draft Core Strategy
					Sustainability Appraisal of the Proposed Minor Changes to the Draft Core Strategy		Alternatives to Broad Spatial Option - SP1
					Sustainability Appraisal of Alternative Broad Locations / Strategic Sites Non Technical Summary		Sustainability Appraisal of Alternative Broad Locations / Strategic Sites Revisiting the Sustainability Appraisal for housing land shortfall
							Post Consultation Changes to the Sustainability Appraisal Appraisal framework Policies reviewed Broad spatial options methodology

Table 3: Wigan's Sustainability Appraisal stages

methodology Workshop Attendees Site Appraisal Scoring Framework Appraisal of Inspector's modifications Sustainability Statement Scoping Report Contextual Policy Appraisal Matrix

In addition to the documents identified in Table 3, we also produced the following documents which assisted with the Sustainability Appraisal:

Issues and Options Topic Papers
 Preferred Options Topic Papers
 Proposed Submissions Topic Papers
 Final Topic Papers
 February 2008
 February 2011
 August 2011

The Evidence Review for the Core Strategy was also used.

There are 13 Topic Papers that provide a summary and analysis of the evidence which informs the Core Strategy and the Sustainability Appraisal. We have combined the evidence gathering stages to streamline the documentation provided and avoid duplication. This has ensured that sustainable development is embedded in the process of producing the Core Strategy. The 13 Topic Papers are:

- 1. Health and recreation
- 2. Community safety and neighbourhood quality
- 3. Community development and involvement
- 4. Education and learning
- 5. Economy and employment
- 6. Housing
- 7. Retail and centres
- 8. Accessibility
- 9. Built environment and landscapes
- 10. Wildlife habitats and species
- 11. Energy
- 12. Waste
- 13. Natural resources and pollution

The Topic Papers are presented consistently. Following an Introduction (section 1), Key plans, policies and strategies are reviewed (section 2) followed by other key evidence such as survey results and reports (section 3). The Key messages from that evidence are then identified (section 4) and these are then translated into the main spatial planning issues identified (section 5), the Main infrastructure issues identified (section 6) and the Main sustainability issues identified (section 7). Our sustainability framework is then identified for the Sustainability Appraisal (section 8), including sustainability objectives, appraisal criteria and baseline position.

Each Topic Paper can be read in isolation but, inevitably, there are important related matters in other Topic Papers. Key linkages are identified in section 1.

The Topic Papers were prepared initially to support the Scoping Report. At that time they were numbered differently, in line with the sustainability objectives, and some of the titles have since been altered. There was also an additional Topic Paper on climate change but climate change has since been incorporated in the other Topic Papers to ensure that it is integrated appropriately.

The Topic Papers were republished to support the Issues and Options for the Core Strategy (February 2008), the Preferred Options (June 2009) and the Draft Core

Strategy – Proposed Submission version (February 2011). The current versions were produced to support the Submitted Core Strategy (August 2011).

In total there are 776 pages throughout the 13 Topic Papers so they are not reproduced as appendices attached to the Sustainability Appraisal. Instead they are produced as freestanding documents. They can be viewed in the deposit locations (Wigan Life Centre and libraries) and there is a direct link to them from the Sustainability Appraisal webpage.

6.0 Our approach to sustainability appraisal

The Government guidance 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents¹ (2005)' recommends undertaking an integrated sustainability appraisal that incorporates the requirements of a Strategic Environmental Assessment.

This guidance sets out a number of stages and tasks for sustainability appraisal that runs in parallel to the development plan preparation process.

We followed this guidance to help us carry out sustainability appraisal of Development Plan Documents in Wigan. We also used 'good practice' examples from other local authorities as reference material.

The sustainability appraisal report for the Core Strategy represents the completion of up to and including Stage D of the process; which is outlined in table 4 below.

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

- A1: Identifying other relevant policies, plans and programmes, and sustainability objectives.
- A2: Collecting baseline information.
- A3: Identifying sustainability issues and problems.
- A4: Developing the sustainability framework and outlining what happens next.
- A5: Consulting on the scope of the sustainability appraisal

Output – Broad Scoping Report

Stage B: Developing and refining the options and assessing the effects

- B1: Testing the Core Strategy objectives against the SA Framework.
- B2: Developing the options.
- B3/B4: Predicting and evaluating the effects of the Core Strategy.
- B5: Considering ways of mitigating adverse effects and maximising beneficial effects.
- B6: Proposing measures to monitor the significant effects of implementing the Core Strategy.

Stage C: Preparing the Sustainability Appraisal Report

C1: Preparing the Sustainability Appraisal Report

Output – The Sustainability Report

Stage D: Consulting on the Core Strategy & Sustainability Appraisal Report

- D1: Public participation on the Sustainability Appraisal Report and Draft Core Strategy.
- D2: Appraising significant changes.

Output - Production of a Sustainability Statement / amend Sustainability Report

Table 4: The stages and tasks of sustainability appraisal

7.0 The Scoping Report (Stage A)

The first stage of the appraisal process required us to produce a broad Scoping Report. The scoping report sets out the policy context, the key issues to be considered, baseline information and our methodologies for carrying out sustainability appraisals. We also produced a series of topic papers, which support the scoping report and our Local Development Framework evidence-base. The topic papers are as follows (please note that they were numbered differently when originally produced and some of the titles have also been changed):

- 1. Health and recreation
- 2. Community safety / neighbourhood quality
- 3. Community development
- 4. Education and learning
- 5. Economy & employment
- 6. Housing
- 7. Retail and centres

- 8. Accessibility
- 9. Built environment / landscape
- 10. Wildlife habitats and species
- 11. Energy
- 12. Waste
- 13. Natural resources and pollution

Each topic paper report contains:

- a list of subject-related background documents which have been checked for relevant information, key messages, objectives and issues (Task A1);
- quantitative and qualitative baseline data / information (Task A2);
- the key sustainability issues, spatial planning issues, infrastructure issues (Task A3);
- the relevant parts of the proposed sustainability appraisal framework (Task A4); and
- a list of data sources, gaps and limitations (in accordance with the SEA Directive).

Throughout the Core Strategy development process we have continued to strengthen our evidence base through ongoing studies and updating our topic papers. During the scoping process, no elements were "scoped out". All sustainability issues were included and therefore considered at each stage of the Core Strategy process.

Task A1: Review of key documents and policy context

A number of key issues and messages were identified as part of a 'contextual review' of key plans, strategies, polices and other pieces of 'evidence'. These issues were taken into account when establishing the key sustainability issues and the appraisal framework.

Appendix R provides a detailed review of this 'evidence'.

Task A2: Baseline information

Each topic paper contains qualitative and quantitative evidence relating to the environmental, social and/or economic conditions in the borough. Trend data is provided where possible to get a picture of what the future baseline might be.

The sources of evidence are listed within each topic paper; which includes performance data, key policy documents and a range of specialist studies.

Task A3: Sustainability issues

Key sustainability issues facing the borough were identified through the 'contextual review', baseline studies and stakeholder/community engagement. These key issues are summarised in Table 5 below, although they can be broadly grouped under the following key themes.

Tackling and adapting to climate change

The lifestyle of the typical Wigan resident is unsustainable; contributing a net increase in greenhouse gases to the atmosphere. Action to mitigate such emissions is needed across all aspects of our lives if we are to move towards a low-carbon society and help to tackle climate change.

We also need to prepare for the unavoidable effects of climate change, which are likely to be an issue for many of the borough's residents, our wildlife and the economy. Sustainable design, green infrastructure and sustainable drainage systems all have an important role to play.

Inefficient use of resources

We need to use energy, water, land and other resources much more efficiently if we are to tackle climate change, fuel poverty and increasing scarcity of non-renewable resources.

We need to actively promote renewable and decentralised supplies of energy, and require developments that are sustainably located, designed and managed. We have not made enough progress in these areas so far.

Although we are recycling and composting more than ever before, we are also producing too much waste and a large amount still gets dumped at landfill.

Environmental protection

Cleanliness, environmental quality and feeling safe are key issues for people in their neighbourhoods.

It is also crucial to protect and enhance the wider 'environment' as it holds important functions for wildlife, recreation, resilience to climate change and health and well-being.

The biological quality of some rivers is poor, which affects several important wildlife species. Air quality is also an issue along some principal roads, affecting human health.

The quality and character of our landscapes, townscapes and buildings needs to be preserved and enhanced as there has been much 'standardised' development.

Deprivation and inequalities

There are notable concentrations of deprivation in the 'east west core' of the borough, with smaller pockets of deprivation outside of these areas. Half of the borough's super output areas fall within the 35% most deprived nationally. Some areas of the borough are also within the 3% most deprived nationally; these are typically located in post-war public sector housing estates, mostly in, around and between Wigan and Leigh town centres but also include places such as Hag Fold and Atherton.

People living in these deprived parts of the borough are likely to suffer more from a range of problems, such as: higher crime rates, worklessness, poorer standards of health, poor qualifications and poorer access to cultural and leisure facilities. The gap between the most deprived areas and the rest of the borough is also increasing for some issues like crime.

Unhealthy lifestyles

Generally, there are low levels of physical activity in Wigan. There are some areas where quality playing fields and other leisure facilities are not up-to-scratch, but there are various schemes underway to address such issues and enhance current provision. This includes Greenheart and Leigh Sports Village.

Whilst there are significant differences across the borough, life-expectancy is also low and incidences of multiple health problems are high.

Barriers to economic growth

The borough's economy is under-performing with low productivity, an over reliance on traditional sectors and an under-developed and under-sized knowledge economy.

The borough has a high degree of long-term unemployment and incapacity benefit claimants, but there are identified skills shortages in the population to meet the needs of modern business. .

The borough also has a limited average income that is lower than those earned in Greater Manchester, the North West region and nationally. This is related to the types of jobs available within the borough.

The economic downturn has affected development activity and it is likely to take time for recovery. Furthermore, there is a poor perception of Wigan as a business location, a shortfall of high quality employment accommodation and infrastructure constraints.

Congestion and unsustainable travel and transport

There is a strong consensus that the borough is congested, especially at peak times. This is largely due to the fact that our infrastructure needs strengthening and the predominant mode of transport is the private car, with low levels of cycling, walking and public transport use.

Patterns of movement are generally unsustainable too, with many people travelling outside the borough to work.

Summary

We have examined the contextual background and baseline data to identify any important issues and trends in Wigan that are relevant to the local development framework and sustainability.

This helped us to refine the sustainability appraisal framework, making sure that it will address the key issues for Wigan when we are appraising local development framework documents. Note that the Topic Papers numbering refers to the recent numbering and not the original versions used during the Scoping stage.

Summary of key issues

Sustainability Issue	Evidence
Local development pressure on biodiversity, natural and seminatural habitats / not enough land in the borough for development without causing environmental damage.	Topic Paper 10: Wildlife Habitats and Species
Environmental assets should be valued and protected strongly because of their strategic importance to wildlife, recreation, resilience to climate change, health and wellbeing. (<i>There should be no net loss</i>)	Topic Paper 10: Wildlife Habitats and Species
Lack of up-to-date information about the extent and condition of wildlife habitats and protected species.	Topic Paper 10: Wildlife Habitats and Species
Climate change increases the existing risk of flooding in the Borough, with a particular impact in areas of socially vulnerable groups, community buildings, businesses and many homes.	Topic paper 13: Natural resources & pollution
Over 40% of river length is not of "good" or "fair" biological quality, which is also a problem for 3 Biodiversity Action Plan species.	Topic paper 13: Natural resources & pollution
Poor air quality along some principal roads, which could be exaggerated by climate change and causes health impacts.	Topic paper 13: Natural resources & pollution
Need to ensure that soil and mineral resources are preserved and enhanced, so that their value to the economy, environment and society is maximised.	Topic paper 13: Natural resources & pollution

Sustainability Issue	Evidence
It is imperative that we respond and plan for climate change by ensuring sustainable drainage, design and construction in new developments.	Topic paper 9: Built environment and landscapes
The quality and character of landscapes, townscapes and buildings needs to be preserved and enhanced.	Topic paper 9: Built environment and landscapes
The amount of derelict land in the borough has reduced but still remains significant.	Topic paper 9: Built environment and landscapes
There is a large and increasing gap in crime between the most deprived areas and the rest of the borough; fear of crime also remains a problem.	Topic paper 2: Community safety & neighbourhood quality
Cleanliness, environmental quality and feeling safe are key issues for people in their neighbourhoods.	Topic paper 2: Community safety & neighbourhood quality.
Challenging waste targets confounded by growing waste streams.	Topic paper 12: Waste
The need for increased and better facilities and services for dealing with waste streams in a more sustainable way.	Topic paper 12: Waste
Low life-expectancy and multiple health problems, particularly in deprived areas.	Topic paper 1: Health & recreation
Low levels of physical activity.	Topic paper 1: Health & recreation
Lack of quality open spaces and a shortfall in playing field provision.	Topic paper 1: Health & recreation
Young people feel there is "nothing for them to do" and residents perceive "teenagers hanging around the streets" as a problem.	Topic paper 1: Health & recreation
Although amongst the most affordable in the country, homes are becoming less affordable in Wigan compared to incomes.	Topic paper 6: Housing
New households must be sustainably designed and existing stock continue to be upgraded.	Topic paper 6: Housing
Fuel Poverty continues to be a major issue due to the relatively low incomes in the borough.	Topic Paper 6: Housing
Low levels of educational attainment and a lack of basic skills, which affects employability. (Particularly in deprived areas)	Topic paper 4: Education & learning
Some buildings for education and learning are inappropriate for learning and climate change – They are located, built and / or resourced poorly.	Topic paper 4: Education & learning

Sustainability Issue	Evidence
Community cohesion is not strong in deprived areas, and there are issues with integration between people from different backgrounds.	Topic paper 3: Community Development and Environment
The Boroughs ecological impact needs to be reduced drastically by raising the awareness of and changing the attitudes and practices of businesses, organisations and the public.	Topic paper 3: Community Development and Environment
The need to use energy less and more efficiently; improving energy security and helping to tackle climate change.	Topic paper 11: Energy
Support a switch to decentralised, low-carbon sources of energy; such as district CHPs, biomass and microgeneration.	Topic paper 11: Energy
Must reduce the need to travel, particularly by car (which has high levels of use).	Topic paper 8: Accessibility
Encourage and enable a shift to more sustainable forms of travel by improving public transport and facilities for cyclists and pedestrians.	Topic paper 8: Accessibility
There is a shortfall of land for business development, but a need to protect environmental assets and promote a sustainable economy.	Topic paper 5: Economy & employment
The Borough's knowledge economy needs to be strengthened, and there are opportunities to exploit markets associated with environmental protection and climate change.	Topic paper 5: Economy & employment
Low wages and limited employment prospects arising from a lack of appropriate skills and qualifications.	Topic paper 5: Economy & employment

Table 5: Sustainability Issues summary

Task A4: Developing a sustainability framework

Using the evidence we have collected, we developed a broad sustainability appraisal framework for Wigan's Core Strategy. This framework consists of 18 headline objectives, sub-questions, monitoring indicators and impact matrices. The complete framework and the supporting matrices can be found in Appendix K (Framework), Appendix P (Site Appraisal Scoring Framework) and Appendix S (Policy Appraisal Matrices).

We have used this framework to assess the economic, social and environmental impacts of the Core Strategy. The appraisal framework will also be used when we are appraising other Local Plan documents such as the Wigan Central Area Action Plan.

The framework was modified and tweaked as we gathered further evidence and identified more appropriate indicators. Consequently, we have made slight changes to the scoping report and re-published updated versions as the Core Strategy progressed.

Our appraisal framework is underpinned by the following headline objectives:

- 1. To protect and enhance the borough's biodiversity and wildlife habitats.
- 2. To protect and improve local air quality.
- 3. To preserve and enhance the borough's soil and mineral resources.
- 4. To ensure sustainable and integrated management of the Borough's water resources.
- 5. To preserve and enhance the borough's landscapes, countryside and green spaces.
- 6. To ensure high quality, sustainable design in all developments whilst respecting, enhancing and capitalising on the borough's historic environment.
- 7. To address the waste hierarchy by: minimising waste as a priority, then reusing, recycling, composting and recovering for energy, before finally seeking disposal.
- 8. To reduce crime, disorder, drug use and the fear of crime and anti-social behaviour, particularly in our priority neighbourhoods and other hotspots.
- 9. To protect and improve the environmental quality of neighbourhoods, particularly those with high levels of multiple deprivation.
- 10. To protect and improve physical and mental health, improve access to good quality healthcare and encourage healthy lifestyles, particularly in the most deprived parts of the Borough.
- 11. To provide increased opportunities for engagement in cultural, leisure and recreational activities.
- 12. To ensure access for all to good quality, affordable housing that is sustainably designed, built and maintained.
- 13. To improve educational and vocational achievement, ensuring a culture of lifelong learning that allows people to fulfil their duties and potential in a global society.
- 14. To effectively involve local communities in decision making, build community capacity and encourage a sense of community identity and welfare that embraces diversity and equality of opportunity.
- 15. To ensure the borough has a secure supply of energy that meets current and future needs and minimises our contribution to climate change.
- 16. To develop transport, telecommunications and economic infrastructure so as to encourage efficient patterns of movement, less need to travel and improvements in the choice and use of sustainable transport modes.
- 17. To aim for a more sustainable local economy that is built on knowledge-based, socially responsible and environmentally progressive industry and commerce.
- 18. To ensure a thriving and prosperous borough of high employment and economic activity that benefits everyone.

Compatibility of Sustainability Objectives with each other

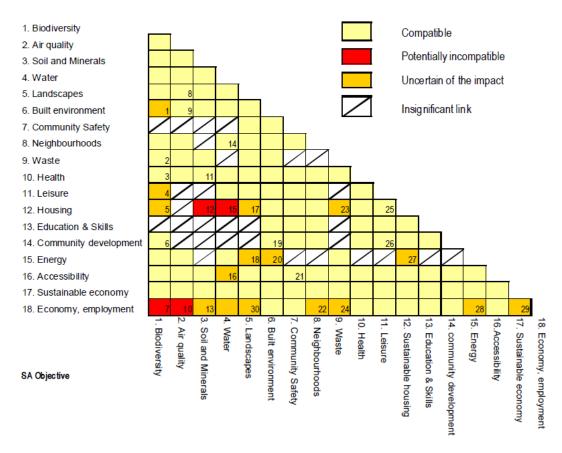


Table 6: Compatibility of Sustainability Objectives with each other

The Scoping Stage identified a number of issues where sustainability objectives may have an impact on other objectives. The appraisal process took these relationships into account.

Synergy of Sustainability Issues with each other

As well as between objectives the appraisal process specifically considered the relationships between issues. Although there are arguably links between all of the sustainability issues, Table 7 below demonstrates the most explicit links. In undertaking the appraisal, appraisers were aware of the synergy between different impacts and the notion that one impact may precipitate a secondary impact elsewhere. The Topic Papers also identify the key links between topics.

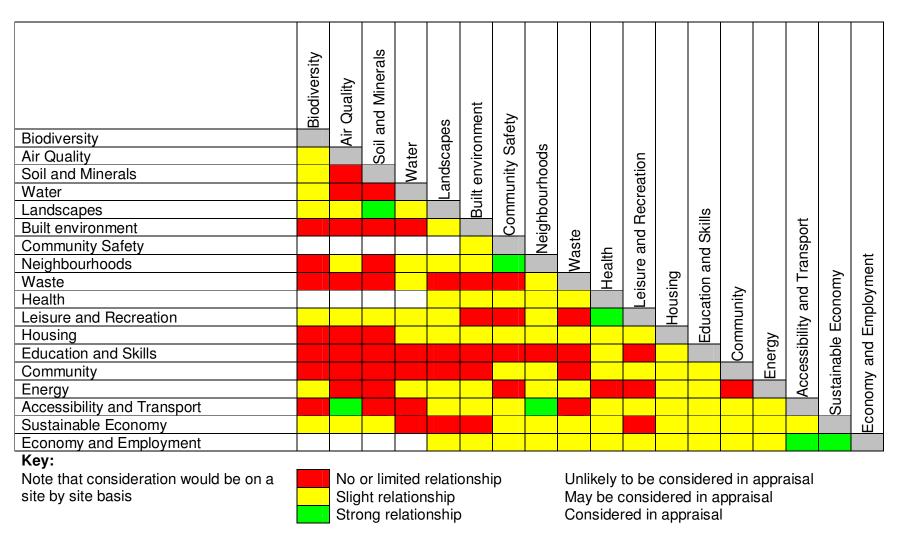


Table 7: Compatibility of Sustainability Issues with each other

Task A5: Consultation at the scoping stage

We sent a first draft of the broad scoping report to the following four statutory consultees for a minimum of five weeks (19 June - 25 July 2007).

- Environment Agency
- English Nature
- Countryside Agency
- English Heritage

We also invited comments from a wide-range of community groups and other stakeholders. This was to ensure that the appraisal was transparent, comprehensive and addressed the relevant issues.

We received a number of comments and suggestions from these statutory consultees and other stakeholders in response to the draft scoping report. We took account of these suggestions alongside new and updated evidence to help refine the scoping report. These comments and our response to them have been recorded in Appendix C of the scoping report.

English Nature and the Countryside Agency later merged to form **Natural England**. Subsequent consultations took place with this amalgamated organisation.

You can view the scoping report and supporting topic papers on our website at: www.wigan.gov.uk/ldfcorestrategy

8.0 Testing the Core Strategy objectives against the sustainability appraisal framework (Task B1)

It is important that the vision and objectives of the Core Strategy are in accordance with sustainability principles. To help achieve this we ensured that the sustainability appraisal helped to guide the Core Strategy as it developed.

The Core Strategy is fully integrated with the sustainability appraisal, so the objectives of the Core Strategy are informed by the same evidence and key issues as the sustainability objectives (using the topic papers). We are therefore confident that the Core Strategy objectives are broadly compatible with the sustainability objectives.

Subsequent stages of appraisal were sufficient to identify potential issues with the Core Strategy approach and opportunities for improvement. The Core Strategy responded to the issues raised in the appraisal and appropriate changes were made. The appraisal shows that the Core Strategy has responded to all aspects of sustainability and mitigated where possible. This does not mean there will be no detrimental impacts but, where there are, mitigation is in place.

9.0 Developing and appraising options (Task B2)

The scoping and evidence gathering stages helped us to identify what the key issues are for the Core Strategy / Wigan Borough - See section 7 above and sections 5, 6 & 7 of each topic paper for further detail.

There are different ways we could tackle these key issues, so it would not be appropriate for us to simply choose an approach that we think would work best. Instead, we needed to compare and contrast different options/alternatives, to justify which approaches are likely to be most sustainable and deliver the best outcome for all stakeholders.

Generating and testing such options is an essential part of the Local Development Framework and is also a key requirement of the Strategic Environmental Assessment Directive. Consideration of options also allows wide involvement from various stakeholder groups and stimulates debate about the issues, ideas and the different ways of proceeding.

9.1 Appraisal of the broad spatial options

Any options we developed needed to be clearly distinct from one another, but above all they had to be realistic and deliverable. With this in mind, we developed five spatial options, each of which outlined broad locations for where we might focus development in the borough.

Spatial Option	Reasoning
1. Focus on the east of the borough	The main reason for considering this option is the geographic proximity of the east of the borough to the rest of the Manchester city region. The city region, and in particular, the Manchester / Salford regional centre, is forecast to be the main location in the region for new jobs over the next 30 years, building on a considerable increase in jobs and prosperity over the last 20 years. Focusing on the east could enable the borough to capture a greater share of these new jobs and enable more residents to commute shorter distances to the regional centre for work.
2. Focus on the west of the borough	The main reason for considering this option is that Wigan is the largest town in the borough. While it is more distant from the rest of the city region, there are good rail connections to the regional centre and good rail and motorway links to the Liverpool and Central Lancashire city regions, and further afield on main 'west coast' routes. The town is also already a significant sub-regional economic hub in its own right.
3. Focus on the outer areas	The main reason for considering this option is that the outer areas are adjacent to the best road infrastructure serving the borough and many sites would be readily delivered by the commercial market, some with relatively little additional infrastructure needed.
4. Focus on the inner areas	The main reason for considering this option is that the inner areas are those most in need of physical, economic and social regeneration. If these objectives can be met in an interlinked way there is potential for considerable gains for health and well-being, the economy and the environment.
5. Dispersed development	The main reason for considering this option is that by dispersing development across the borough, in particular the nine towns, the adverse and beneficial impacts of development would be similarly dispersed.

Table 8: Spatial options considered

We used our sustainability appraisal framework to test the economic, environmental and social performance of each broad spatial option. We produced an <u>interim sustainability appraisal report</u> in February 2008 outlining the results of this stage of the appraisal and the methods that we used.

At this stage it was not possible to accurately determine the full impacts of each option, because they could differ depending upon the type of development and how it was implemented. Therefore, we made assumptions about the type and quality of development, generally adopting the precautionary principle when determining the likely impacts.

After we published the interim report we strengthened our evidence base and gathered new information. We revisited the spatial options appraisal to ensure that the results were representative of the latest evidence.

If we choose to not support any of the broad spatial options then the Borough is likely to develop in a way that ignores the spatial, environmental, economic and social issues we need to address. Current problems will be exacerbated – but at the same time, some areas will thrive.

Option 1: Focus on the east

								?						?				- very major positive - Major positive impact - moderate - major positive - moderate positive - minor positive
I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	10. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	16.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
								?						?				- minor negative
											ļ							- moderate negative
																		- moderate - major negative
																		- major negative impact
																		- very major negative

How 'sustainable' is option 1?

This option would not have a particularly positive impact on the borough's 'natural' environment, but any negative impacts on the environment would only be moderate. It is possible that some wildlife habitats and other environmental resources such as soil and air quality could be adversely affected in the east of the borough, but areas in the west would be under less pressure from development. There would be potential for indirect impacts on a European Protected Site at Manchester Mosses in Astley.

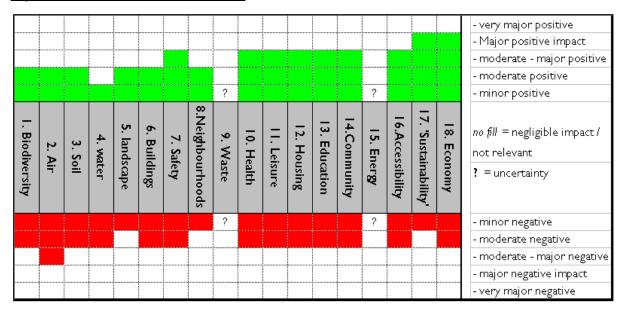
It could be quite beneficial to the borough's economy, as there are a number of attractive sites for business development in the east and it is close to the Manchester / Salford regional centre. This could improve job opportunities for local people, particularly in the east, depending on the type of development. Increased prosperity would also lead to moderate improvements in education and community cohesion, although areas in the west would not benefit as much from development. Because of poor public transport facilities in the east of the borough, car use would probably be increased, unless public transport improvements were secured alongside development. Levels of out-commuting are also high at present, which would probably increase unless employment opportunities were taken by local people.

There could be major positive impacts on community safety and health in the east of the borough where we know these are particular issues. These positive cumulative impacts would slightly outweigh the fact that deprived communities in the west of the borough would not benefit as much from development.

How does option 1 compare with the alternatives?

This option has fewer positive impacts than option 4 and the negatives are more pronounced, although it is generally better for air quality than option 4. However, this option is cumulatively much more 'sustainable' than option 3 (outer), which has far fewer positive and far more negative impacts. This option has very similar impacts to option 2 (focus on the west), although it performs slightly better against some social objectives such as health and community safety.

Option 2: Focus on the west



How 'sustainable' is option 2?

This option would not have a particularly positive impact on the borough's 'natural' environment, but any negative impacts on the environment would only be moderate. It is possible that some wildlife habitats and other environmental 'resources' such as soil, water and landscapes could be adversely affected in the west of the borough, but areas in the east would be under less pressure.

It is also possible that the character of the built (historic) environment in the west could be eroded, although there are also good opportunities for regeneration-led development in this part of the borough.

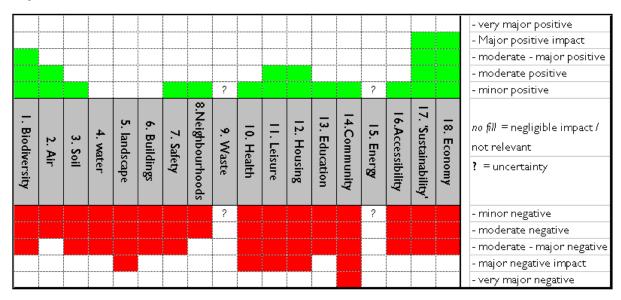
There are major positive impacts against economic objectives as Wigan has a number of attractive sites for business growth and could become a hub for office development supporting a knowledge-based economy. Provided that the employment opportunities brought by new business matched local skills, it could help tackle worklessness and increase prosperity in this part of the borough. As a result there could be moderate-to-major positive impacts on social inclusion in the west where there are large concentrations of deprived communities. However, deprived communities in the east would not benefit from the positive aspects of development as much and could become further isolated; which would have negative impacts across the range of social and economic objectives.

This option could lead to greater levels of traffic and congestion in areas that already suffer, such as Wigan town centre. As there are higher concentrations of people living near to main roads, there could be an adverse effect on human health due to poorer air quality. However, there are better rail and public transport links and greater scope to reduce car use in the west of the borough. Focusing development in the west might also relieve some of the congestion problems in the east.

How does option 2 compare with the alternatives?

On balance, considering the cumulative impacts, this is not as 'sustainable' as spatial option 4 (focus on inner areas) which has more positive and fewer negative impacts in total. However, it does have fewer negative and more positive impacts than option 3 (focus on outer areas). Although it has slightly more negatives than option 5 (dispersed development) it is far more positive on balance. This option has a similar impact to option 1 (focus on the east).

Option 3: Focus on the outer areas



How 'sustainable' is option 3?

This option would have a major negative impact on many social objectives as it does not target the areas that could benefit the most from the positive aspects of development. It would widen the deprivation gap between the borough's most deprived areas and the more affluent areas with a major negative effect on health, recreation, education, community safety, housing and social cohesion. Any improvements to communities in the outer areas would only constitute a minor positive impact in the context of the borough's deprived central areas.

This option is not likely to benefit the borough's built environments or landscapes. It is likely to have adverse impacts on both due to an erosion of character in outer areas, reduced scope for tackling the borough's largest areas of derelict land and less opportunity for regeneration and sustainable design.

It would be beneficial to the borough's economy as the outer areas are very attractive for business development due to accessibility advantages. However, it is possible that many of the jobs created would be taken by people who live outside the borough and that levels of commuting would increase. These areas would also be difficult to access by public transport, which would probably mean increased car use and further isolation for communities in the heart of the borough.

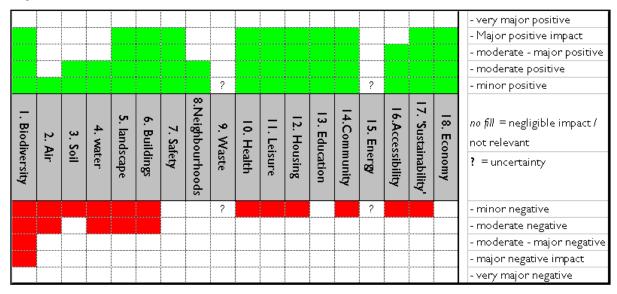
It could help to alleviate air quality issues by drawing traffic away from inner areas, although this may only be a secondary impact as conversely, it could create more problems due to increased car traffic and development close to existing air quality management areas. It may also reduce pressure on wildlife habitats and corridors which run through the centre of the borough. However, access to the Greenheart Regional Park would be poor and opportunities for habitat enhancement reduced. The allocation of any sites along the East Lancashire Road corridor would also present a potential impact on Manchester Mosses European Site.

There would also be a moderate-to-major negative impact on the borough's soil and mineral resources and flood risk would be increased.

How does option 3 compare with the alternatives?

On balance this is the least 'sustainable' spatial option; as the cumulative consideration results in many more negative impacts than any other option and has fewer positive impacts in total than the other four options. It only performs marginally better than spatial options 1, 2 and 4 in terms of air quality.

Option 4: Focus on the inner areas



How 'sustainable' is option 4?

It could have a major positive impact on many social objectives as it targets the areas that could benefit the most from the positive aspects of development. It could therefore help to narrow the deprivation gap between the borough's most deprived areas and more affluent areas, with very positive effects on health, recreation, education, community safety, social cohesion and housing objectives.

This option is also likely to have a major positive impact on the built (historic) environment and landscapes throughout the Borough. This is because there would be good opportunities for regeneration-led development where it is most needed (inner areas), and pressure on the built environment / landscapes in the outer areas would be relieved. However, focused development could still have a detrimental impact on the inner areas if it was not appropriate.

This option performs very well against economic objectives as it would help to build Wigan as a hub for office development, whilst still providing opportunities for Leigh. It could help to tackle worklessness in many of the borough's most deprived communities if development is inclusive. It could also help us to move towards an economy that is founded more on knowledge-based business and sustainability.

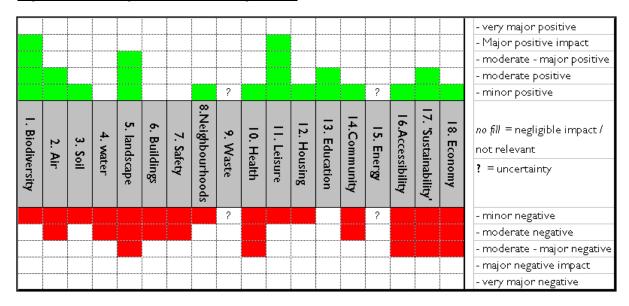
This option performs less well against the air quality objective, as it could increase traffic and congestion in the inner areas, where exposure to pollution is possible. However, parts of the inner areas are relatively well served by public transport and there are opportunities to reduce the need to travel and increase investment in, and use of, public transport, walking and cycling networks.

There is also the potential for major negative impacts on the borough's wildlife habitats if development is not appropriate and sensitive, although opportunities for enhancement are equally possible because of the excellent links with Greenheart.

How does option 4 compare with the alternatives?

On balance this is the most 'sustainable' spatial option; it has many more positive impacts than any of the other options across the range of sustainability objectives (particularly social and economic), and has fewer negative impacts in total. However, it performs only marginally better or worse against some of the environmental objectives than options 1, 2 and 5. Notably, this option could have the worst impact on the borough's wildlife habitats than any other option. However, the potential to have a very positive impact on biodiversity is equally as high.

Option 5: Dispersed development



How 'sustainable' is option 5?

This option is likely to have a negative impact on the economy, because the beneficial effects of development would be diluted and the prospects for business development would be stifled.

There would also be little positive impact on social inclusion because development would not be targeted in the areas it is most appropriate or where the greatest positive benefits to society would be anticipated. Therefore, current deprivation trends would be likely to continue or in some cases get worse. Although there would be a major positive impact on recreation opportunities locally, there would be moderately negative impacts on health, social cohesion and community safety objectives.

Although there could be minor adverse impacts on soil, minerals and water quality, there could be major positive impacts on the borough's wildlife habitats as they would be under less pressure from development.

Air quality issues in the borough could also be reduced if jobs and services were provided in local centres. However, it would be difficult to secure development on this basis and access to and from the different parts of the borough would remain poor with little opportunity for improvement.

The borough's built environment and landscapes could suffer moderately due to a lack of regeneration where it is most needed, and a loss of local distinctiveness due to areas becoming standardised.

How does option 5 compare with the alternatives?

On balance, this option has less pronounced impacts than any of the other spatial options across most aspects of sustainability.

The positive impacts that this option does have are mostly minor or moderate, and much less than any of the other options (apart from option 3 'outer areas'). Notably, option 5 only has minor or moderate positive impacts for the economic objectives, whilst all the other spatial objectives have a major positive impact in this area. However, option 5 does perform better than any of the others against the biodiversity objective.

This option performs much worse than options 1, 2 & 4 against social objectives, but better than option 3.

Summary and recommendations

Looking at the appraisal scores it was very clear that option 3 (focus on outer areas) was generally the worst performing against many aspects of sustainability. The appraisal suggests that this should not form a substantial part of the preferred option(s). However, there may still be some instances where a focus on outer areas would be more attractive, particularly for employment clusters.

Option 4 (focus on inner areas) generally performs the best against nearly all the different aspects of sustainability. The appraisal therefore suggests it should form a substantial part of our preferred option. Although, option 4 performs quite poorly for biodiversity and air quality, this could be tackled through mitigation and there are excellent links to Greenheart, which is a significant opportunity for enhancement.

Options 1 and 2 are somewhere in-between the 'best' and 'worst' scoring for most sustainability objectives with the exception of landscapes (option 1 is the best), sustainable economy (option 2 is joint best) and air quality (option 2 is the worst). We concluded that each of these broad options could form a part of the preferred option(s), drawing upon their strengths and avoiding areas of weakness.

The dispersed option (option 5) performs better than any of the alternatives against biodiversity and recreation objectives, yet it performs the worst of all the options against accessibility and both 'economic' objectives. It also performs poorly across most of the other sustainability objectives.

The broad spatial option chosen for the next stage of consultation – the preferred options, is set out in the next chapter.

NB: This appraisal helped us to identify what effects each option would be likely to have on the sustainability objectives. Whilst this information was valuable in helping us to shape the preferred options, the appraisal alone did not determine which approach we would take.

Who was involved in the appraisal of the spatial options?

The appraisal was coordinated and completed by members of the council's Sustainability Team and Planning Policy Team.

However, many more people were involved in carrying out the sustainability appraisal of the five spatial options. We asked for input from a range of council officers and partner organisations that have experience and knowledge in specific

aspects of sustainability. For example, for the health objective, we involved members of the NHS Primary Care Trust; for the community safety objective we involved officers from the council's Community Safety Team.

We also held a sustainability appraisal workshop where we invited community representatives to carry out a more simplified sustainability appraisal of the five spatial options. This provided us with a cross reference against the results we had gathered from the 'formal' sustainability appraisal and it also offered us a different perspective (a 'community view'). The community workshop was organised and delivered by the council's Sustainability Team.

We made use of baseline information, geographical information systems and professional knowledge to help us determine impacts and their significance.

The "Interim Sustainability Appraisal Report: Broad Spatial Options" (February 2008) contains full details of our methodology and the Broad Spatial Options assessment. This is reproduced as Appendix M.

9.2 Appraisal of the thematic options

We also looked at a range of different options for tackling 'thematic' issues such as design and housing density. This was to help us to inform policies on such issues that could affect development irrespective of the broad spatial location.

Although we considered these issues separately, we are aware of the close links that are needed between policy areas to achieve more sustainable developments.

In the tables below we have summarised the options that we took forward to inform our 'preferred approach' and those that were rejected, giving reasons for each. In some instances combinations of options were taken forward as there were positive aspects to more than one option. For full appraisal tables explaining the impacts of each thematic option in detail see Appendix N.

Sustainable design and construction:

The evidence told us that sustainable design and construction is a key issue that we need to consider. We identified three thematic options that could help to inform our approach to this issue.

Option SDC 1: Ensuring development is in accordance with national planning

policy and building regulations.

Option SDC 2: Develop higher borough-wide standards for all development,

covering issues such as energy, water (use, storage and disposal), biodiversity, waste, materials etc... (This may follow standards set out in the Code for Sustainable Homes and / or Building Research Establishment Environmental Assessment

Method (BREEAM).

Option SDC 3: Develop a range of standards to be applied on a site specific

basis

Options taken forward	Justification / explanation:	Comments
SDC 2 & SDC 3	An approach combining these two options was in-line with PPS 1 supplement on climate change. This option would also result in more positive impacts across a wide-range of sustainability objectives than option SDC 1.	Any local standards need to be supported by a robust evidence base.
Discounted option(s):	Justification / explanation:	
SDC 1	Local Authorities have an important role to play in driving the sustainable design and construction agenda forward ahead of national standards where opportunities arise. Not in the spirit of PPS 1, which suggests that higher standards should be sought where appropriate.	

Housing density

Option HD 1: To require all residential development to be a minimum of 40 dwellings per hectare.

Option HD2: To deliver residential development that is substantially in excess of 40 dwellings per hectare to allow other development of less than 40 dwellings per hectare.

Option HD 3: To require all residential development to be a minimum of 30 dwellings per hectare.

Option HD 4: To deliver residential development that is substantially in excess of 30 dwellings per hectare in town and district centres and close to inner area transport nodes to allow development in other areas of less than 30 dwellings per hectare.

Options taken forward	Justification / explanation:	Comments
HD4	More flexible approach that allows lower densities in exceptional circumstances. In-line with national planning policy.	Aim for 30 dwellings per hectare as a minimum. But we need to ensure that densities are appropriate to the character of an area / site. Encourage flexibility.

Discounted option(s):	Justification / explanation:
HD3	Inflexible approach. Would restrict development opportunities in some areas, affecting housing delivery and local distinctiveness.
HD1 & HD2	Options deleted in light of changes to Regional Spatial Strategy. Replaced by options HD3 & 4 above which were subjected to sustainability appraisal.

Development and Flood Risk

Option DFR 1: Allow development only in areas with low flood risk.

Option DFR 2: Allow certain types of development in flood risk areas but only if appropriate mitigation measures are implemented.

Option DFR 3: Allow development in all flood risk areas, with mitigation at the developers discretion.

Option DFR 4: Require that all development integrates sustainable urban design features such as rainwater recycling, green roofs, sustainable drainage systems and the use of 'green infrastructure' to help tackle and adapt to the effects of climate change.

Options taken forward	Justification / explanation:	Comments
DFR 2 & DFR 4	Both options support the general approach set out in PPS 25.	The allocation of sites must reflect application of the Sequential Test, and where necessary the Exception Test, with
	Both options supported by Environment Agency.	reasoned justifications provided for any decision to allocate land in areas at high risk.
	United Utilities show particular support for option DFR 4.	Sustainability Appraisals should use the Strategic Flood Risk Assessment as the main source of baseline information.
	These options achieve a more balanced and positive performance against the full range of sustainability objectives.	It may be difficult to secure SUDS for all development, so there may need to be a mix of 'encouragement' and 'requirement' on a site-specific basis. However, we should seek to achieve water neutrality from all new developments.

Discounted option(s):	Justification / explanation:
DFR 3:	Not in accordance with national policy (PPS 25). Scores poorly in many areas of sustainability.
DFR 1:	Flood risk should not preclude development if appropriate measures can be implemented to manage the risk. This option is not in accordance with national policy (PPS 25).

Built heritage and local character

Option BHLC 1:	Target areas outside of conservation areas (and those covered by design guides) for development.
Option BHLC 2:	Avoid 'infill' and focus on the provision of new 'sustainable settlements' that have their own distinct character.
Option BHLC 3:	Focus on regeneration-led development utilising the borough's built heritage (recycling old buildings/places etc.)
Option BHLC 4:	Consider (on a development-specific basis) existing patterns of local development and distinctiveness.

Options taken forward	Justification / explanation:	Comments
BHLC 3 BHLC 4	A mixed approach is most appropriate. Options BHLC 3 and BHLC 4 have fewer negative impacts and should form the focus of the approach.	See below.
Discounted option(s):	Justification / explanation:	
BHLC 1 BHLC 2	With regard to BHLC2; We should encourage new sustainable settlements, but avoiding infill might be difficult and restrictive. Some sites may also be in good, accessible locations supported by existing infrastructure. BHLC 1 could be too restrictive, so flexible policies need to be developed.	

Waste

Option W 1: Sustainably manage waste locally on-site (such as home composting and increased kerbside recycling etc, complementing and enhancing current service provision.

Option W 2: Sustainably manage waste in-line with the preferred spatial option when it is identified (.i.e. focus management of waste where development is focused)

Option W 3: Sustainably manage waste away from where the development is to be focused through the preferred option, when it is identified.

Option W 4: Export waste outside the borough.

Options taken forward	Justification / explanation:	Comments
W 1 W 2 W 3 W 4	Each of these options has its merits and will be necessary in tackling our waste streams. However, none of these options would be appropriate if pursued in isolation as each also has disadvantages.	An appropriate mix of these options needs to be determined, although there should be a preference for options 1 and 2. Option 4 should be the 'last resort'.
Discounted option(s):	Justification / explanation:	
None	See above	

Renewable and low-carbon energy supply

Option RLCES 1: Focus on developing the infrastructure and market for biomass power.

Option RLCES 2: Focus on large-scale wind-turbines.

Option RLCES 3: Focus on energy efficiency measures and micro-renewable technologies (through a 'Merton-style' rule) such as solar panels, mini-wind turbines, ground source heat pumps.

Option RLCES 4: Focus on developing a network of 'combined heat and power' systems.

Option RLCES 5: A mix of the above approaches, implementing different renewable / low-carbon energy schemes where they are most appropriate, feasible and viable.

Option RLCES 6: Carry on as we do at the moment, using mainly centralised supplies of energy and relying upon individuals to implement renewable energy schemes in the homes, businesses or new developments.

Option RLCES 7: Focus on developing the infrastructure and a market for alternative transport fuels (such as bio-fuels and electricity).

Options taken forward	Justification / explanation:	Comments
RLCES 5 RLCES 3 RLCES 4	A balanced, flexible approach is required to move towards a low carbon economy. Efficiency measures should be prioritised as they produce the biggest carbon reductions for the least cost. Combined Heat and Power networks are likely to be an important part of the energy mix (Stakeholder consultation also showed support for this technology).	Extent and broad location of large-scale renewables schemes needs to be determined. A Greater Manchester-wide energy study will set the framework and a local energy study will help us to identify opportunities and constraints.

Discounted option(s):	Justification / explanation:
RLCES 1	The adverse impacts of biomass supply chains on environmental assets are uncertain. However, in-line with the precautionary principle, we anticipate these to be significant; outweighing any economic benefits.
RLCES 2	Although large-scale wind has the potential to supply a significant proportion of the regions renewable energy targets, there would be considerable constraints to such a one-track approach.
RLCES 6	Evidence (particularly the Stern Report) suggests we need to take strong and early action to tackle climate change and energy security issues. Local Development Frameworks should help to drive the zero carbon agenda forward more proactively. A passive approach is not acceptable.
RLCES 7	The adverse impacts of bio-fuel supply chains on environmental assets are uncertain. However, in-line with the precautionary principle, we anticipate these to be significant; outweighing the economic benefits. Spatial planning has a limited scope to influence choice of fuel used.

Who was involved in appraisal of the thematic options?

The appraisal of the thematic options was undertaken by members of the council's Sustainability Team with assistance in each topic area from officers with 'specialist' knowledge.

This is the same approach we adopted for the appraisal of the broad spatial options.

The "Interim Sustainability Appraisal Report: Thematic Options" (February 2008) contains full details of our methodology and the Thematic Options assessment. This is reproduced as Appendix N.

10.0 Predicting and evaluating the sustainability implications of the Core Strategy (Tasks B3/B4/B5)

10.1 Developing the plan - the preferred options stage

Our preferred options outlined the favoured approach to development for the next 20 years in Wigan. Based on a robust and credible evidence base, the preferred options set out where we thought development should be focused spatially and how that development should be delivered.

Policy Principles

We made use of our evidence base (including the outcomes of our stakeholder engagement, and sustainability appraisal exercises at issues and options stage) to develop a number of 'policy principles' for the Core Strategy. These principles formed the basis of our next stage of consultation; informing stakeholders of our preferred approach and inviting their input.

Policy Principles	Role of Sustainability Appraisal
	The broad spatial options appraisal (as discussed in the previous section) identified the strengths and weaknesses of the broad approaches for delivering development in the Borough.
	Of the broad spatial options, we found that option 4: focus in the inner areas would achieve the best balance of environmental, social and economic rewards. It was also supported strongly by a wide range of stakeholders. Therefore this formed a significant part of our strategic spatial policy principles.
Core Spatial approach	However, although option 4 was generally our 'preferred approach', there were elements of the other broad options that were also positive in terms of sustainability. Therefore, the inner area was extended eastwards to Astley, westwards to the M6 motorway and south-westwards to Ashton-in-Makerfield as very much a combined option incorporating parts of option 1 (Focus on the east), option 2 (Focus on the west) and option 3 (Focus on the outer areas) too. Subsequently, following the consultation on addressing the identified shortfall in housing land, the spatial strategy also identifies the some of the southern and northern parts of the outer area for housing development, specifically Standish, Golborne and Lowton, and the part of Astley not already included.

Core Policy Principles Covering a range of themes in alignment with our evidence.	Out Core Policy principles were informed by our topic paper evidence, the thematic options appraisal and stakeholder engagement. Several stages of appraisal were carried out on the principles to inform their development and summarise their impacts.
Development Management Policy Principles	These added an additional layer of detail to the Core Policy principles where it is needed. We did not carry out sustainability appraisal on these principles at this stage.
Key strategic sites / Spatial Policies	A site appraisal framework was set up to identify impacts associated with strategic sites. Alternative sites were also appraised. The appraisal results helped to inform policy principles for each strategic site. We also developed and appraised a number of broader spatial policies for key areas such as Wigan Town Centre, Leigh and Ashton.

Table 9: Role of the sustainability appraisal in shaping our preferred options

10.2 Appraisal methods

We carried out several stages of appraisal on our preferred options.

Stage 1 – working with stakeholders to identify impacts

The first stage was carried out whilst the policy principles were being developed. This was to ensure that sustainability was fully embedded into our policies and it helped to shape their content.

At this first stage, a series of appraisal workshops were arranged where we identified the potential positive and negative impacts of our draft policy principles against our sustainability framework.

At each session we looked at the impact of all our policy principles against specific sustainability objectives from our appraisal framework. This allowed a thorough assessment of impacts against each aspect of sustainability.

A wide range of stakeholders where involved at this stage. Details of attendees and issues covered at the appraisal sessions are listed in Appendix O.

At each session, the groups worked through a series of appraisal matrices identifying the positive and negative impacts of each policy principle in the short, medium and long term.

We designed an appraisal matrix so that the characteristics of impacts were described in terms of time, scale, magnitude, likelihood and significance. Combined with a separate commentary / recommendations box this provided a clear audit-trail of our decisions.

The impact 'scores' were agreed collectively. This was based mostly on professional knowledge, although we endeavoured to use baseline information

wherever possible to inform the assessment. We also devised criteria, a guidance sheet and a significance matrix to help keep a consistent approach.

When any negative impacts were identified, mitigation measures were proposed in a separate commentary box if appropriate. Any opportunities to maximise the benefits of the Core Strategy were also recorded.

Impacts that were mitigated or improved upon might have resulted in a more positive impact than initially predicted. Therefore, the 'residual impact' was recorded in a final column taking into account any mitigation or improvements that might be implemented.

As a result of this first stage appraisal process, a number of changes were made to the draft policy principles.

Stage 2 – analysing the changes

In light of these changes, we carried out a second stage appraisal to account for any different impacts that might occur as a result of the revised policy principles.

We found that most of the impacts identified at the first stage of appraisal remained the same. However, in a number of instances there were slight changes.

At this stage we published a sustainability appraisal report alongside our preferred options document. This outlined the impacts of each policy principle against our sustainability framework.

Stage 3 - turning 'policy principles' into policies

Following consultation on our preferred options (and the accompanying sustainability appraisal) we began to work up the policy principles into detailed policies for inclusion in the publication document.

The majority of policies developed smoothly from their corresponding principles with little change. However, as the policies reflect the consultation responses we received, advice from the planning inspectorate and a consideration of the latest evidence, there are some aspects of the policies that needed to be reappraised in terms of sustainability.

Some policy principles were also split into several different policies, each requiring their own distinct appraisal. The Development Management policies were either incorporated into core policies or deferred for a later Development Plan Document.

These changes were made to ensure that the Core Strategy was more succinct, spatial and locally specific.

We used the results from previous rounds of appraisal to act as a strong starting position for this round of appraisal. We focused most of our efforts at this stage on areas where there had been a significant change between the policy principles and the corresponding policies.

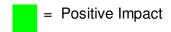
Appendix B sets out the key changes that were made between the preferred options stage and the working up of policies for the draft plan.

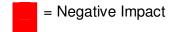
We used the same methods of appraisal at this stage as we had used in previous iterations of the appraisal. This included the ongoing involvement of stakeholders who had been involved in appraisal workshops as the Core Strategy was being developed.

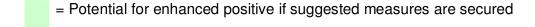
The following sections summarise the impacts of all our Core Strategy policies on economic, social and environmental objectives. Fully completed appraisal tables can be found in Appendices C (Spatial Policies), D (Core Policies), E (site specific appraisals - Preferred sites), and G (Alternative to policy SP1).

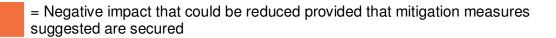
The appraisal tables from the issues and options and 'preferred options' stages can be found in the interim appraisal reports on our website.











10.3 Appraisal of the Spatial Policies

New Sustainable Development Policy

The National Planning Policy Framework states that Local Plans should be based upon and reflect the presumption in favour of sustainable development. The Planning Inspectorate considers that the policy is an appropriate way of meeting this expectation.

Shor	t term	ı impa	acts															
																		Major positive impact
																		Moderate - major positive
																		Moderate positive
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Minor positive
1. Biodiversity	2. Air C	3. Soil and	4. Water	5. Land	6. Built env	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure an	12. Housing	13. Educatio	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	no fill = negligible impact / not relevant
versity	Air Quality	Soil and Minerals	ater	Landscapes	Built environment	nity Safety	ourhoods	aste	ealth	Leisure and Recreation	ousing	Education and Skills	nmunity	nergy	and Transport	ole Economy	nd Employment	? = uncertainty
?	?	?:	?	?	?	?	?	?	?	?	?	?	٠.	?	?:	?	?	Minor negative
																		Moderate negative
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Med	lium t	erm i	mpaci	ts														Major positive impact
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?	?	?	?	_														Moderate - major positive Moderate positive
			_	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
1. Biodi	2. Air (3. Soil and	4. W		6.							13.	14.				18.	Moderate positive
1. Biodiversity	2. Air Quality	3. Soil and Minerals	4. Water	5. Landscapes		7. Community Safety	8. Neighbourhoods	9. Waste	? 10. Health	11. Leisure and Recreation	• 12. Housing			15. Energy	16. Accessibility and Transport	17. Sustainable Economy		Moderate positive Minor positive no fill = negligible impact /
1. Biodiversity		3. Soil and Minerals	4. Water		6.							13.	14.				18.	Moderate positive Minor positive no fill = negligible impact / not relevant
	Air Quality	Soil and Minerals		5. Landscapes	6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13. Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty
	Air Quality	Soil and Minerals		5. Landscapes	6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13. Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty Minor negative

Long	term	impa	cts															
																		Major positive impact
																		Moderate - major positive
																		Moderate positive
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Minor positive
1. Biodiversity	2. Air Q	3. Soil and	4. Wa	5. Lands	6. Built environment	7. Community	8. Neighbo	9. Waste	10. Не	11. Leisure and	12. Ho	13. Education and	14. Com	15. En	16. Accessibility	17. Sustainable Economy	18. Economy and	no fill = negligible impact / not relevant
ersity	Quality	and Minerals	Water	Landscapes	ronment	ity Safety	Neighbourhoods	ıste	Health	and Recreation	Housing	n and Skills	Community	Energy	and Transport	le Economy	d Employment	? = uncertainty
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Minor negative
																		Moderate negative
																		Moderate - major negative
																		Major negative impact

Summary of impacts – Sustainable Development Policy for Wigan Borough

The policy does not affect Core Strategy either positively or negatively because it adds little to the approach as laid out in the National Planning Policy Framework, which all other policies have been developed in consideration of. The policy in itself cannot, therefore, be considered positive or negative.

Policy SP1: Spatial strategy for Wigan Borough

Our spatial strategy policy is the driving force of the Core Strategy, setting out the areas and issues we plan to focus on. This is the council's final iteration of the policy taking into account the requirement to address the shortfall in housing land provision, as submitted to the Inspector in November 2012 and then the subsequent representations from the Inspector.

The following diagrams illustrate the impact of the core spatial policy against our 18 sustainability objectives over the short, medium and long terms

																		Major positive impact
																		Moderate - major positive
																		Moderate positive
																		Minor positive
1. Biod	2. Air (3. S oil and	4. W	5. Lands	6. Built en	7. Community	8. N eighb	9. W	10. н	11. Leis ure and	12. Ho	13. E ducation and	14. Cor	15. E	16. Acces sibility	17. Sustainable	18. E conomy a	no fill = negligible impact/not relevant
Biodiversity	Quality	oil and Minerals	Water	scapes	Built environment	ınity Safety	N eighbourhoods	Waste	. Health	าd R ecreation	. Housing	on and Skills	om munity	nergy	y and Transport	ble Economy	and Employment	? = uncertainty
																		Minor negative
																		Moderate negative
																		Moderate - major negative
																		Major negative impact

Medi																		Major positive impact
																		Moderate - major positive
																		Moderate positive
																		Minor pos itive
1. Biod	2. Air	3. S oil an	4. W	5. Lands	6. Built en	7. Community	8. Neight	9. W	10. н	11. Leis ure aı	12. H	13. E ducation	14. Cor	15. E	16. Acces sibility	17. Sustainable	18. Economy a	no fill = negligible impact/not relevant
B iodivers ity	Quality	and Minerals	Water	s ca pes	B uilt env ironment	ınity Safety	Neighbourhoods	Waste	Health	and R ecreation	Housing	on and Skills	om munity	nergy	y and Transport	ble E conomy	and Employment	? = uncertainty
																		Minor negative
?																		Moderate negative
																		Moderate - major negative
																		Major negative impact

Long	term	impa	c ts															
																		Major positive impact
																		Moderate - major positive
																		Moderate positive
																		Minor positive
1. Biod	2. Air (3. S oil and	4. W	5. Land	6. Built en	7. Community	8. Neighb	9. W	10. Н	11. Leis ure and	12. Ho	13. E ducation	14. Cor	15. E	16. Acces sibility	17. S us ta inable	18. Economy a	no fill = negligible impact/not relevant
Biodiversity	Quality	and Minerals	Water	Lands capes	B uilt environment	ınity S afety	Neighbourhoods	Waste	Health	nd R ecreation	Housing	on and Skills	om munity	nergy	y and Trans port	ble E conomy	and E mploy ment	? = uncertainty
																		Minor negative
?	?																	Moderate negative
																		Moderate - major negative
																		Major negative impact

Summary of impacts - Policy SP1: Spatial strategy for Wigan Borough

In the short term there is likely to be minor impacts with only recreation (due to links into Greenheart); housing and education being notable. Housing may also see a negative impact as supporting infrastructure is required but if this is delivered alongside it may also have some slight benefits for accessibility. Naturally this improves over time.

In the medium term, positive benefits begin to be realised with impacts being moderately positive across the range of objectives – albeit with only minor positives in biodiversity, air quality (and the related accessibility and transport), waste and energy. Some negatives begin to be noticeable – particularly around air quality, landscapes and accessibility/transport.

In the long term the spatial policy could have a major positive impact on social and economic objectives as it targets the areas that could benefit from the most positive aspects of development. However, this is tempered by the inclusion of some areas that will benefit only slightly if at all. There is less of a positive impact on environmental objectives but it still remains positive.

Overall it could help close the gap between the borough's most deprived areas and more affluent areas with notable impacts on landscapes, community safety, health, recreation, housing, community development and economy.

There will be notable long term negative impacts in landscapes and community safety although they will remain positive overall.

A lot will depend on the phasing of development to ensure those areas which most require investment receive it and supporting infrastructure is developed. Focusing development in more affluent areas may only serve to widen inequality gaps which could create further problems later on. However, overall the approach strongly supports our sustainability framework with notable positive impacts against most objectives in the long term.

There will a number of – predominantly minor – negative impacts across a range of objectives that will be unavoidable throughout the plan period and beyond. Without

appropriate mitigation measures in place, the negative impacts could be greater in the long term, especially in terms of accessibility and transport.

Overall this strategic spatial policy was selected because with mitigation and enhancement it would be the most sustainable approach to satisfying the borough's development needs. The development of this policy has been an iterative process. Having considered 5 broad spatial options initially at the Issues and Options stage, covered in section 9.1 above, the selected policy is effectively the 'east-west core plus Standish, Golborne and Lowton'. Potential alternatives involving the release of Green Belt land for housing development around Wigan and at Leigh were considered amongst the options for addressing the shortfall of housing land in 2012.

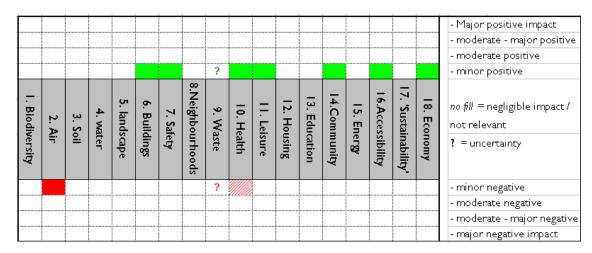
Individually those two spatial options are effectively incorporated within two of the broad spatial options considered at the Issues and Options: Option 1 'Focus on the east of the borough', which includes Leigh and Option 2 'Focus on the west of the borough', which includes Wigan. Together they are effectively incorporated within Option 4 'The inner are of the borough' and all 3 scenarios would be incorporated within the east-west core of the borough. Fundamentally however, they are in the Green Belt and the council does not believe that exceptional circumstances can be demonstrated for housing development in the Green Belt at this time. As such there are three alternatives to the strategic spatial policy selected:

- The east-west core plus northern parts of the outer option.
- The east-west core plus southern parts of the outer option.

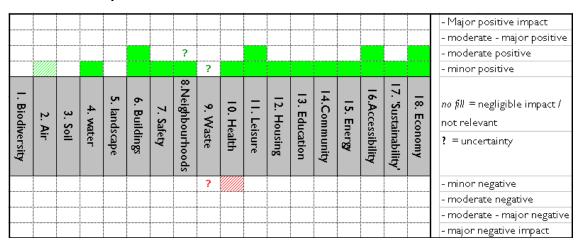
All of these have been appraised at different stages of the plan process and they are laid out in Appendix G.

Policy SP2: Our town and local centres

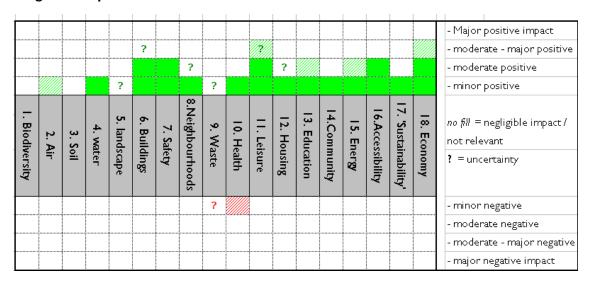
Short term impacts



Medium-term impacts



Long-term impacts



Summary of Impacts - Policy SP2: Our town and local centres

The impacts in the short term are minor in significance, with most being positive. These are because of preliminary works on tackling dereliction/vacancy, improving appearance and encouraging sustainable transport.

Over time the positive impacts increase as town centre improvements gather momentum. The impacts on the built environment, safety, accessibility and leisure opportunities are notable positive impacts. Economic gains would also be seen in the longer term, with the potential for major positive impacts if planning can be used to ensure that local communities benefit from town centre employment opportunities.

Air quality could be adversely affected in the short term due to an increase in trips before measures to secure sustainable travel are fully in place. This becomes less of an issue in the medium to long term.

There are potential negative impacts on health objectives, because health facilities are not explicitly identified as an appropriate town centre use.

Having said this, national policy does cover these issues to an extent and there are some examples of town centre health facilities that have been developed.

Being more proactive in this area would mitigate any potential negative impact, but the negative impact does need to be acknowledged because currently the three local hospitals and other facilities are located in out-of-centre locations.

There may also be problems with waste storage / management in dense urban areas, which would be compounded by the policy. On the other hand it could make it easier to coordinate waste collection and explore opportunities for schemes such as energy from waste.

Policy SP3: A key strategic site - Northleigh Park

Short	term	ı impa	acts															
																		Major positive impact
																		Moderate - major positive
																		Moderate positive
																		Minor positive
1. Biodiversity	2. Air (3. Soil and Minerals	4. Water	5. Landscapes	6. Built env	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure ar	12. Housing	13. Educatio	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	no fill = negligible impact / not relevant
iversity	Air Quality	Minerals	/ater	scapes	Built environment	nity Safety	ourhoods	/aste	lealth	Leisure and Recreation	ousing	Education and Skills	nmunity	nergy	and Transport	ble Economy	nd Employment	? = uncertainty
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Summary of Impacts – Policy SP3: A key strategic site - Northleigh Park

Development which facilitates new link roads that would improve accessibility in the area, makes this a more suitable and desirable strategic location for housing and employment in the longer term. Therefore, the social and economic impacts in the long term would be positive in this respect. Phasing of the approach should also help alleviate any environmental pressures that exist in the short term. Having said this, the short term disruption and increase in traffic could have adverse impacts on terms of congestion and air quality.

The majority of the site is previously developed, but it has naturally regenerated, giving the appearance of semi-natural green-space. However, much of the area is degraded, of poor quality and has little value for recreation, biodiversity, landscape character and agriculture. In fact, development offers the opportunity to create higher quality environments that are more accessible, attractive and enjoyable to local communities.

Development of community facilities and a local centre may assist with reducing longer transport journeys currently taken to elsewhere and also assist with developing the local social fabric – giving a focal point to the area.

There may be some negative impacts in the short term, but the environmental impacts should become more positive over time as mitigation and enhancement measures are secured. Improving links in to surrounding development and employment sites such as Leigh Road should help with ensuring long term sustainability of North Leigh. The phased approach to development, including the link road, should ensure development is sympathetic to the sustainability needs of the area at present and the needs of the future.

In the medium to long term, additional housing may also place pressure on secondary school places in the area, which are running close to capacity.

Energy issues are also a key consideration, as growth is typically associated with increased carbon and energy demand. However, if low carbon technologies are an integral feature of the development there is potential for significant positive impacts in the longer term.

Policy SP4: Broad locations for new development

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Biodiversity	Air Quality	Soil and Minerals	4. Water	Landscapes	Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	lealth	nd Recreation	12. Housing	Education and Skills	14. Community	15. Energy	/ and Transport	17. Sustainable Economy	18. Economy and Employment	? = uncertainty
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ersity	uality	Minerals	iter	capes	ronment	ity Safety	urhoods	ıste	alth	Recreation	using	n and Skills	munity	ergy	and Transport	le Economy	d Employment	? = uncertainty
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Summary of Impacts – Policy SP4: Broad locations for new development

There are a number of uncertainties in the short term which will depend on the phasing of development and whether housing is brought forward in particular areas – this is true for both positive and negative impacts.

Although there are some minor negative impacts anticipated during construction in terms of waste and biodiversity, impacts are anticipated to be minor in the short term, because levels of growth are not anticipated to be high and it takes time for the consequences of development to be felt. However, with the inclusion of housing in less deprived areas such as Standish there may be greater impacts than previously anticipated.

As levels of growth increase, the positive impacts would become more established, with particular benefits for housing objectives, economy and health. However, a number of negative impacts would accompany this growth, and although only minor, the impacts cross a wide range of objectives.

This reflects potential impacts on amenity, and other environmental objectives due to construction activities, and disruption. A number of other permanent impacts would also start to emerge, such as on landscapes, soil resources and water.

There is potential to mitigate the loss of soil resource to an extent if suitable provision is provided offsite, but this is an uncertainty. In-line with the precautionary principle, a negative impact has been assumed.

In the longer term, the main positive impacts are for housing and other social objectives, which all increase in significance. The economic impacts remain positive, but there would be further benefits if a greater commitment to low carbon businesses was established.

The impacts on landscape become more negative in the longer term due to increased growth and loss of character. Although some areas would benefit, and this is reflected in some positive impacts against landscape, others are sensitive to development and impacts would be unavoidable, although the significance could be lessened through mitigation.

The impact on water and energy objectives also needs to be mentioned, as development could increase pressure on distribution networks and capacity whilst increasing resource use.

Alleviating some of the pressures and mitigating some of the impacts will require robust infrastructure plans to be produced for broad locations in advance of development. A variety of business development along with housing types will be required to ensure a range of energy loads, which in turn can help make decentralised and low carbon energy schemes more viable.

Overall, the positive impacts of this policy outweigh the negatives, but it needs to be accepted that this policy will have unavoidable negative impacts on some aspects of sustainability.

Policy SP5: Greenheart

Short-term impacts

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I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8. Neighbourhoods	9. Waste	I 0. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	I 6.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
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Medium-term impacts

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I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	I 0. Health	II. Leisure	12. Housing	13. Education	14.Community	15. Energy	I 6.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
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Long-term impacts

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I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	10. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	16.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
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Summary of impacts – Policy SP5: Greenheart

The policy is anticipated to have a positive impact across a range of sustainability objectives, with some impacts getting more significant over time.

The potential negative impacts are only minor, and are related to increased pressure on landscapes, transport networks, recreation and biodiversity. There is also a potential negative impact on energy objectives in the longer term, but mitigation could make this neutral.

The main positive impacts relate to improved environmental conditions for wildlife, natural resources, landscapes, recreational opportunities and the knock on benefits in terms of human health.

The positive impacts for the environment relate to improved environments and image, which can attract investment in housing and businesses.

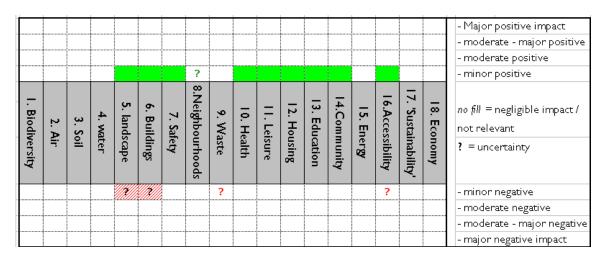
10.4 Appraisal of the Core Policies

We have developed 19 Core Policies, setting out our approach to development across a number of themes. Although these policies deal with distinct issues, it is important that they are read together as a whole. Fully completed appraisal tables for the Core Policies are contained within appendix D.

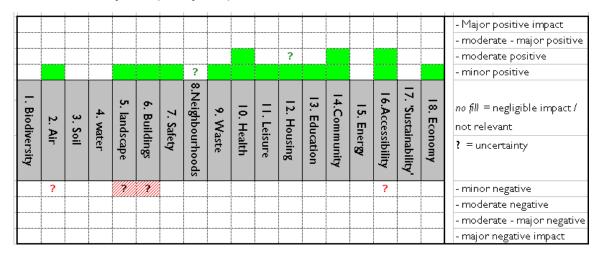
Policy CP1 - Health and well-being

The following diagrams illustrate the impact of the core policy for Health and Wellbeing against our 18 sustainability objectives over the short, medium and long term. A brief summary is given.

Short term impacts (0-5 years)



Medium term impacts (5-15 years)



Long-term impacts (15 years+)

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I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	I 0. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	16.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
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Summary of impacts – Core policy for Health and well-being

The policy could have a positive impact across a wide range of sustainability factors in the short, medium and long term - with the impacts getting more pronounced with time.

Health and well-being would be expected to improve over time, with knock on benefits to community development and other social objectives.

Housing markets may also be more attractive if there are good quality health and community facilities secured.

The policy acknowledges the importance of environmental factors in affecting health and well-being and through the use of Health Impact Assessments could also help to secure minor positive impacts in terms of the quality of natural resources and environments.

Although the impacts on accessibility are mainly positive, inappropriate location of facilities could also lead to further emissions from traffic and poor accessibility for some people.

Poor design and planning could also lead to some minor adverse impacts on objectives for Landscapes and the built environment. Strong application of other policies (for example 'design') should help to mitigate these minor impacts through.

On balance, the policy strongly supports our sustainability framework, having few negative impacts and a variety of positive impacts, some of which are moderate or major.

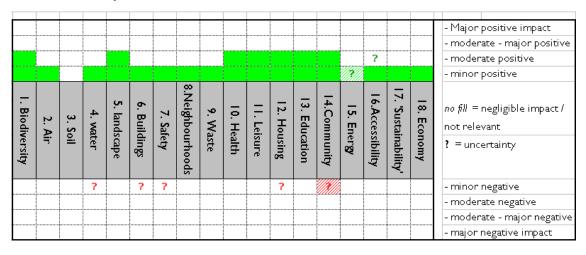
Policy CP2 - Open space, sport and recreation

The following diagrams illustrate the impact of the core policy for Open Space, Sport and Recreation against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts

																		- Major positive impact - moderate - major positive - moderate positive - minor positive
I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	I 0. Health	II. Leisure	12. Housing	13. Education	14.Community	15. Energy	I 6.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
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Medium term impacts



Long-term impacts

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Summary of impacts – Core Policy for Open space, sport and recreation

The policy is anticipated to have a range of positive impacts over all timescales, with the significance of the impacts increasing considerably over time.

There are obvious benefits in terms of objectives for leisure, and this has knock-on benefits for health, education and community development, with major positives in the long term.

There are a range of positive environmental impacts too, with benefits for landscape quality and biodiversity in particular.

The economic impacts of improved recreation, health and well-being would be felt through more attractive housing markets and a healthier workforce.

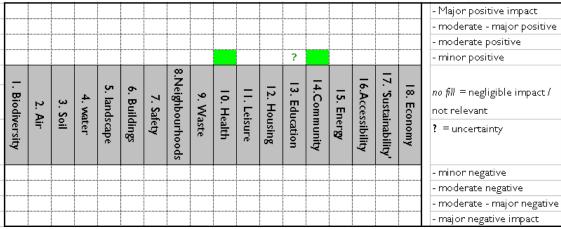
Overall, the likelihood of negative impacts is uncertain, but several potential impacts have been identified such as increased costs for housing, safety concerns with open space and communities not benefiting from new development.

These potential negative impacts are dependant upon the approach taken, so there are opportunities to avoid them.

Policy CP3 - Community facilities

The following diagrams illustrate the impact of the core policy for Community Facilities against our 18 sustainability objectives over the short, medium and long term. A brief summary is given of the impacts.

Short term impacts



Medium term impacts

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	Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	10. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	16.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
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Summary of impacts – Core policy for Community facilities

The policy is unlikely to have a large impact in the short term, although it may help to preserve and enhance some community facilities, which is positive for this objective.

The positive impacts increase over time, as more facilities become enhanced and the benefits of community activities start to be felt by communities.

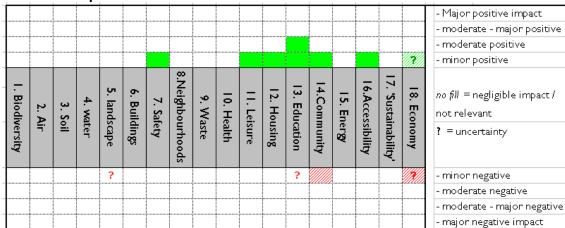
The only significant potential negative impact could arise if new facilities as a part of new development are inaccessible to existing communities, as this could create or widen inequalities.

The extent that impacts would be positive could be higher in some cases if new facilities are inclusive and consider sustainability in its broadest sense. For example, consideration of allotments as part of new built facilities would be positive in terms of the soil objectives. We cannot be certain about these impacts, so they are recorded with uncertainty.

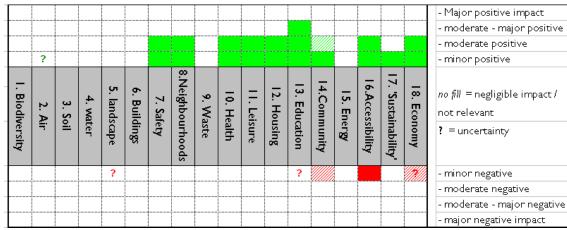
Policy CP4 - Education and learning

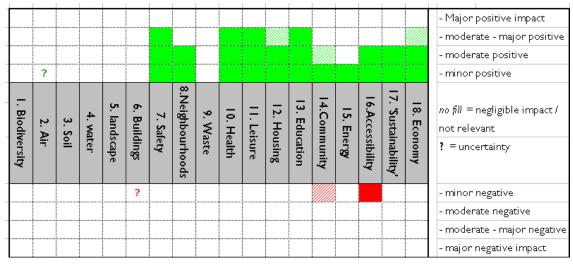
The following diagrams illustrate the impact of the core policy for Education and Learning against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts



Medium term impacts





Summary of impacts – Core policy for Education and learning

The policy would have major positive impacts on social and economic objectives in the long term. There is limited impact on environmental objectives.

Direct impacts include improvements to learning facilities and attainment, improved facilities and opportunities for recreation, and improved accessibility. Indirect knock-on impacts include lower levels of crime and anti-social behaviour, improved health and well-being and the attractiveness of housing.

The creation of a better skilled workforce also supports economic objectives, and could support growth sectors such as low carbon businesses.

However there is the potential for minor negative impacts over time if new facilities are not equally accessible to different social groups and communities.

This is not just about physical access but the location of facilities could be a particular issue that is worth highlighting.

Policy CP5 - Economy and employment

The following diagrams illustrate the impact of the core policy for Economy and Employment against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

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1. Biodiversity		3. Soil and Minerals	4. Water	5. Landscapes	6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13. Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact /
	2.				6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation		13. Education and Skills		15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty
	2.				6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste		11. Leisure and Recreation		13. Education and Skills		15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant
	2.					7. Community Safety	8. Neighbourhoods	9. Waste		11. Leisure and Recreation	12. Housing	13. Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty Minor negative

.ong	term	impa	cts															
																		Major positive impact
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1. Biodi	2. Air (3. Soil and	4. W	5. Land	6. Built env	7. Commu	8. Neighb	9. W	10. Н	11. Leisure an	12. Ho	13. Education and	14. Con	15. Eı	16. Accessibility	17. Sustainable	18. Economy ar	no fill = negligible impact / not relevant
Biodiversity	Quality	Soil and Minerals	Water	Landscapes	environment	Community Safety	Neighbourhoods	Waste	Health	and Recreation	Housing	on and Skills	Community	Energy	Accessibility and Transport	ble Economy	and Employment	? = uncertainty
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Summary of impacts – Core policy for Economy and employment

There is a mix of positive and negative impacts over all time periods.

In the short term, the balance of impacts is about the same. There are moderate positives associated with the encouragement of growth in key sectors, which would promote skills development and focus on areas of need. There are also minor positives in terms of improved community safety and health which comes with greater opportunities to access training and employment. However, this is tempered by the fact that developments will only be encouraged and not required to act on this issue.

There are also negative impacts in the short term across several sustainability objectives. These are related to an increased use of natural resources for growth such as water, energy and materials. There could also be some minor disturbance to wildlife, recreation and amenity. Encouraging rather than requiring development of local skills and employment may result in development be detrimental to the area in this respect.

The potential for negative impacts increases slightly over time as the development of strategic sites could have an impact on a variety of objectives. The impact on air quality could be a particular issue, due to increased traffic in areas that are already congested. This could potentially be mitigated in the longer term through infrastructure projects, but there are no guarantees that congestion would not remain a problem.

The positive impacts associated with the policy increase significantly over time with benefits for all areas of sustainability to varying magnitudes. There are particular benefits in terms of employment, economic growth, tackling inequalities and deprivation and the resultant impacts on health and well-being.

There are some minor positive impacts against environmental objectives as well, because development provides opportunities for enhancement.

Overall, the policy has major positive impacts across economic and social objectives and minor positives for environmental objectives. Although there are quite a number of negative impacts too, the magnitude of the positives outweighs this.

Policy CP6 - Housing

The following diagrams illustrate the impact of the core policy for Housing against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is also given.

Shor	t tern	n imp	acts															
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1. Biodi	2. Air (3. Soil and Minerals	4. Water	5. Landscapes	6. Built env	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13. Educatic	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	no fill = negligible impact / not relevant
1. Biodiversity	Air Quality	Minerals	'ater	scapes	Built environment	nity Safety	ourhoods	aste	ealth	id Recreation	ousing	Education and Skills	nmunity	nergy	and Transport	ble Economy	nd Employment	? = uncertainty
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					6. Built env	7. Commu	8. Neighb	9. W	10. Н	11. Leisure ar	12. но	13. Educatio	14. Cor	15. E	16. Accessibility	17. Sustaina	18. Economy ar	Major positive impact Moderate - major positive
1. Biodiversity	ium t 2. Air Quality	ermi 3. Soil and Minerals	mpac 4. Water	5. Landscapes	6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13. Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact /
					6. Built environment	7. Community Safety ~-	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing		14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant
					6. Built environment		8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty
					6. Built environment		8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Major positive impact Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty Minor negative

ong	term	impa	cts															
																		Major positive impact
									?					?				Moderate - major positive
																		Moderate positive
																		Minor positive
1. Biodi	2. Air (3. Soil and	4. W	5. Land	6. Built env	7. Commu	8. Neighb	9. W	10. Health	11. Leisure an	12. Ho	13. Education and	14. Con	15. Ei	16. Accessibility	17. Sustainable	18. Economy ar	no fill = negligible impact / not relevant
Biodiversity	Quality	Soil and Minerals	Water	Landscapes	Built environment	Community Safety	Neighbourhoods	. Waste	lealth	and Recreation	. Housing	on and Skills	Community	Energy	Accessibility and Transport	ble Economy	and Employment	? = uncertainty
						?						?						Minor negative
																		Moderate negative
																		Moderate - major negative
																		Major negative impact

Summary of impacts - Core policy for Housing

Relatively few impacts are anticipated in the short term, mainly due to the state of the current market and levels of house building but encouraging development in areas such as Standish will see some impacts albeit minor ones.

The few positive impacts are only minor, and relate to small achievements in housing delivery, and the knock-on benefits for the economy. Positive impacts on biodiversity could occur dependent upon schemes that are implemented as a result of development.

Conversely, development could also cause disturbance to biodiversity, and increases the use of resources such as water and energy.

As levels of house-building increase and cumulative impacts are experienced, there would be a significant rise in the amount of positive impacts. These would relate to environmental improvements secured through development, improved neighbourhood quality, and the direct impacts in terms of improved housing choice.

There would be some unavoidable impacts on natural resources and amenity in some parts of the borough, but the positives should outweigh these over time.

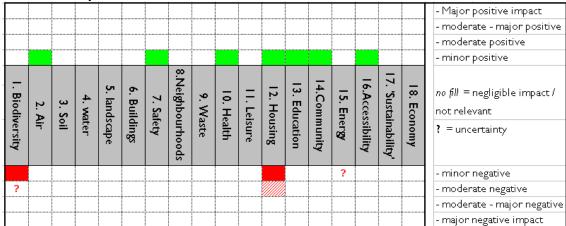
The areas of greatest concern are related to increased levels of traffic and congestion with associated air quality impacts. Unless adequate infrastructure is secured alongside strategies for sustainable travel, then there could be significant impacts against these objectives.

The impact in terms of energy objectives could also be negative if housing schemes do not help to deliver district energy schemes.

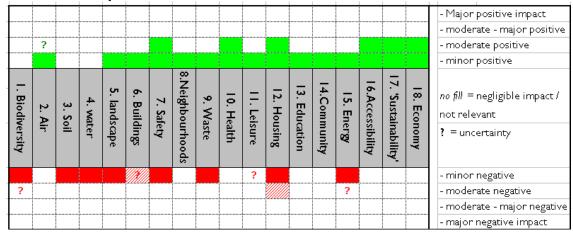
Policy CP7 - Accessibility

The following diagrams illustrate the impact of the core policy for Accessibility against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts



Medium term impacts



	?		?							?								- Major positive impact - moderate - major positive - moderate positive - minor positive
I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	10. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	16.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
	?									?								- minor negative
?						?								?				- moderate negative
																		- moderate - major negative
																		- major negative impact

Summary of impacts – Core policy for Accessibility

The policy could have a positive impact on social objectives by improving accessibility to jobs, facilities and services and promoting more active, healthier lifestyles. These impacts are minor in the short term, but get significantly stronger over time with moderate/major impacts on objectives for health, leisure and housing over the longer term.

The economy would also stand to benefit from improved transport links, with the opportunity to support growth of knowledge-based sectors. Again the impacts would get stronger over time.

Promoting sustainable travel patterns and modes of transport could have a positive impact on objectives for accessibility with the impacts getting stronger over time as schemes were implemented. There would also be knock-on benefits for air quality, improved street scene amenity and safety.

New road infrastructure could have a direct negative impact on environmental objectives such as biodiversity, landscape, historic features, soil and water. It could also affect open space used for recreation and leisure. Cumulatively, these impacts could be quite significant in the longer-term and would need to be tackled through mitigation and enhancement measures following further impact assessment. Having said this, infrastructure provision may be limited by the viability of delivery at strategic sites, so these impacts are not anticipated to be major.

The provision of improved infrastructure could have a positive impact on air quality in the longer term by relieving pressure in congested inner areas of the borough. Therefore, impacts have been identified as positive. However, it should also be noted that whilst new roads may help in the short-medium term to disperse trips, if capacity is taken up, we may be back to the same poor or even worse position in the longer term. The delivery of sites my also restrict the quality and quantity of infrastructures schemes.

Overall, the positive impacts of the principles outweigh the negatives, particularly in the longer-term. There are notable benefits for the economy, housing and wellbeing as a result of improved accessibility.

However, there are a number of negative impacts (on environmental objectives in particular) that need to be tackled through mitigation and / or enhancement measures.

The establishment of electric charging infrastructure could also have an impact on the capacity of the local electricity network. This is a potential negative impact in the longer term that needs to be planned for.

Policy CP 8 - Green Belt and safeguarded land

The following diagrams illustrate the impact of the core policy for Green Belt and safeguarded land against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

onor	t tern	n imp	acts															
																		Major positive impact
																		Moderate - major positive
																		Moderate positive
																		Minor positive
1. Biodiversity	2. Air Quality	3. Soil and	4. Water	5. Landscapes	6. Built env	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13. Educatic	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	no fill = negligible impact / not relevant
iversity	Quality	Soil and Minerals	/ater	Iscapes	Built environment	nity Safety	ourhoods	'aste	lealth	าd Recreation	ousing	Education and Skills	nmunity	nergy	and Transport	ble Economy	nd Employment	? = uncertainty
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																		Moderate negative
																		Moderate - major negative
																		Major negative impact
																		_
1ed	lium t	erm i	mpac	ts														Major positive impact Moderate - major positive
1ed	lium t	erm i	mpac	ts														Moderate - major positive
/led	lium t	erm i	mpac	ts														Moderate - major positive Moderate positive
	2.				6. Built env	7. Commu	8. Neighb	9. W	10. H	11. Leisure ar	12. н	13. Education	14. Cor	15. E	16. Accessibility	17. Sustaina	18. Economy ar	Moderate - major positive
1. Biodiversity		3. Soil and Minerals	4. Water	5. Landscapes	6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13. Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Moderate - major positive Moderate positive Minor positive no fill = negligible impact /
	2.				6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing		14. Community	15. Energy	16 . Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty
1. Biodiversity	2.	3. Soil and Minerals			6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing		14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty Minor negative
1. Biodiversity	2.	3. Soil and Minerals			6. Built environment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing		14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	Moderate - major positive Moderate positive Minor positive no fill = negligible impact / not relevant ? = uncertainty

ong	term	impa	cts															
																		Major positive impact
																		Moderate - major positive
																		Moderate positive
																		Minor positive
1. Biodi	2. Air (3. Soil and	4. W	5. Land	6. Built env	7. Commu	8. Neighb	9. W	10. Н	11. Leisure ar	12. Ho	13. Education and	14. Cor	15. E	16. Accessibility	17. Sustainable	18. Economy ar	no fill = negligible impact / not relevant
Biodiversity	Quality	Soil and Minerals	Water	Landscapes	Built environment	Community Safety	Neighbourhoods	. Waste	10. Health	and Recreation	. Housing	on and Skills	Community	Energy	Accessibility and Transport	ble Economy	and Employment	? = uncertainty
?		?					?						?					Minor negative
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																		Moderate - major negative
																		Major negative impact

Summary of impacts – Core policy for Green Belt and safeguarded land

The policy would help to protect areas of open space and countryside from development, which could have a direct positive impact on environmental objectives such as biodiversity, soil, water, landscapes and the character of the built environment.

However, the policy is more or less a continuation of existing green belt policy and will not really involve enhancement.

There is also a notable positive impact on objectives for leisure and recreation over all time scales, reflecting the major role of Green Belt in maintaining areas of open space.

The positive impacts are consistent over time with only a small increase against objectives for housing and accessibility over the longer term. These increases are associated with the promotion of sustainable travel patterns.

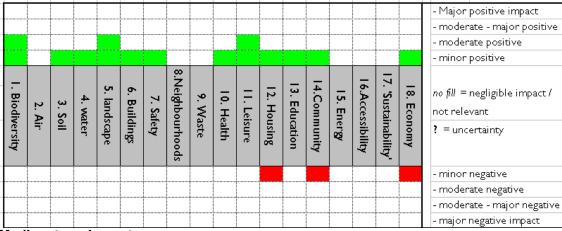
The policy could have a negative impact on objectives for waste, economy, housing and energy, as they could prevent the development of sites that are suitable and / or attractive for housing, employment, and/or waste and energy schemes.

Overall, the positive impacts (notably against 'environmental' factors) far outweigh the minor negative impacts associated with these policy principles.

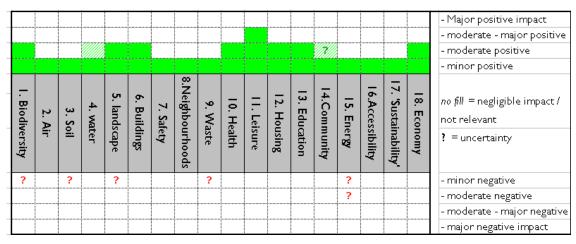
Policy CP9 - Strategic landscape and green infrastructure

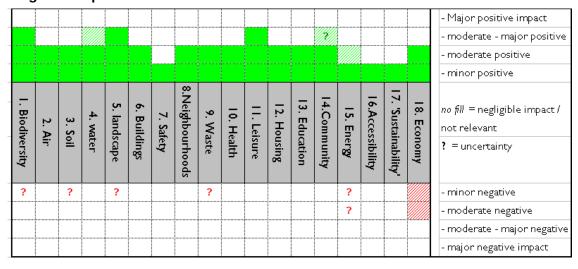
The following diagrams illustrate the impact of the core policy for Strategic Landscape and Green Infrastructure against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts



Medium term impacts





Summary of impacts - Core policy for Strategic landscape and green infrastructure

The policy is likely to have a direct positive impact on 'environmental' factors such as water, air quality, landscape, biodiversity, soil and the built environment. These impacts would be moderate or minor in the short term but could get stronger over time as more enhancement measures were implemented and green networks were strengthened.

Notably, the policy would help to tackle flood risk, improve resilience to the impacts of climate change, preserve and improve environmental quality, preserve heritage, and promote sustainability in design.

There could also be knock-on positive impacts against a range of social objectives such as housing, education, health, leisure and community development. Again, many of these impacts would get more positive over time.

The policy could also help to create attractive environments for businesses activity and residents, having an increasing positive impact on economic objectives over time.

In the short term, enhancement measures may be seen as a burden to development, which could have a minor negative impact on housing and economic objectives.

In the medium to longer-term, we identified that conflicts in the use and function of green infrastructure could also lead to negative impacts on biodiversity, soil, landscape and waste objectives. However, multi-functional use is promoted, so the impacts are only determined as minor and uncertain.

Negative impacts with regards to energy are potentially more of an issue because schemes could clash with other green infrastructure objectives, and this could have knock-on impacts on the ability of businesses to compete in the longer term. These issues could be mitigated if suitable energy schemes were encouraged and supported on landscapes and open areas that are not protected or particularly sensitive.

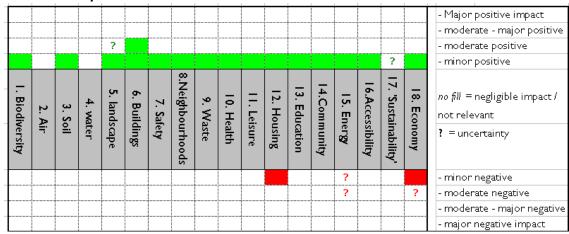
Overall, the policy strongly supports our sustainability framework with positive impacts across the entire range of environmental, social and economic factors in the longer-term.

There are very few negative impacts over all time scales; these are uncertain and there is potential to mitigate identified impacts.

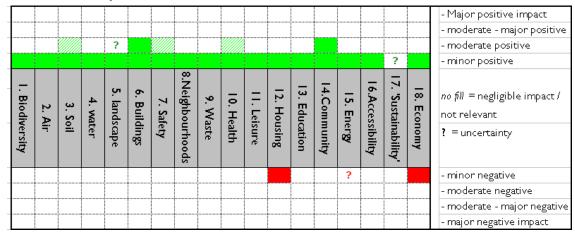
Policy CP10 - Design

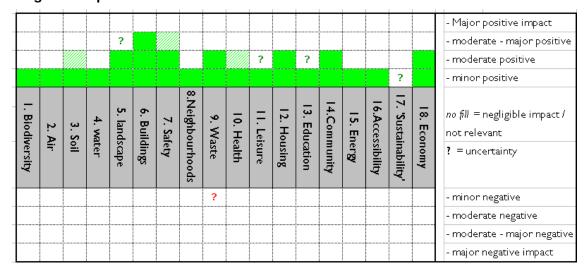
The following diagrams illustrate the impact of the core policy for Design against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts



Medium term impacts





Summary of impacts - Core policy for Design

The policy for design supports our sustainability framework, with positive impacts across environmental, social and economic objectives. The impacts are mostly minor in the short term, but get more pronounced over time.

The policy could help to create more attractive, vibrant and pedestrian friendly places; having a significant positive impact on a number of social objectives such as health, community safety and education.

There could also be positive impacts on environmental objectives, with notable benefits for landscape, built environment and neighbourhood quality.

High quality design could also make Wigan a better place to live and work. This could potentially improve the image of the borough, attract investment, raise aspirations and improve quality of life.

There are very few negative impacts identified over any time scale, with those identified in the short to medium term disappearing in the longer term. These adverse impacts are mainly due to the perceived or actual costs of implementing higher quality and more sustainable design.

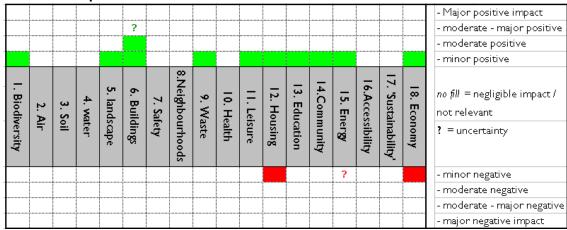
In the short term, there is potential for buildings to be constructed using materials with high embodied energy and poor environmental performance, as the main influence on materials seems to be character. Although these impacts are uncertain, it is important to flag them as an issue. In the longer term, these issues would be expected to diminish given that standards are expected to rise.

Overall, the policy will have a significant positive impact.

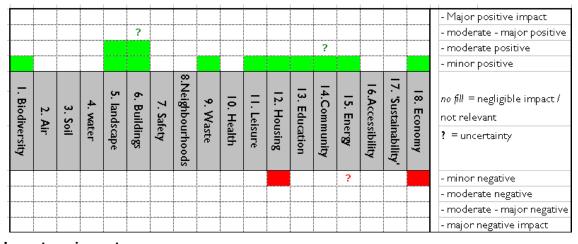
Policy CP11 - Historic environment

The following diagrams illustrate the impact of the core policy for Historic Environment against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts



Medium term impacts



					?	?	?						?					- Major positive impact - moderate - major positive - moderate positive - minor positive
I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	10. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	16.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
														?				- minor negative - moderate negative
																		- moderate - major negative - major negative impact

Summary of impacts - Core policy for Historic environment

The spread of impacts is not as wide as for other policies, due to the specific nature of this policy. However, the impacts are mostly positive, with particular benefits noted against objectives for landscape and the built environment.

Protection and enhancement of historic features and cultural heritage should help to strengthen community pride and improve interactions with the built environment. It can also improve the attractiveness of places and give them a unique selling point, which is positive for housing and economic development.

Encouraging appropriate re-use of existing buildings is also positive in that it helps to reduce the embodied energy and resources spent in new buildings and directs development towards areas that are generally well served by infrastructure.

However, historic buildings and features can also act as a barrier to development and the installation of renewable energy technologies.

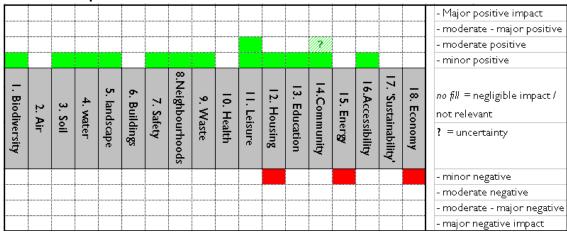
Retaining and enhancing existing buildings and built heritage can also be costly and add to development cost. However, these can also be used as a positive feature in new developments and to attract investment.

On balance, the policy has a limited impact upon sustainability in its broadest sense. However, the positive impacts outweigh the potential negative impacts significantly.

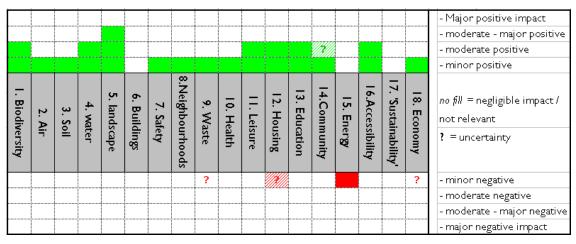
Policy CP12 - Wildlife habitats and species

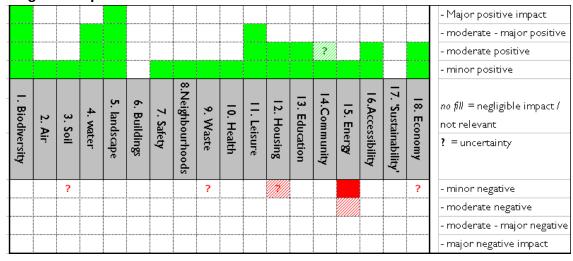
The following diagrams illustrate the impact of the core policy for Wildlife Habitats and Species against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts



Medium term impacts





Summary of impacts – Core policy for Wildlife habitats and species

We determined that the policy will have mostly positive impacts over all time scales. Impacts on environmental objectives are significant, with major positives determined in the longer-term against objectives for biodiversity, water and landscape. There are also strong links with opportunities for recreation, with a moderate / major impact anticipated over the longer-term.

Appreciation of open spaces and improved opportunities for interaction with wildlife could have knock-on positive impacts on social objectives such as health, education and community development. However, these are only determined as minor impacts that are not likely to increase significantly over time.

The policy could have a progressively positive impact on housing and economy objectives, as quality environments are attractive for housing and employment development. However, consideration for biodiversity may also restrict development in some locations or affect viability, which are particular issues in the current market.

On balance, the impacts on accessibility objectives should be positive. But, it should be noted that certain areas will have to be protected from infrastructure provision if the integrity of habitats and landscape is to be protected. There is also a potential conflict in use between certain energy schemes and the preservation / enhancement of biodiversity.

Preservation of geological features should be beneficial in ensuring a stable landscape for wildlife to flourish as long as these features are not open to exploitation in the future. Case-by-case impact assessments will be necessary to determine the appropriateness of schemes and potential mitigation / enhancement measures so that important development opportunities can be realised. Commitment to this is reflected in the consideration of air quality assessments for certain sites.

Overall, the policy strongly supports our sustainability framework, with particular benefits for environmental assets and resources.

Policy CP13 – Low carbon, decentralised energy infrastructure

This policy has been deleted on the Inspector's recommendation.

Policy CP14 - Low-carbon development

The following diagrams illustrate the impact of the core policy for Low Carbon Development against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

hor	t tern	ı imp	acts															
																		Major positive impact
																		Moderate - major positive
																		Moderate positive
										?								Minor positive .
1. Biod	2. Air Quality	3. Soil and Minerals	4. V	5. Land	6. Built environment	7. Commu	8. Neighb	9. W	10. H	11. Leisure and Recreation	12. Н	13. Educati	14. Cor	15. E	16. Accessibility and Transport	17. Sustaina	18. Economy a	no fill = negligible impact / not relevant
1. Biodiversity	Quality	d Minerals	4. Water	5. Land scapes	vironment	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	าd Recreation	12. Housing	Education and Skills	14. Community	15. Energy	and Transport	17. Sustainable Economy	18. Economy and Employment	? = uncertainty
							?			?								Minor negative
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	lium t																	Major positive impact Moderate - major positive
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								?		?			?					Minor positive
1. Biodi	2. Air Quality	3. Soil and	4. Water	5. Landscapes	6. Built env	7. Community Safety	8. Neighbourhoods	9. Waste	10. Health	11. Leisure and Recreation	12. Housing	13 . Education and Skills	14. Community	15. Energy	16. Accessibility and Transport	17. Sustainable Economy	18. Economy and Employment	no fill = negligible impact / not relevant
1. Biodiversity	Quality	Soil and Minerals	'ater	scapes	Built environment	nity Safety	ourhoods	aste	ealth	d Recreation	ousing	n and Skills	nmunity	nergy	and Transport	ble Economy	าd Employment	? = uncertainty
										_			mm				-	
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Long	term	impa	icts															
																		Major positive impact
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1. Biodi	2. Air (3. Soil and	4. W	5. Land	6. Built env	7. Commu	8. Neighb	9. Waste	10. Health	11. Leisure an	12. Ho	13. Education and	14. Con	15. Eı	16. Accessibility	17. Sustainable	18. Economy ar	no fill = negligible impact / not relevant
Biodiversity	Quality	Soil and Minerals	Water	Landscapes	Built environment	Community Safety	Neighbourhoods	'aste	lealth	and Recreation	. Housing	on and Skills	Community	Energy	Accessibility and Transport	ble Economy	and Employment	? = uncertainty
								?		?								Minor negative
																		Moderate negative
																		Moderate - major negative
																		Major negative impact

Summary of impacts – Core policy for Low-carbon development

The inability of this policy to do more than encourage consideration of low carbon development reduces its potential to make a difference and this is reflected in the impacts.

In the short term, the impacts as mostly negligible or minor, as it will take time for the benefits of energy schemes to be felt.

Having said this, the additional initial costs of implementing higher sustainability standards could exclude lower income groups if no subsidy is provided. The cost of renewable fuel may also be more expensive in the short-term, which may compound issues of fuel poverty. This is reflected by a moderate negative impact on the housing objective.

In the medium to longer term, positive impacts start to become more pronounced albeit in a minor way as there is greater time for energy schemes to be established and the market conditions are likely to become more favourable for low-carbon technologies and buildings.

Initial impacts on the economy may be negative as the higher costs associated with sustainability measures could affect profitability and limit growth. However, as technologies became less expensive and more commonplace, impacts on the economy would turn positive as resource efficiency would be more likely to be associated with a stronger economy – but this will depend on developers wanting to install low carbon measures more than the policy directing that change.

Overall the impacts on housing are mixed. Whilst the principles would help to promote more sustainable homes (in support of the national programme for zero carbon development), there could be a negative impact on deliverability associated with increased costs. Over the longer-term the cumulative impact has been determined as a minor positive, as zero carbon development should be in place and the policy will have supported this transition to an extent.

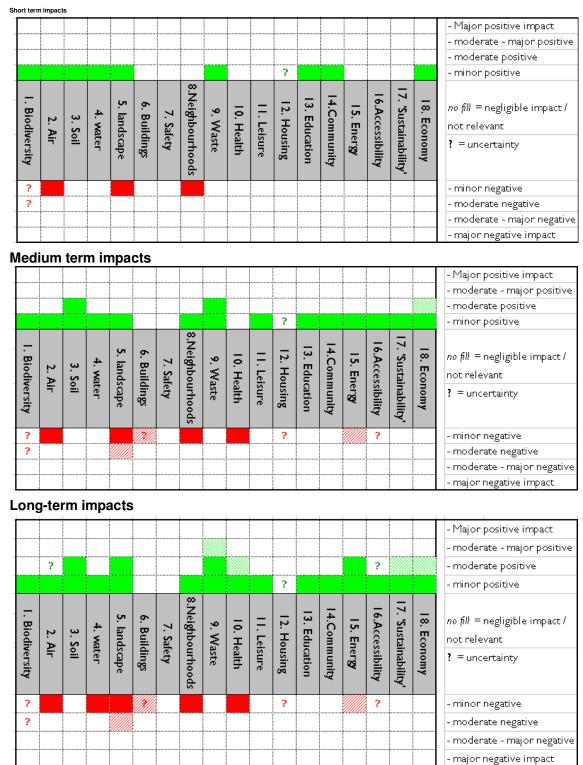
There are potential negative impacts on landscape associated with off-site measures which need to be considered. On-site amenity may also be an issue where biomass is involved, although the impacts are only expected to be minor and there is no direct support for heat and power schemes.

On balance, the positive impacts in the longer term outweigh any negatives. Although the potential for negative impacts neutralises the positives in the short term, over time the balance shifts considerably to positive.

Further positive impacts could be achieved by including greater consideration and requirements for district power schemes.

Policy CP15 - Waste

The following diagrams illustrate the impact of the core policy for waste against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.



Summary of Impacts – Core policy for Waste

There are particular benefits in achieving our waste objectives as waste would be increasingly viewed as a resource in the longer term. There is also potential to support low-carbon energy schemes utilising waste to generate heat and electricity.

The policy also supports the development of skills and business activity in environmental sectors.

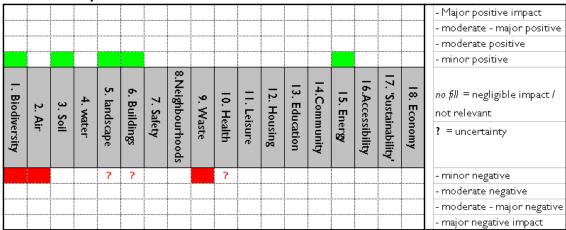
From a negative viewpoint, waste facilities and collection arrangements can generate heavy goods traffic and local amenity concerns that could affect the character of built and natural environments. However, there is scope to mitigate impacts through design and operational conditions.

The policy discourages land-filling, which has positive landscape, soil and amenity impacts of its own. Re-use and energy generation also results in less waste going to landfill, but there can be conflicts between the use of waste streams for energy generation or recycling/reuse.

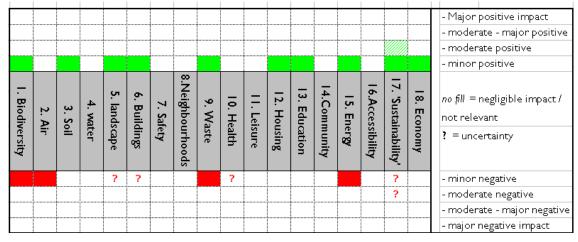
Policy CP16 - Minerals

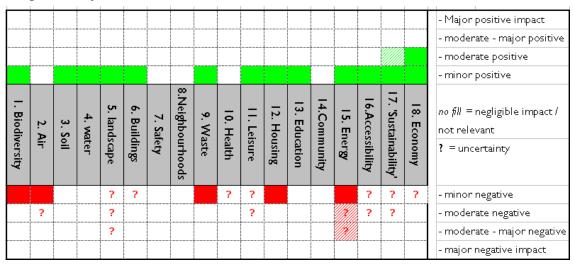
The following diagrams illustrate the impact of the core policy for Minerals against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short term impacts



Medium term impacts





Summary of impacts - Core policy for Minerals

There are few impacts in the short term, but extraction facilities could disturb wildlife or cause environmental nuisance (e.g. dust)

In terms of benefits, there would be positive impacts on soil and other natural resources through the promotion of secondary materials.

Positive impacts arise across a number of other sustainability objectives in the medium and long term, but the magnitude remains mostly minor. The exception is a moderate impact on the economy, because preservation of minerals would support future growth aspirations and business activities.

In the longer term, the potential for negative impacts increases significantly due to the possibility of coal and peat extraction. This could have negative impacts upon carbon reduction initiatives, landscape quality, recreation and air quality. Having said this, these impacts are uncertain, so we cannot predict them with confidence. Recognising bog land as beneficial in terms of its habitat and carbon sink potential is welcomed.

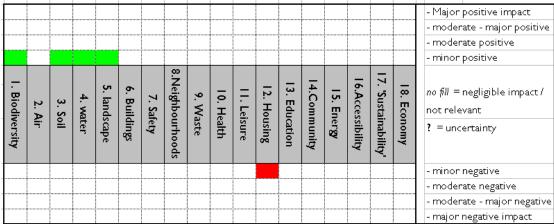
In the short to medium term the positive impacts outweigh the negatives. However, there are some negative impacts in the longer term that would shift this balance significantly if they were to occur.

Careful monitoring of this policy will be necessary to ensure these issues are considered carefully in the future.

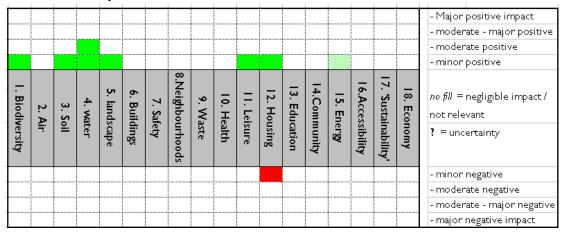
Policy CP17 - Flooding

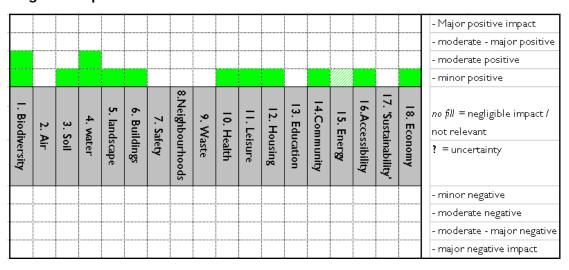
The following diagrams illustrate the impact of the core policy principles for Flooding against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short-term impacts



Medium-term impacts





Summary of Impacts - Core policy for Flooding

The policy is overwhelmingly positive over all time scales, with no negative impacts anticipated in the longer term.

The only significant negative impacts identified are on housing objectives, as the policy could restrict some homes from being built in the short term or could add to costs if mitigating measures need to be secured.

Having said this, the policy is founded on national policy, so the additional requirements are minimal.

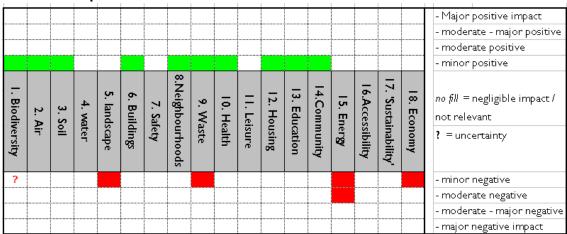
The major positive impacts are associated with improved surface water run-off management, which benefits drainage, biodiversity and environmental quality. This has knock on benefits in terms of health and well-being and helps to create more attractive business environments.

Reduced flood risk is also positive in terms of social objectives, economic activity and resilience.

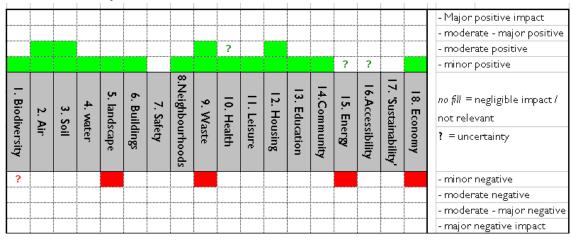
Policy CP18 - Environmental protection

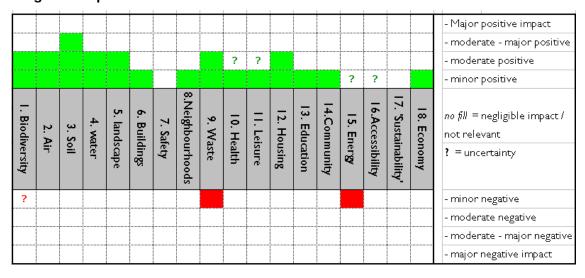
The following diagrams illustrate the impact of the core policy principles for Environmental Protection against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short-term impacts



Medium-term impacts





Summary of impacts – Core policy for Environmental protection

In the short term there are some minor positive impacts in terms of improvements to environmental quality and the knock-on benefits for communities.

However, there could be negative impacts on energy schemes such as wind power because amenity is a key policy consideration. Although this is inevitable, it would be more proactive to highlight the overriding benefits of energy schemes and the considerable weight that this should be afforded when making decisions.

Impacts on the economy may be viewed as a minor negative in the short term due to costs of mitigation and enhancement measures. However, in the longer term there are very few negative impacts and the positive aspects of the policy emerge strongly.

There are particular benefits in terms of environmental quality, and the knock on benefits this has for communities and the housing market.

Policy CP19 - Developer contributions

The following diagrams illustrate the impact of the core policy for Developer Contributions against our 18 sustainability objectives over the short, medium and long term. A brief summary of the impacts is given.

Short-term impacts

		?	?			?		?				?	?	?	?	?	?	- Major positive impact - moderate - major positive - moderate positive - minor positive
I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8. Neighbourhoods	9. Waste	I 0. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	I 6.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
	?			?		?	2//			?							?	- minor negative
											?							- moderate negative
											?							- moderate - major negative
																		- major negative impact

Medium-term impacts

		?	?		?	?		?	?		?	?	?	?	?	?	?	- Major positive impact - moderate - major positive - moderate positive - minor positive
I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	I 0. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	I 6.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact/ not relevant ? = uncertainty
	?			?		?				?							?	- minor negative
										?	?							- moderate negative
																		- moderate - major negative
																		- major negative impact

		?	?		?	?		?	?		?	?	?	?	?	?	?	- Major positive impact - moderate - major positive - moderate positive - minor positive
I. Biodiversity	2. Air	3. Soil	4. water	5. landscape	6. Buildings	7. Safety	8.Neighbourhoods	9. Waste	10. Health	11. Leisure	12. Housing	13. Education	14.Community	15. Energy	16.Accessibility	17. 'Sustainability'	18. Economy	no fill = negligible impact / not relevant ? = uncertainty
	?			?		?				?							?	 minor negative moderate negative moderate - major negative major negative impact

Summary of impacts – Core policy for Developer contributions

There is a lot of uncertainty about the magnitude of impacts and whether some will actually occur. This is due to the uncertainty surrounding how contributions would actually be used.

Some impacts can be predicted with greater certainty as it is clear that there would be improvements compared to the current situation. For example, there would be positive impacts against our energy objectives because the policy allows for contribution to energy schemes and this is a new process.

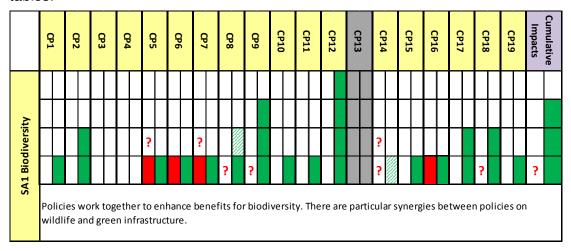
Although the impacts do not change significantly over time, the potential for greater positive impacts is clearly illustrated and is dependant upon the successful application of the policy.

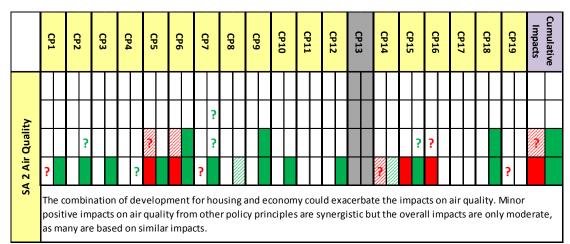
It would be useful to produce a framework for securing contributions to resolve the potential conflict and uncertainties associated with this policy. For example, to produce a list of priority infrastructure types / schemes, in defined localities. This would be necessary to bring forward a Community Infrastructure Levy (or similar mechanism) anyway.

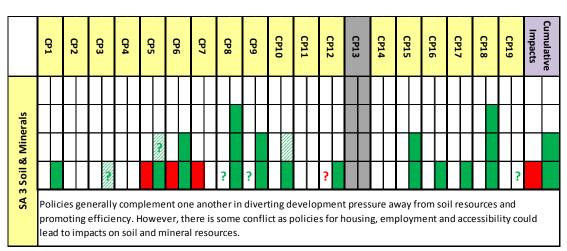
A needs based approach would be appropriate, but there is recognition that a case-by-case approach is also necessary.

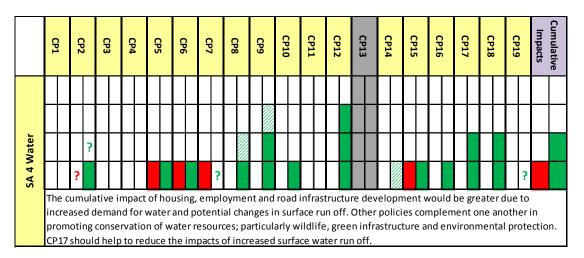
10.5 Cumulative and synergistic impacts of the Core Policies

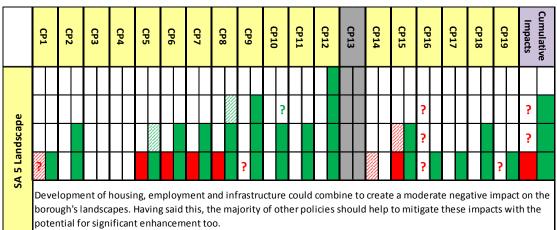
The following diagrams illustrate the impacts of all the Core policies considered together alongside each sustainability objective. In most instances the policies work together positively to create enhanced positive impacts against the sustainability impacts. However, in some instances there are conflicts or the potential for greater negative impacts as a result of policies reinforcing one another. Note that policy CP13 has been deleted and so is 'greyed out' in the tables.

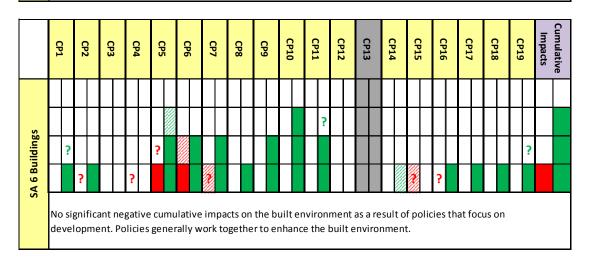


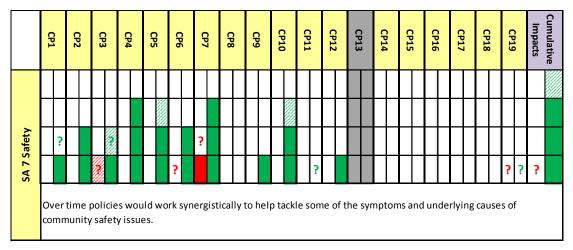




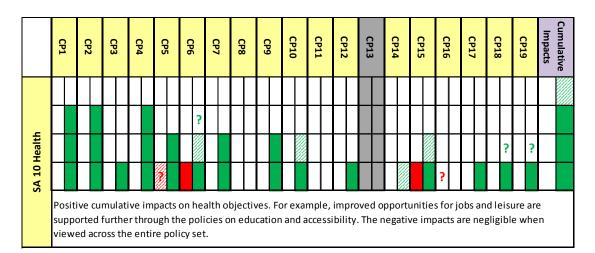


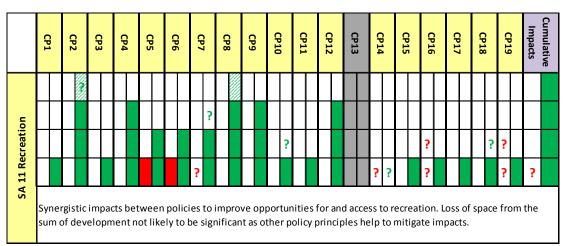


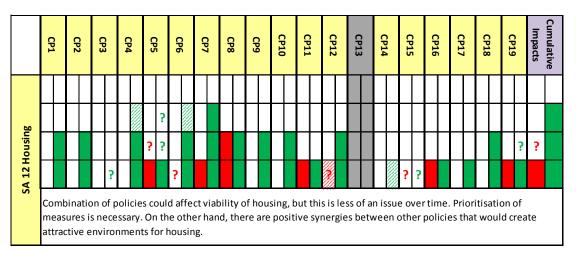


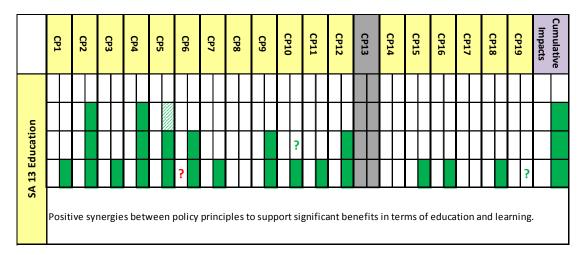


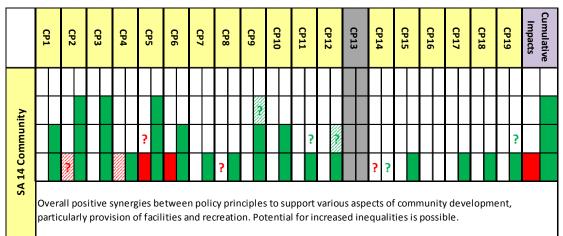


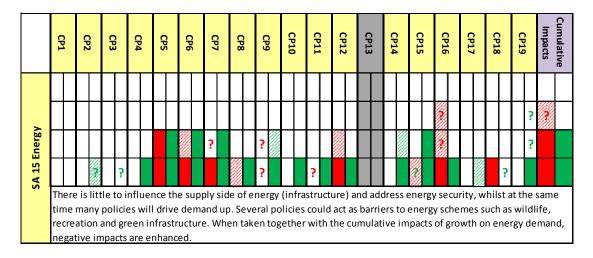


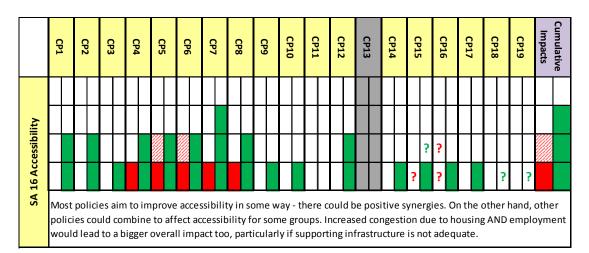


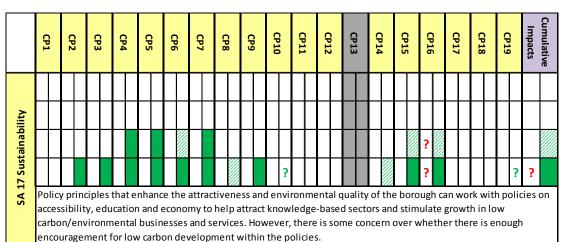


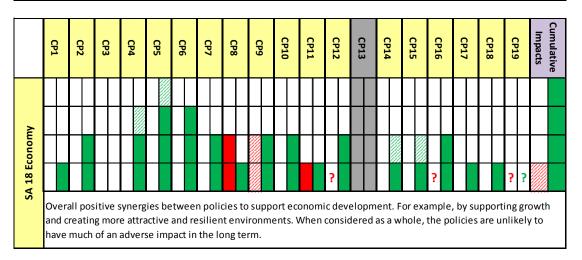












Cumulative long-term impacts of all Core Policies

					?							?	?					Major positive impact
																		Moderate - major positive
																		Moderate positive
																		Minor positive
1. Biodi	2. Air (3. Soil and	4. W	5. Land	6. Built en	7. Commu	8. Neighb	9. W	10. н	11. Leisure and	12. на	13. Educatic	14. Con	15. E	16. Accessibility	17. Sustaina	18. Economy ar	no fill = negligible impact / not relevant
Biodiversity	Quality	Soil and Minerals	Water	Landscapes	Built environment	Community Safety	Neighbourhoods	Waste	10. Health	າd Recreation	12. Housing	Education and Skills	Community	Energy	Accessibility and Transport	Sustainable Economy	and Employment	? = uncertainty
						?			?	?						?	?	Minor negative
							?				?				?			Moderate negative
																		Moderate - major negative
																		Major negative impact

The in-combination impacts of the core policies are mostly positive in the long term. There are particular benefits in terms of social objectives, notably improved health, wellbeing and community safety and cohesion. The economy would also benefit significantly.

The impacts on environmental assets such as wildlife, air, water and soil quality, would be moderately positive, as the policies seek to enhance such features. However, there would inevitably be disturbances and adverse changes to some environmental resources that would cause minor negative impacts.

The most significant negative impacts recorded are against the energy objective, as there is little proactive content for the development of low-carbon, decentralised energy schemes.

Although the impact on the character of our landscapes would generally be positive due to reclamation and enhancement efforts, there remains an uncertainty over potentially negative impacts due to development and infrastructure development.

10.6 Cumulative assessment of other plans and strategies of relevance

The Core Strategy is closely aligned to other local and sub-regional plans and strategies. The 13 Topic Papers identify those of most relevance as at August 2011 (see section 2 of the Topic Papers). The Regional Spatial Strategy is of critical relevance as conformity is a key test. Other key local plans and strategies include:

- Living Well in Wigan Borough Joint Public Health Strategy
- Greenheart Strategy and Action Plan
- Parks and Green Spaces Strategy for Wigan Borough
- Wigan Economic Development Plan
- Wigan Housing Strategy

- Greater Manchester Local Transport Plan
- Wigan Climate Change Strategy and Action Plan
- Wigan Municipal Solid Waste Management Strategy

Since publication of the submitted Topic Papers the council has adopted an Economic Framework for Wigan Borough to replace the Economic Development Plan. It is aligned closely to the Core Strategy with the intention of enabling delivery of key components as appropriate. The council is also preparing a Transport Strategy to both inform and supplement the Local Transport Plan. It too is being informed by and prepared in close alignment with the Core Strategy.

The Public Health Strategy is focused on tackling health inequalities, the resulting deprivation being very much concentrated on the inner areas of the borough where the spatial strategy is principally focused. There is also a specific policy on health and well being (policy CP1) and numerous related policies such as on open space, sport and recreation (policy CP2), education and learning (CP5), economy and employment (CP6) and accessibility (CP7).

The Greenheart Strategy is taken forward in the spatial strategy and notably policy SP5 on Greenheart.

The Parks Strategy is supported directly through policy CP2 on Open space, sport and recreation, notably through the designation of the principal parks and the township parks.

The Housing Strategy is focused on tackling deprivation, which is focused in the inner areas principally on large public sector housing estates, as well as tackling housing needs which is reflected in the spatial strategy and policy CP6 'Housing' specifically.

The Local Transport Plan is supported through policy CP7, which identifies 7 major transport infrastructure interventions including the Leigh-Salford-Manchester busway that is being delivered through the LTP, and promoting travel choices.

The Climate Change Strategy is supported though numerous policies including on accessibility (policy CP7), strategic landscape and green infrastructure (CP9) design (CP10), low-carbon development (CP14), waste (CP15), minerals (CP16) and flooding (CP17).

Overall there is close alignment to these and other local and sub-regional plans and strategies of relevance and there are no matters of cumulative impact.

10.7 Cumulative impacts on neighbouring authorities

Cross boundary and cumulative impacts were considered through the preparation of the Regional Spatial Strategy, for which a Sustainability Appraisal was undertaken incorporating Strategic Environmental Assessment. Consultation with government agencies, utility companies and others was also undertaken as part of that process, through which strategic and cumulative impacts were considered and addressed, including through the examination process.

In addition we have considered our immediate neighbouring authorities and the wider area and how each of our sustainability issues affects them (and how they affect it in return). This is set out in Table 8 below. An "x" indicates where there is a relationship. These issues were taken into account during the assessment processes undertaken.

	Reasoning	St Helens	Bolton	Salford	Warrington	West Lancs	Chorley	Wider area	Notes
Biodiversity	Increased burdens on designated sites and species			х	х				Possible effects on the Mosses. The Habitats Regulation Assessment deals with this issue. No impacts on strategic wildlife corridors.
Air Quality	Detrimental effects due to increased traffic levels from development	х	х	х	х	х	х	х	Consultation responses from transport bodies will have considered cumulative impacts.
Soil and Minerals	Borough focus not beyond local area			Local focus					
Water	Pressure due to increased water demand	х	х	х	х	х	х	х	Consultation responses from Utility companies and environmental agencies will have considered cumulative impacts.
Landscapes	Borough focus not beyond local area	Not applicable						Local focus	
Built environment	Borough focus not beyond local area		Not applicable						Local focus

	Reasoning	St Helens	Bolton	Salford	Warrington	West Lancs	Chorley	Wider area	Notes
Community Safety	Some potential for cross border crime	х	х	х	x	Х	х	х	Consultation responses from neighbouring councils and police forces will have considered cumulative impacts - expected to be very slight. Identified where applicable within appraisals.
Neighbour- hoods	Borough focus not beyond local area				Local focus				
Waste	Borough focus not beyond local area								Possible increased demand on waste disposal facilities but limited.
Health	Increased demand on health facilities	х				х		х	Shared NHS Acute Trust with part of West Lancashire and Community Health Trust with various North West areas.
Leisure and Recreation	Potential for increased pressure on recreational facilities	х	х	Х	х	х	х	х	Some potential for increased demand for recreation can be both beneficial and detrimental

	Reasoning	St Helens	Bolton	Salford	Warrington	West Lancs	Chorley	Wider area	Notes
Housing	Borough focus not beyond local area				Not applicabl	e			Should be neutral impact as Core Strategy is meeting the borough's own needs
Education and Skills	Demand for education provision	х	х	х	х	Х	х	Х	Primary and secondary education is a local focus but there may be increased demand for further education inside and outside the borough as well as higher education outside the borough
Community	Borough focus not beyond local area				Not applicabl	е			Local focus on areas of deprivation
Energy	Increased energy demand on energy supply network	Х	х	Х	х	х	х	х	Consultation responses from Utility companies will have considered cumulative impacts
Accessibility and Transport	Increased traffic/demand on transport system	Х	х	Х	х	х	х	х	Consultation responses from transport bodies will have considered cumulative impacts
Sustainable Economy	Borough focus not beyond local area		Not applicable					Local focus	

	Reasoning	St Helens	Bolton	Salford	Warrington	West Lancs	Chorley	Wider area	Notes
Economy and Employment	Provision of employment opportunities retaining residents and attracting workers in	х	х	х	х	х	х	х	Should be relatively neutral impact as Core Strategy should be meeting our own needs However, a large % of work already outside of borough, will continue

Table 10: Cumulative impacts on neighbouring authorities

10.8 Appraisal of key strategic sites and broad locations

To deliver housing and employment targets through our Core Strategy, we need to bring forward a number of strategic development sites.

Our broad locations for development and our policy for North Leigh Park outline the preferred areas for strategic development.

In order to select the most appropriate locations we carried out a number of site appraisals as our Core Strategy was developed.

We used studies such as the Employment Land Review and Strategic Housing Land Availability Assessment as a starting point. Along with stakeholder engagement and a host of other evidence this led to the development of our preferred key strategic sites.

These strategic sites underwent further appraisal in terms of delivery and viability and this has helped us identify the broad locations for development that are proposed in the draft Core Strategy.

We developed a site appraisal framework to identify the positive and negative impacts of sites. This can be found in the Sustainability Appraisal Scoping Report for the Core Strategy.

The anticipated use of sites is important in determining impacts because housing has different effects to commercial and industrial uses.

Some of the sites we considered are assumed to be mixed use, with no specific sub type of development. Others have been appraised on the basis of a certain type of development, for example exceptional quality logistics opportunities. We made assumptions about the uses on sites, based upon the best available knowledge at the time.

The first stage appraisals on sites can be found in the interim appraisal report on our website. This identifies our preferred sites and assumptions for development at that stage.

Further work since the preferred options has revealed that some of our anticipations for the type of development that would be brought forward are not as appropriate due to delivery / viability issues.

Therefore, we have had to carry out a number of reiterative appraisals on the same sites to determine the impacts that would arise from different uses.

The impact summary tables below represent the most up to date assessments, taking into account the anticipated uses at each site. In line with the requirements of the Strategic Environmental Assessment Directive, we have also considered and appraised a number of alternative options when developing our Core Policies. Full appraisal tables for all preferred broad locations can be found in Appendix E.

Broad locations - Key sites appraisal

Several sites have been allocated for general strategic development as broad locations, principally housing but many including employment development and other uses. Where appropriate, these have been updated with details obtained at the stage when we considered a shortfall in housing land.

Appraisal of East of Wigan Road, Landgate

Sustainability objective	Impact	Residual
Biodiversity (Designated sites)	×	0
Biodiversity (Species)	××	×
Air quality a) Impact	×	0/×
Air quality b) With infrastructure secured		11
Soil & minerals a) brownfield	✓	✓✓
Soil & minerals b) Agricultural land	×	x ?
Water a) Flood risk	×	√√
Water b) water supply	0	0
Water c) Waste water& drainage	0	0
Landscape (Character assessment)	0	0
Buildings (Impact on heritage)	0/×	0
Community Safety	0	0
N.Quality a) Amenity impacts	××	×
N.Quality b) Environmental gain	×	0/×
Waste	×	×
Health	0	√√
Recreation (open space assessment)	×	//
Housing a) Delivery against targets	///	///
Housing b) Affordability & sustainability	///	///
Education	0	0
Communities (Deprivation)	✓	*
Energy a) Electricity capacity	×	0/×
Accessibility a) public transport	√√	√ √
Accessibility b) Existing congestion	0	✓
Sustainable economy	0	√
Economy and employment	✓✓	√ ✓

location for development.

Development of this site would be an attractive proposition for employment and housing, and could improve opportunities for local communities, some of which fall within the top 20% deprived in the country.

Although this brownfield site has value for agriculture, development would not lead to significant impacts on landscape character or opportunities for leisure. In fact, development provides the opportunity to improve the quality of open space and improve permeability for local communities.

The site is well located, as it is well served by public transport and existing congestion is not too problematic. Water issues would be minimal at this site.

Although air quality issues could be a concern due to potentially increased car traffic, this site could support delivery of a bypass for Bryn Cross, with potential benefits on air quality.

It is important to be aware of potential amenity impacts on existing communities as a result of increased vehicular access to the site.

Dependant upon how the site is developed, there may also be a need for mitigation and / or compensation to account for impacts on biodiversity (particularly on managed grassland, which is a priority habitat). Overall this broad location was selected because with mitigation and enhancement it would a sustainable

Appraisal of South of Hindley

Sustainability objective	Impact	Residual
Biodiversity (Designated sites)	××	×
Biodiversity (Species)	××	×
Air quality a) Impact	xx	×
Air quality b) With infrastructure secured		✓
Soil & minerals a) brownfield	✓✓	✓✓
Soil & minerals b) Agricultural land	0/×	0
Water a) Flood risk	0	√ √
Water b) water supply	0	0
Water c) Waste water/ drainage	0	0
Landscape (Character assessment)	×	✓
Buildings (Impact on heritage)	×	0
Community Safety	0	0
N.Quality a) Amenity impacts	0/ ×	0/ ×
N.Quality b) Environmental gain	√ √	√ √
Waste	X	×
Health	×	✓✓
Recreation (open space assessment)	×	4
Housing a) Delivery against targets	///	///
Housing b) Affordability & sustainability	///	///
Education	XX	✓
Communities (Deprivation)	0	0
Energy a) Electricity capacity	0	0
Accessibility a) public transport	0/ ×	✓
Accessibility b) Existing congestion	xxx	x ?
Sustainable economy	0	√
Economy and employment	✓	✓

Site development will have a very positive impact on housing objectives as it would help to deliver over 2,000 homes. It would also be an attractive proposition for employment and could improve opportunities for local communities, some of which fall within the top 30% deprived in the country.

The site is brownfield and much of the area is degraded, of poor quality and has little value for recreation, landscape character and quality agriculture. In fact, development offers the opportunity to create higher quality environments that are more accessible and enjoyable to local communities.

The site has fair access by public transport, although there are opportunities to enhance provision. Development also brings the opportunity to improve transport links from east to west through the provision of a new link road. This could help to relieve congestion and tackle air quality issues to an extent.

Dependant upon scheme details there could be negative impacts on biodiversity as there are several Sites of Biological Importance within, adjacent to or in close proximity to the site including an abandoned railway, reservoirs and a reedbed. The site is also close to a major wildlife corridor and is host to priority habitats and species with potential for many more. However, appropriate mitigation could minimise disturbance. There is

also an opportunity to enhance habitats and linkages to Greenheart, which is reflected by a positive impact in the residual impacts column.

Over time, additional homes would put significant pressure on primary and secondary school places in the area that are running close to capacity. It will be necessary to contribute to provision of increased school places in the area, particularly in the medium to longer-term. Overall this broad location was selected because with mitigation and enhancement it would a sustainable location for development.

Appraisal of East of Atherton

Sustainability objective	Impact	Residual
Biodiversity (Designated sites)	×	0
Biodiversity (Species)	××	×
Air quality a) Impact	0/×	0
Air quality b) With infrastructure secured		✓
Soil & minerals a) brownfield	√ √	/ /
Soil & minerals b) Agricultural land	0	0
Water a) Flood risk	0	0/✓
Water b) water supply	0	0
Water c) Waste water& drainage	0	0
Landscape (Character assessment)	××	×
Buildings (Impact on heritage)	0/×	0/?
Community Safety	×	0/×
N.Quality a) Amenity impacts	0/×	0
N.Quality b) Environmental gain	✓	✓
Waste	×	×
Health	XX	✓
Recreation (open space assessment)	0	11
Housing a) Delivery against targets	///	///
Housing b) Affordability & sustainability	///	///
Education	×	0
Communities (Deprivation)	√ √	//
Energy a) Electricity capacity	0	0
Accessibility a) public transport	√ √	11
Accessibility b) Existing congestion	×	0
Sustainable economy	0	✓
Economy and employment	✓	✓

Development of this site would be an attractive proposition for employment, and could improve opportunities for local communities, some of which fall within the top 10% deprived in the country.

The site is excellently located for public transport access and development would be expected to have a minimal impact on levels of congestion.

This brownfield location is poor quality degraded land with potential contamination as a result of former activities.

Although the site is used for dog walking and informal recreation, permeability is limited by a lack of quality footpaths and poor ground conditions. It is not attractive or suitable for agriculture either.

Development offers the opportunity to improve the quality of open space on the site, making it more attractive, accessible and safer for local residents.

There could be a minor negative impact on landscape as the site does offer a feeling of 'openness' in a predominantly urban area.

There are also a number of 'historic features' that can be viewed from within the site including a Mill. These are not particularly unique or high quality features, but high quality design and landscaping should be promoted to ensure that this 'character' is retained as much as

possible for local amenity.

It may also be necessary to mitigate and / or compensate impacts on wildlife as there are areas of natural / semi natural open space and some priority habitats such as hedgerow and open mosaic / acid grassland.

The site could attract crime from deprived areas close by. Development should consider, for instance, the potential to improve recreational opportunities for young people in the area as a preventative measure. Overall this broad location was selected because with mitigation and enhancement it would a sustainable location for development.

Appraisal of Garrett Hall, Astley

Sustainability objective	Impact	Residual
Biodiversity (Designated sites)	0	✓
Biodiversity (Species)	××	×
Air quality a) Impact	××	×
Air quality b) With infrastructure secured		✓
Soil & minerals a) brownfield	XXX	×××
Soil & minerals b) Agricultural land	×	×
Water a) Flood risk	X	0
Water b) water supply	×	0
Water c) Waste water& drainage	×	0
Landscape (Character assessment)	××	×
Buildings (Impact on heritage)	×	0/✓
Community Safety	×	0/ ×
N.Quality a) Amenity impacts	0/ ×	0/ ×
N.Quality b) Environmental gain	0	0
Waste	×	×
Health	×	✓
Recreation (open space assessment)	✓	/ / /
Housing a) Delivery against targets	///	/ / /
Housing b) Affordability & sustainability	///	///
Education	×	0
Communities (Deprivation)	0	0/✓
Energy a) Electricity capacity	0	0
Accessibility a) public transport	√√	///
Accessibility b) Existing congestion	×	×
Sustainable economy	n/a	n/a
Economy and employment	n/a	n/a

The site would deliver roughly 600 homes, so would make a fairly significant contribution to our housing targets.

The area is fairly well matched to areas of need as some adjacent communities fall within the 20% most deprived in the country. However, there are also many super output areas nearby with moderate, low or very low levels of deprivation.

There could be a moderate negative impact on landscape objectives, as the site is relatively 'open' and natural. There could also be amenity considerations for local communities, although mitigation could help.

The site is greenfield and has some limited value for agriculture, but it is not particularly suited to formal recreation. Development presents an opportunity to improve the quality of and access to recreational space for local communities.

Flood risk and water supply have been flagged as potential constraints, but mitigation is possible at a cost and through design.

Accessibility by public transport is just okay at present, but development could help improve the viability of the Leigh Guided Busway. Additional housing may also place pressure on primary and secondary school places in the area, which are currently running close to capacity.

The location is not now considered for employment purposes as it covers a smaller area not including land to the south where planning permission has been granted for employment development. Overall this broad location was selected because with mitigation and enhancement it would a sustainable location for development.

Golborne and Lowton Broad Location

In order to offer a greater mix and choice of housing across the borough, in 2010 it was deemed necessary to allocate a broad location for high-quality housing.

For the purposes of appraising the policy we grouped together a number of potential strategic sites within the broad location, to give a broad idea of the potential impacts.

We carried out site level appraisals to help identify the sustainability issues that could be associated with different areas within the broad location. These appraisals can be found in Appendix E and further detail in Appendix I, and helped to inform detailed allocations within this broad location.

It is important to remember that the ultimate impact of the broad location for development can only be determined when one or a combination of the sites is allocated in further Development Plan Documents.

Appraisal of Golborne and Lowton Broad Location

Sustainability objective	Impact	Residual
Biodiversity (Designated sites)	×	0/×
Biodiversity (Species)	××	×
Air quality a) Impact	××	×
Air quality b) With infrastructure secured		//
Soil & minerals a) brownfield	XXX	XX
Soil & minerals b) Agricultural land	xx	××
Water a) Flood risk	×	0
Water b) water supply	×	0
Water c) Waste water& drainage	×	×
Landscape (Character assessment)	××	×
Buildings (Impact on heritage)	0/×	0/✓
Community Safety	×	0/ ×
N.Quality a) Amenity impacts	××	0/ ×
N.Quality b) Environmental gain	×	0/×
Waste	×	×
Health	×	✓
Recreation (open space assessment)	0	//
Housing a) Delivery against targets	//	111
Housing b) Affordability & sustainability	111	///
Education	XXX	0
Communities (Deprivation)	×	✓
Energy a) Electricity capacity	0	0
Accessibility a) public transport	0	✓
Accessibility b) Existing congestion	xxx	××
Sustainable economy	n/a	n/a
Economy and employment	n/a	n/a

The sites within this broad location are mainly fairly accessible by public transport and would all present an attractive proposition for housing development.

The accommodation of 1,000 properties spread across the broad location would be attractive to workers in Manchester and Liverpool through ease of access though congestion may be an issue.

Environmental impacts at this greenfield location are seen in amenity, impact on soil resources and landscape, although these are not major and can be mitigated to a degree.

Benefits to local communities are likely to be small due to distance from areas of need though potential is there.

If contributions were made to infrastructure improvements in other parts of the borough, then the impacts for communities would increase.

Potential high value of the dwellings means that it could be possible to achieve higher standards of sustainability in design. There may also be some potential to improve recreation depending which site(s) are brought forward.

The ability to deliver such enhancement measures could be restricted by a need to

ensure that water resources and drainage are adequate. Development of housing could also put some pressure on education facilities.

The location is not being considered for employment – hence the lack of economic scores. Overall this broad location was selected because with mitigation and enhancement it would a sustainable location for development.

Standish Broad Location

In order to provide the required number of houses across the borough, the Inspector instructed the Council to allocate Standish broad location for approximately 1,000 high-quality housing.

For the purposes of appraising the policy we grouped together a number of potential strategic sites within the broad location, to give a broad idea of the potential impacts.

We carried out site level appraisals to help identify the sustainability issues that could be associated with different areas within the broad location. These appraisals can be found in Appendix E and further detail in Appendix I, and helped to inform detailed allocations within this broad location.

It is important to remember that the ultimate impact of the broad location for development can only be determined when one or a combination of the sites is allocated in further Development Plan Documents.

Appraisal of Standish Broad Location

Sustainability objective	Impact	Residual
Biodiversity (Designated sites)	××	×
Biodiversity (Species)	××	×
Air quality a) Impact	×	0/×
Air quality b) With infrastructure secured		√ √
Soil & minerals a) brownfield	XXX	XX
Soil & minerals b) Agricultural land	×	×
Water a) Flood risk	0/ ×	0
Water b) water supply	0	0
Water c) Waste water& drainage	0	0
Landscape (Character assessment)	xxx	xx
Buildings (Impact on heritage)	0/×	0
Community Safety	0	0
N.Quality a) Amenity impacts	××	×
N.Quality b) Environmental gain	×	×
Waste	×	×
Health	×	✓
Recreation (open space assessment)	×	✓
Housing a) Delivery against targets	111	///
Housing b) Affordability & sustainability	111	///
Education	xxx	0
Communities (Deprivation)	xxx	xxx
Energy a) Electricity capacity	×	0/×
Accessibility a) public transport	0/✓	✓
Accessibility b) Existing congestion	xxx	××
Sustainable economy	n/a	n/a
Economy and employment	n/a	n/a

terms.

The sites within this broad location are mainly reasonably accessible by public transport and would all present an attractive proposition for housing development.

Accommodation of 1,000 properties spread across the broad location would be attractive to local Wigan population as well as commuters making use of the M6 and wider motorway network although both localised congestion and wider motorway capacity in this area may be an issue.

Benefits to deprived communities is likely to be minimal due to location, and

Loss of biodiversity (both in terms of species and habitats) is likely to be an issue whilst landscapes would also be detrimentally affected. The loss of greenfield in this location would be difficult to mitigate.

There would be some detrimental impacts on the local neighbourhood in terms of amenity and environmental gain though this could be mitigated somewhat through design.

Due to the ability to tackle transport improvements over a wider area there are likely to be some benefits in air quality

10.9 Alternative strategic sites and broad locations

We completed appraisals of a number of other sites and locations identified as potentially suitable for strategic development, to inform both the preferred options stage (June 2009) and the Revised Proposals and Draft Policies (October 2010). The majority of these performed worse overall in terms of sustainability compared to the chosen locations. Further changes were made following the Examination in Public in March 2013 to reflect the removal of Junction 25 as a broad location for employment and the inclusion of Standish for housing.

These sites and locations were not taken forward as part of the Core Strategy on the grounds of sustainability, deliverability and viability.

Several of these sites and locations were appraised according to various development scenarios, for example, for high-quality housing only, for mixed-use or for high quality employment only, and a summary of each unique assessment has been provided below. Inevitably, there is some cross over in the impacts experienced under the scenarios.

Fully completed appraisal tables for alternative sites can be found in Appendix H.

Site	Impact summary / reasons for rejection
South of Atherton Mixed use development	Although the site is fairly well related to areas of need, it suffers from accessibility issues and is not particularly attractive for development. It also scores poorly against water objectives because it falls within flood zones and has issues with waste water / drainage. The environmental quality of the site could perhaps be improved, but there is still potential for impacts on environmental objectives such as biodiversity. Overall it was rejected because it would be an inappropriate for location for mixed use development. However it has since been reappraised for housing development using more up-to-date evidence— see section 10.8.
South of Atherton Housing	After mitigation there are no key negatives. However, some negative issues do remain concerning species (due to a record of bats in the area) and the probability of other species on site; congestion issues and the possible impact of energy issues. Key positives arise from it being a brownfield location, the ability to support recreation activity, housing provision and the impact on deprivation – notably the Hag Fold estate. Specific infrastructure investment here would have a wider positive effect on the air quality of the network. Other positives are likely in sustainable travel and health outcomes. Overall this proposal was selected because it would be a sustainable location for housing development, with mitigation and enhancement.
Westleigh Canalside Housing	This site would come forward purely for housing development. Although the site was designated as a Key Strategic Site at Preferred Options Stage, it is not Safeguarded Land, and can be brought forward anyway through standard development processes.

Almond Brook, Standish Mixed use Development	The site could be suitable for a significant number of homes and some employment. However, it is not well related to areas of need and suffers from poor accessibility. There would also be significant environmental issues such as impacts on biodiversity, landscape character and soil. Overall it was rejected because it would be an unsustainable location for mixed use development.
Almond Brook, Standish High Quality Employment	Although the site would be fairly attractive for employment, it is poorly related to areas of need and poorly accessible by public transport. There are several ponds designated as Sites of Biological Importance within the site too, which could be affected adversely. Considerable landscape issues are probable in this part of the borough as it is valued and exposed to views. There would also be an impact on soil resources and amenity. The site is also suitable for housing, so a mixed approach might be more appropriate here. Overall, development of high quality employment at this site is not attractive, because the environmental and social impacts would be considerably more negative than the chosen alternatives.
Rectory Lane, Standish Mixed use development	Although the site would be attractive for employment and / or housing, it is not well related to areas of need and poorly accessible by public transport. There would also be significant environmental issues such as impacts on biodiversity, landscape character and soil. Overall it was rejected because it would be an unsustainable location for mixed use development.
The Bell, Lamberhead Green, Wigan High Quality Employment	The Bell would be a very attractive site for modern logistics and distribution employment provision with excellent motorway links and fairly good public transport access. It is also within proximity to many of the borough's most deprived communities, so there may be opportunities to tackle deprivation. The main constraints are related to landscape character and soil resources. If this development was to be brought forward, it would have to deliver infrastructure improvements to transport and electricity networks, which would have knock-on benefits elsewhere. However, the costs have proven to be prohibitive so the site has been removed from the Core Strategy as a preferred option.
Land at Sandyforth Farm High Quality Employment	The site would be fairly attractive for logistics/distribution employment, but it is very inaccessible by public transport and very poorly related to areas of greatest need. Although classified as brownfield, we would still anticipate negative impacts in terms of landscape quality too. The site performs poorly compared to those chosen in the publication document as broad locations for development. Overall it was rejected because it would be an unsustainable location for high quality employment development.

Site	Impact summary / reasons for rejection
Pocket Nook, Lowton High Quality Employment	This site would be very attractive for high quality employment development, due to its excellent location and greenfield status. However, it is not particularly well related to areas of need, so communities would not get the full benefits. There could also be some issues with flooding, water supply and drainage at the site that would be a constraint. The loss of a listed building may be unavoidable with development, and there would be some irreversible impacts on landscape character too. As the site is also attractive for housing, there could be some conflict between uses for logistics / distribution as the two uses are not particularly compatible. It was rejected for high quality employment development because it is not sufficiently well related to the M6
Junction 25, M6 Motorway, South of Wigan High Quality Employment	motorway and would serve a partly different market. Proximity to a motorway junction makes this location attractive for logistics / distribution business. The location would be even more attractive if infrastructure was implemented to create a two way junction, but this is unlikely. The negative impacts are mainly likely to be environmental, given that the sites involved are greenfield and provide local amenity value. Wigan Flashes is also fairly close, and there could be some impacts on biodiversity to mitigate. The impact on landscape could also be an issue, given that the site is Greenbelt, and effectively acts as a barrier to Ashton and Wigan 'merging' in parts. More accurate (and possibly less negative) impact results will be attainable once the individual schemes are allocated within the broad location.

10.10 Proposal for addressing the shortfall in housing land provision

Following the Examination in Public, the Planning Inspector identified a shortfall in housing land provision. He requested that the council addresses this issue. This meant that the Sustainability Appraisal needed to consider a number of different location options for housing provision, including some for a second time. Full details are in Appendix I. This section includes a summary of the proposal that was subsequently selected for inclusion in the 'east-west core' of the borough. Selected broad locations and sites are in section 10.8.

Site	Impact summary / reasons
Land at Coldalhurst Lane, Astley	Key negative issues are identified for soil and minerals due to the loss of greenfield land which is not easy to mitigate; and also the loss of landscape character which, due to the size of the site, is also difficult to mitigate. Other negative impacts are seen in biodiversity due to the presence of bats and bird species although surveys would need to be undertaken; loss of agricultural land, congestion issues, energy and waste. Key positives are identified for housing provision and the ability of the site to support local recreation provision. Other positives are notable in improving health outcomes, helping tackle deprivation issues (as development here may assist Blackmoor local centre) and sustainable travel provision. Overall this proposal was selected because it would be a relatively sustainable location for housing development.

10.11 Alternative locations for addressing the shortfall in housing land provision

This section includes summaries of the alternative broad site options that were subsequently rejected as they were not considered sustainable for addressing the shortfall in housing land provision. Full details are in Appendix I.

Site	Impact summary / reasons for rejection
North West of Standish Lower Ground, Wigan	The key negative issue is landscapes due to the unavoidable change of character and the sensitive nature of the area. This is also seen in the other negatives such as biodiversity (designated sites) with the existence of a site of biological importance and ancient woodland. The loss of recreational space and the inability to mitigate is another negative as are congestion issues in the locality. Energy concerns arise from the need for infrastructure investment. Key positives are seen in housing due to the attractiveness of the site and it being a potential urban extension of Standish Lower Ground. This site is majority brownfield and there is opportunity for increasing sustainable travel options which are also positives. Overall this broad site option was rejected because it would be a marginally unsustainable location for housing development.
North of Beech Hill, Wigan	Key negative impacts are likely in landscapes where the loss of an overwhelmingly agricultural character would be difficult to mitigate. Health is another key negative impact due to strain on infrastructure, and recreation is also adversely affected; while congestion is also negatively impacted upon. Key positives are provision of housing due to attractiveness for housing development, and also the contribution development at the location could make to neighbouring areas of deprivation as evidenced in the community section. Overall this broad site option was rejected because it would be a relatively unsustainable location for housing development.
North West of New Springs, Wigan	Key negative impacts are due to the loss of greenfield land which it would be difficult to mitigate, as well as the impact on landscape character which would be lost. Another key negative impact would be on congestion which would also be difficult to mitigate. Other negative issues are the effects on air quality due to private vehicle use, and the impact upon neighbourhood quality, specifically amenity. Energy is another negative due to the lack of spare capacity with no plans to address this. Housing is a key positive not just for provision but the ability to incorporate innovative design and layout. Other positives are seen in health provision and support; recreation support and sustainable travel opportunities. Overall this broad site option was rejected because it would be an unsustainable location for housing development.
South East of Hawkley, Wigan	Key negative impacts inevitably arise from the loss of greenfield as well as from the impacts of congestion (though some mitigation would help to a degree). Other negative impacts are identified with regards to the adjacent site of biological importance; loss of agricultural land; the loss of landscape character; the limited impact on deprivation and potential energy constraints. Key positive impacts are seen in housing provision and recreation support. Overall this broad site option was rejected because it would be an unsustainable location for housing development.

South of Winstanley, Wigan	Key negative issues arise through the loss of greenfield which is difficult to mitigate. The lack of impact on deprivation is another key negative as is the congestion issue. Other negative impacts are seen in relation to energy (due to some constraints and current capacity problems) as well as biodiversity (sites); air quality (linked to congestion); loss of agricultural land and landscape character; and loss of amenity for the neighbourhood. Health, despite mitigation, would still present issues. Key positives are seen in housing provision and other positive impacts are likely in recreation (through addressing park provision) and sustainable travel support. Overall this broad site option was rejected because it would be an unsustainable location for housing development.
North East of Bedford, Leigh	There are no key negatives following mitigation. However, some negatives do remain. Biodiversity issues due to tree preservation orders; air quality and congestion (which are linked); water issues due to the presence of a watercourse; the loss of greenfield (albeit limited); landscape character impacts and waste are all negative issues. Key positives centre on housing provision and the impact on deprivation in the area (specifically Higher Folds). Other positives are identified for sustainable travel and support for health outcomes, as well as a slight positive impact on recreation. Overall this broad site option was rejected because although it would be a relatively sustainable location for housing development, it is designated as Green Belt and exceptional circumstances cannot be demonstrated at this time for housing development in the Green Belt.
East of Hooten Gardens, Leigh	Key negatives are centred on soil and minerals due to the loss of greenfield land as well as the loss of agricultural land. Loss of landscape character is another key negative. Other negatives are water issues due to the presence of water courses; poor sustainable travel options (despite mitigation); congestion and waste. Key positives arise in housing due to the attractiveness of the site, and recreation due to supporting and improving current access. Other positives are the ability of development to help improve the biodiversity of the location as well as supporting health outcomes. Overall this broad site option was rejected because it would be a marginally unsustainable location for housing development as well as being designated as Green Belt.

11.0 Conclusions

The appraisal has been integral to the development of the Core Strategy and has been fully incorporated from an early stage. This has helped to shape the policies in our Core Strategy so that they achieve a better balance against economic, social and environmental objectives.

The initial scoping report set out the approach that was to be taken and this has been expanded to ensure the latest issues and relevant local, national and international evidence has been taken into account. The new evidence is cited within the topic papers and their evidence review documentation. This has, in turn, helped develop the consideration of sustainability.

As the Core Strategy has developed, the sustainability appraisal has been reconsidered but there has not been a need to fundamentally alter the sustainability appraisal's conclusion. This demonstrates the influence the Sustainability Appraisal and its related Topic Papers have had on the Core Strategy.

The appraisal illustrates that our Core Strategy is generally positive in terms of sustainability. There should be particular benefits for our most deprived communities, with the potential for increased life opportunities, raised aspirations and improved quality of life. There are some identified negative impacts on environmental objectives such as wildlife, landscape character, soil resources and water, but our Core Policies should help to mitigate those negative impacts.

Areas that are degraded and poor quality will also benefit from development, helping to improve the environmental quality in the inner areas where it is most needed. The sensitive landscapes on the periphery of the borough would remain largely unaffected as a result of the spatial focus of the policies.

The strategy has the potential to improve accessibility, which is a major issue for residents and businesses. There could also be knock-on benefits to air quality. However, there is some uncertainty about these impacts because they are dependant upon infrastructure upgrades and the enabling of more sustainable modes of transport. If these measures are not secured there is potential to cause negative impacts for some parts of the borough, with potentially worse conditions than present.

Tackling climate change is a key issue and we need to ensure that development helps us to move towards a low-carbon economy, rather than add to the burden. To reflect the importance of climate change mitigation and adaptation, the scoping report recommended that we included climate change considerations as a part of every relevant policy to ensure a mainstream approach.

Although this approach resulted in some positive steps in reducing emissions and adapting to climate change through the strategy, the policies that deal specifically with energy / carbon reduction have not gone as far as they could in seeking to address the issues identified. This may be as a result of not recognising how they are in balance with other desired outcomes.

In the context of the Stern Review, which states that early action is preferable and less

costly than later action, the energy policies should be more proactive. Implementation of the policies alongside other local and national policy developments, should seek to ensure greater energy security alongside reduced carbon emissions – responding to the needs of the time.

The local evidence also suggests there are opportunities for low-carbon energy schemes to be taken advantage of. Whilst the policy does not preclude such projects from being developed, it does not encourage a rapid move in this direction and does not facilitate effective energy planning, which could affect the deliverability of development in terms of capacity and switchgear fault issues.

Policies concerning improved design which protect the historic environment whilst ensuring quality, low carbon development need to ensure they are able to be monitored effectively, otherwise they risk being aspirations and not objectives.

Some of the core policies are also not explicit or clear in terms of how they will prioritise different aspects of sustainability, for example, deciding upon the level of financial contributions towards carbon reductions versus affordable housing versus play provision and other schemes. As a result, there are uncertainties about some impacts as they are dependant upon how policies are actually delivered. This can be firmed up through subsequent development plans and implementation of the community infrastructure levy.

Undertaking reiterations of the sustainability appraisal and monitoring of significant impacts will therefore be important steps following the publication of the Core Strategy.

There could also be opportunities to deal with issues such as energy planning and other related sustainability issues in future Development Plan Documents. Any such documents will also be subject to sustainability appraisal to ensure they are developed consistently with this appraisal and with the evidence available at the time.

12.0 Monitoring arrangements (Task B6)

The sustainability appraisal process is an iterative process, so its success and effectiveness will be monitored by the continued collection of data according to identified indicators in the sustainability framework.

To avoid duplication of effort we are making the best use of monitoring frameworks that already exist such as the council's annual monitoring report. As the Sustainability Appraisal was an integral part of the Core Strategy, there are many crossovers in evidence and monitoring data.

We identified a number of baseline indicators in our Topic Papers which we will update periodically to monitor the trends in contextual sustainability objectives and impacts. Please refer to the Topic Papers and the annual monitoring reports for further detail. These can be found on our website at www.wigan.gov.uk.

To ensure that the most significant negative effects identified as part of the appraisal are monitored carefully, we have identified the key indicators to track potential impacts. These are outlined below.

Key negative impacts	Policies	Proposed indicator(s)	Source
SA 1: Biodiversity - Development of some safeguarded land and other sites could have a detrimental impact on biodiversity through disturbance, fragmentation or loss of habitat. Although enhancement is proposed it is necessary to monitor impacts due to uncertainties.	SP4 CP5 CP7	Damage to designated areas arising from development.	Annual Monitoring Report Development Management Process
SA 2: Air quality - Increased development in congested inner areas of the borough could exacerbate congestion and air quality issues. Although infrastructure improvements should help to mitigate these impacts (and potentially lead to improvements) there is some uncertainty and this is a key impact. Key strategic sites are of particular significance.	SP1 SP3 SP4 CP5 CP6	 Number of days per year when air pollution exceeds national 24hr standard for dust/particles (PM10) Annual average background nitrogen dioxide concentration (ug/m3) Average of Annual mean levels for selected nitrogen dioxide road side diffusion tube sites (ug/m3) Number of tonnes of NOx emitted annually from road transport 	Annual Monitoring Report.

SA 3: Soil and minerals – Loss of agricultural land could be an issue in the longer term, especially if we want to become more self-sufficient and promote local crop markets. The promotion of allotments and offsite measures would offset the loss of agricultural land from strategic site development to an extent. However, it is important to ensure that the further cumulative loss of land that could be used for crop growth is not significant.	SP4 CP6	Number of planning permissions granted that would result in an irreversible loss of grade 1, 2 or 3a agricultural land.	Local indicator
SA 4: Water – Increased levels of development could lead to a greater demand for water supply and put more pressure on surface water and drainage systems. This could be an issue in certain parts of the borough were networks are close to capacity.	SP1 SP4 CP5 CP6	 Number of permissions achieving our surface water management targets. Consult with United Utilities for further indicators. 	Indicators need development
SA 5: Landscapes – Some development could have a detrimental impact on landscape character locally. This needs to be determined and mitigated at a project level.	SP1 SP4 CP5	 Negative impact on landscape character types as a result of new development. Indicator needs work. 	Potential local indicator.
SA 6: Built Environment – The character of parts of the inner area of the borough could be affected adversely by increased levels of housing development. Although this could be tackled through good design, there are potential impacts that should be monitored.	SP1 CP5	 Change of character in conservation areas (Determined through area appraisals) % of built developments performing well against policy requirements (random sample) 	Local Indicator
SA 7: Community Safety – Although accessibility improvements are generally positive for people's wellbeing, there can be issues with fear of crime associated with new transport infrastructure that need to be considered. It is also important to ensure that enhanced accessibility does not extend opportunities to commit crimes such as theft of and from vehicles.	SP4 CP7	 Perceptions of antisocial behaviour. Theft of / theft from vehicles 	National
SA 11: Recreation – Overall, the Core Strategy is very positive for leisure and recreation. However, some strategic development could lead to a loss of open space. Although this should be replaced in-line with PPG17, it may be difficult to secure quality replacements in some areas such as Wigan South Central. These issues need to be followed up.	SP4 (CP5, CP6)	Development and comparison of local standards.	Annual Monitoring Report
SA 12: Housing – The requirement to contribute to infrastructure improvements, affordability and sustainability targets may affect the delivery of housing, particularly in the short term.	CP6 CP19 CP14 SP1	 Net additional dwellings 	Annual Monitoring Report

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SA 12: Housing – In the long term, policies that restrict development in certain locations could affect housing delivery.	SP1 CP8	Net additional dwellings	Annual Monitoring Report
SA13: Education – Increased housing development could lead to pressure on school places in some areas of the borough - such as the East Lancashire Road Broad Location.	SP3 SP4	Number of student applicants being admitted to first school of choice	Annual Monitoring Report
SA 14: Community Development – Potential for deprived communities to be excluded by the cost of renewable energy, I.T. and other technologies.	CP5 CP14	Percentage of people living in Fuel PovertyBroadband take up levels	Annual Monitoring Report
SA 14: Community Development – There is a risk that development in deprived areas could heighten inequalities if it is not inclusive.	SP1 (CP5, CP6).	Measurement of 'inequality gap' against education, health, crime, employment domains?	Indicators need defining.
SA 15: Energy – Other policy considerations could act as a potential barrier to some energy schemes and low carbon development.	CP8 CP11 CP12 CP16	Energy schemes not permitted due to other restrictions on development (e.g. biodiversity etc.)	Indicator needs developing in tandem with AMR energy indicators.
		% of relevant developments meeting our carbon reduction targets. (Average % reduction achieved)	Local Indicator for Annual Monitoring Report.
SA 15: Energy – Increased development and growth is likely to increase energy consumption, at least in the short to medium term.	CP5 CP6	Per capita Co2 emissions in the Local Authority area.	DECC
SA 16: Accessibility – Positive impacts on accessibility are partly reliant on successful implementation of strategic road infrastructure. Other factors can contribute too, so it is necessary to monitor this issue carefully.	SP1 SP3 SP4 CP5 CP6 CP7	 Implementation of major transport interventions. Net changes to travel time on designated routes. 	Annual Monitoring Report
SA 18: Economy and Employment – Other policy considerations such as biodiversity, pollution and Green Belt could act as a barrier to development for employment.	CP8, CP11, CP12,	Amount of development within Green Belt	Annual Monitoring Report
	CP16	 Environmental Impacts Assessments required as part of planning process 	Development Management Process
SA 18: Economy and Employment – Considerations for energy/climate change and sustainable design could act as a short term barrier / cost to development.	CP10, CP14	BREEAM levels achieved for relevant developments undertaking it	Indicators needs developing
		Number of renewable and low carbon energy schemes	

Table 11: Monitoring impacts and indicators

The council's annual monitoring reports monitor the effects of the Core Strategy as it is implemented. In particular it considers:

- Whether policies have been met or progress is being made towards meeting them
- Where policies are not being met or progress is not being made, the reasons why
- What significant effects implementation of the policies is having on the sustainability objectives and whether these effects are intended
- Whether the policies need adjusting or replacing because they are not working as intended, and
- What remedial actions we need to take to achieve the outcomes we want.

As such if any significant adverse effects are occurring during implementation of the Core Strategy, there is a mechanism in place to identify them and act upon them in order to reverse, reduce or mitigate those effects.