

LOCAL DEVELOPMENT PLAN



LOCAL DEVELOPMENT PLAN SUSTAINABILITY APPRAISAL REPORT

Non-Technical Summary

Introduction:

This non-technical summary of the Final Sustainability Appraisal Report (SAR) provides an overview of the findings of the Sustainable Appraisal (SA) and Strategic Environmental Assessment (SEA) process. Complete information can be found in the Final Sustainability Appraisal Report (June 2013) that accompanies the adopted Denbighshire Local Development Plan (LDP) 2006-2021.

The Local Development Plan:

Denbighshire County Council is preparing a Local Development Plan (LDP, the Plan). The Plan is a new system introduced in Wales under Part 6 of the Planning & Compulsory Purchase Act (2004). The LDP forms the statutory development plan for the local authority area. The Plan will replace the Denbighshire Unitary Development Plan and sets out a vision, strategy, area-wide policies for development types, land allocations and where necessary policies for key area of change or protection during the Plan period. Integration of sustainable development is a statutory requirement of the process of preparing the Plan. Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) along with effective consultation will test the Plan.

Sustainability Appraisal & Strategic Environmental Assessment:

The Planning and Compulsory Purchase Act 2004 requires a Sustainability Appraisal to be carried out for all development plans in Wales. European and UK legislation require that the LDP is also subject to a Strategic Environmental Assessment (SEA) required by the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004, a process that considers the effects of development planning on the environment. Government guidance advises that these two processes should be carried out together. The use of the term 'SA' in this non-technical summary incorporates SEA.

The SA looks to predict social, economic and environmental concerns that are important within the County and could be affected through development planning. Where the SA shows that there may be a problem arising from a particular policy, this can be addressed through changes to the LDP or through measures being put in place to minimise an impact. This should help to make the LDP and future development more sustainable.

The preparation of the SA involves five key stages:

Stage A: The production and consultation of a Scoping Report setting out the range of issues that the SA would consider.

Stage B: Developing options and assessing effects.

Stage C: The production of the Sustainability Appraisal Report (SAR), published along with a non-technical summary. This is known as an Environment Report in the SEA Regulation; however, this report uses the terms SA Report throughout.

Stage D: Consultation of the SA Report to accompany the LDP (various stages; Preferred Strategy document (June – August 2008); then Deposit Local Development Plan (October – December 2009); then Submission (August 2011), then Adoption (June 2013).

Stage E: Monitoring the significant effects of implementing of the LDP on the environment.

SA Scoping and Issues for Sustainability:

During early 2006 a scoping process for the SA was produced to understand the key sustainability issues relevant to the Denbighshire LDP. Relevant plans, programmes and current baseline

information were reviewed to develop a wider understanding of issues. This information was updated in 2008.

SA Framework:

A sustainability framework was developed from the current baseline and sustainability issues which were defined as Sustainability Appraisal Objectives (see below) that aimed to resolve the issues identified; these were used to test the draft plan as it was being prepared. The development of the SA Framework was documented in the Scoping Report (2006) which was subject to statutory consultation period.

SA Objective	
1.	Ensure the housing needs of the community are met.
2.	Promote community health and well-being.
3.	Promote safer neighbourhoods and contribute to a reduction in fear of crime.
4.	Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment.
5.	Increase the provision of public transport, walking and cycling networks and reduce the dependency on the private car.
6.	Protect and enhance the Welsh Language and culture, including the County's heritage assets.
7.	Support County economic development and regeneration, including the provision of opportunities for rural diversification.
8.	Maintain and enhance the vitality and viability of town and rural centres.
9.	Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes.
10.	Safeguard soil quality and function and maintain long term productivity of agricultural land.
11.	Protect and enhance all international, national and locally designated nature conservation sites and protected species and avoid their damage or fragmentation. Protect, enhance and create appropriate wildlife habitats in urban and rural areas thus enhancing biodiversity.
12.	Preserve and enhance landscape character across the County, particularly the AONB.
13.	Protect and improve the water quantity and quality of inland and coastal waters
14.	Prevent development in areas of high flood risk and ensure new development does not increase flood risk on or off site.
15.	Protect and improve air quality.
16.	Contribute to a reduction in greenhouse gas emissions (especially CO2) by increased energy conservation and efficiency in development and support increased provision and use of renewable energy
17.	Protect mineral resources from development that would preclude extraction.
18.	Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency.

Denbighshire Local Development Plan

There Deposit Local Development Plan has been developed from a number of background papers and documents. It includes a Vision and Objectives of what the County should be like by the end of the Plan period 2021. The LDP Vision and Objectives are supported by a strategy, land use policies and site allocations.

SA of the Local Development Plan:

There are three key stages of Plan preparation;

- Pre Deposit Local Development Plan - includes the draft Vision, Objectives and Preferred Strategy;
- Deposit Local Development Plan – Final Vision, Objectives, Strategy, Policies and Allocated Sites;
- Deposit Local Development Plan with Focussed Changes – a list of the proposed focussed changes to the Plan following public consultation for consideration by the Planning Inspector at the Examination in Public of the Plan.

Method of Appraisal

Each of the above stages of Plan preparation was appraised systematically using the SA Objectives. The compatibility of the LDP Objectives with the SA Objectives was assessed using a matrix. The LDP policies were assessed against the SA Objectives with a commentary to expand on the assessment. The purpose of assessing the plan through the SA is to predict the social, environmental and economic effects of the policies being considered in the LDP preparation process. Where significant adverse effects, including environmental effects, have been predicted, the SA sought where possible to identify means of offsetting these effects, including amendment to policies based on SA recommendations.

The Assessment Process:

Assessment of Alternatives (2008): The *initial* SAR consulted upon in summer 2008 along with the Pre Deposit LDP included the assessment of a range of high-level options for strategic development. The options were based around different ways of approaching levels of growth, spatial approach and location of growth and high level policies.

Business as Usual Scenario (2008): The assessment of alternatives also considered the potential effects of not writing the LDP. ‘Business as usual’ scenario looked at not writing the LDP and continuing with the strategy and policies in the adopted Denbighshire Unitary Development Plan (2002). Adapting to climate change through sustainable development and delivering housing provision in rural hamlets for people with local connections scored strongly negative. For this reason, the initial SAR recommended pursuit of the LDP.

Reassessing the amended Vision and additional Objective: The key messages from the *initial* SAR consultation was that mitigation and adaptation to climate change did not translate strong enough into the Pre-Deposit LDP Vision. Recommendations were put to the LDP Working Group and the LDP Vision was reviewed. The new Vision works positively towards the achievement of a number of the SA Objectives.

Refining the Pre-Deposit options for Deposit Key Strategic Site: Previous development plans have sought to distribute growth around the County, with smaller scale incremental additions being made to settlements. These incremental additions have added to the pressure on services and local infrastructure but have not been of sufficient scale to generate additional infrastructure or community facilities. Incremental change can be unsustainable and result in lack of connectivity to jobs and facilities.

In the initial stages of development of the Local Development Plan, it was established that one of the key issues facing the County that could be addressed through the Plan was the need to provide adequate infrastructure in new developments to ensure that sustainable communities are created and maintained. This issue translated into Objectives regarding the provision of infrastructure and the concept of using mixed use developments to ensure delivery of infrastructure and other community benefits.

The conclusion to allocate Bodelwyddan as the preferred Key Strategic Site was informed by both the findings of the SA which indicated that it performed well against the three aspects of

sustainability and also the findings of other studies such as the Strategic Masterplan Study (2009), BE Group Employment Land Study (2004), and BE Group Major Mixed Development Areas Study (2007) which examined viability and deliverability of aspects such as housing and employment along with the ability to deliver infrastructure requirements. These assessments have informed the decision making process. It would be unrealistic to allocate a site that performed well against the SA framework but that was unviable and undeliverable and thus ultimately unsustainable.

Assessing the Deposit LDP Policies (2009): A number of potential policies were drafted for the benefit of Key Stakeholders and the LDP Member Working Group each assessed informally against 18 sustainability objectives and the ‘business as usual’ scenario. The policy wordings that have gone into the Deposit LDP are generally those that were considered to produce the most positive and least negative effects. Measures to reduce the impact of negative effects and strengthen positive impacts were also identified. The key findings and recommendations are to be found in Chapter 9 of the SA Report 2009

Assessing the Deposit Site Allocations (2009): Each candidate site has been assessed using the Site Assessment Criteria. The Site Assessment Criteria had been assessed using the 18 SA Objectives at the Pre-Deposit stage (see SAR).

Assessment of Focussed Changes (2011): The Council has prepared Focussed Changes to its Deposit Local Development Plan following public consultation on the Deposit LDP and alternative sites stage. A screening assessment of each proposed change was undertaken; this considered the significance of the policy change and if there was likely to be a significant sustainability effect as a result of the change.

Assessment of the Inspectors binding recommendation and Matter Arising Changes (2013): Following the publication of the Inspector’s Report a screening assessment of each change was undertaken. Many of the changes reflected those of the Focussed Changes proposals.

Mitigation and Monitoring:

Monitoring of the SA of the Denbighshire LDP will take place following adoption; a monitoring framework has been developed in the Plan. Indicators were suggested for the monitoring stage in the SA Scoping Report based on measuring the SA Objectives. Using the monitoring framework, the Council will prepare an Annual Monitoring Report (AMR). The LDP monitoring framework should incorporate the SA monitoring proposals.

Habitat Regulations Assessment:

Environment protection legislation requires plan-making authorities to ensure that none of their land use plans, or thereof elements, will cause a significant effect on the designated features, i.e. habitats or / and species, of a European site. Therefore, every plan has to be subject of a ‘Habitats Regulations Appraisal’ (HRA), unless the plan is directly linked with the management of those sites in particular.

Denbighshire County Council has carried out a HRA screening exercise at every stage of the LDP production. In comprehensive consultation with Natural Resources Wales, former Countryside Council for Wales (CCW), it was concluded that the Plan would not have a significant effect on the designated features of a European sites providing that all identified mitigation measures are operational prior to the occurrence of any pertinent effect.

END.

Contents

Chapters	Page
Non Technical Summary	i
Abbreviations.....	v
1. Introduction	
Background	1
Sustainability Assessment and Strategic Environment Assessment	1
Purpose of the Local Development Plan	4
Habitats Regulations Assessment	4
2. Sustainability Appraisal Methodology	
Meeting the requirements of the SEA Directive	5
SA Progress through Plan preparation stages	6
Appraisal Methodology	8
3. Review of Plans, Programmes and Policies.	
Introduction	14
Relevant Plans, Programmes and Policies	14
4. Baseline Context and Sustainability	
Methodology	20
Social Baseline	22
Environmental Baseline	29
Economic Baseline	41
Issues and constraints with baseline	43
Conclusion	43
5. Identifying Sustainability Issues	
Introduction	64
6. Development of the Sustainability Appraisal Framework	
Introduction	65
Methodology	65
Testing the compatibility of the SA/SEA Objectives	74
7. Assessment of Development and Strategic Options	
Introduction	76
Identification of LDP Strategic Options	76
Assessment of LDP Strategic Options	84
Assessment of Key Strategic Sites	84
Conclusion and Recommendations	92
8. Compatibility of the LDP Vision and Objectives	
Introduction	93
Recommendations from the Assessment - Vision	93
Sustainability Recommendations - Vision	93
Compatibility of the SA Objectives and the LDP Objectives	94
Sustainability Recommendations	94
The Final LDP Objectives and the Results of the Assessment	95
Sustainability Recommendations - LDP Objectives	95

9.	Assessment of the LDP Policies	
	Introduction	98
	Initial SA Review of the Spatial Policies	98
	Result of the Assessment of the LDP Policies	99
	The 'Business as Usual' Assessment	99
	Policies of the LDP Strategy	100
	Summary of the Respecting Distinctiveness Theme	102
	Summary of Building Sustainable Communities Theme	104
	Summary of Promoting Sustainable Economy Theme	107
	Summary of Valuing our Environment Theme	111
	Summary of Achieving Sustainable Accessibility Theme	114
10.	Assessment of the LDP Housing and Employment Allocations	
	Introduction	116
	Key Strategic Site	116
	LDP Allocations	116
	Site Assessment Criteria	117
	Generic Site Mitigation Measures	118
	Allocation of additional sites (July 2012)	119
11.	Predicting the Effects of the Denbighshire Deposit LDP	
	Introduction	121
13.	Predicting, Evaluating and Mitigating the Effects of the Deposit LDP	
	Introduction	124
14.	Monitoring Framework	133
15.	Addendum Reports	142

List of Tables

- Table 1.1 - Timetable for the Preparation of the LDP
- Table 2.1 - Schedule of SEA Requirements
- Table 2.2 - SA Progress to Date
- Table 2.3 - Assessment Notation Used to Complete the Matrices
- Table 2.4 - Extract of the Matrix Used to Assess LDP Policies
- Table 3.1 - List of Plans, Policies and Programmes Reviewed
- Table 3.2 - The Denbighshire BIG Plan
- Table 4.1 - Average house prices in 2002 and 2005
- Table 4.2 - Denbighshire Annual Affordable Household Needs
- Table 4.3 - Statutory and Non-Statutory nature Conservation Sites in Denbighshire.
- Table 4.4 - Key baseline tranes and the predicted future without the implementation of the Local Development Plan.
- Table 5.1 - Key Issues - Population
- Table 5.2 - Key Issues - Housing
- Table 5.3 - Key Issues - Access & Transportation
- Table 5.4 - Key Issues - Health & Well-Being
- Table 5.5 - Key Issues - Economic Gorwth
- Table 5.6 - Key Issues - Employment Land
- Table 5.7 - Key Issues - Biodiversity, Flora & Fauna
- Table 5.8 - Key Issues - Landscape & Heritage
- Table 5.9 - Key Issues - Water
- Table 5.10 - Key Issues - Air
- Table 6.1 - SA Framework
- Table 6.2 - Compatibility of SA/SEA Objectives
- Table 7.1 - Strategic Options Assessment – Summary of Strategic Growth Options
- Table 7.2 - Strategic Options Assessment – Summary of Spatial Options
- Table 7.3 - Spatial Options Assessment - Summary of Land Use Type
- Table 7.4 - Summary of Pre Deposit Key Strategic Sites Assessment
- Table 7.5 - Summary of Deposit Key Strategic Sites Assessment
- Table 8.1 - Compatibility of LDP Objectives and SA Objectives
- Table 9.1 - Key Sustainability Recommendation of the initial review of policies (March 2009)
- Table 9.2 - Notation used in the Summary Tables
- Table 9.3 - Summary Assessment Results for Respecting Distinctiveness
- Table 9.4 - Summary Assessment Results for Building Sustainable Communities
- Table 9.5 - Summary Assessment Results for Promoting Sustainable Economy
- Table 9.6 - Summary Assessment Results for Valuing our Environment
- Table 9.7 - Summary Assessment Results for Achieving Sustainable Accessibility
- Table 10.1 - Compatibility of Site Assessment Criteria with SA Objectives
- Table 12.1 - Predicting the Effects of the Denbighshire Deposit LDP.
- Table 13.1 - Proposed SA Monitoring Framework

List of Figures

- Figure 2.1: Relationship between SA Stages and Tasks
- Figure 4.1: Denbighshire Population Composition
- Figure 4.2: Proportion of Residential Areas by Settlement Types
- Figure 4.3: Welsh Index of Multiple Deprivation – Overall Index
- Figure 4.4: Change in Average House Prices

Figure 4.5: Geographical Access to Services Deprivation in Denbighshire

Figure 4.6: Percentage of Welsh Language Speakers in Denbighshire

Figure 4.6: Built Environment

Figure 4.7: Natural Environment

Figure 4.8: Broad Agricultural Land Classification

APPENDICES

1. Pre Deposit / initial Sustainability Appraisal Report Consultation Responses (2008)
2. Deposit Sustain Sustainability Appraisal Report Consultation Responses (2009)
3. Full Assessment of the Key Strategic Options
4. Full Assessment of the Deposit LDP Policies

ADDENDUM

1. SA/SEA Assessment of Denbighshire Local Development Plan Focussed Changes (May 2011).
2. SA/SEA Assessment of the Planning Inspectors binging recommendations and Matter Arising Changes (May 2013).

1. Introduction

1.1 Background

Denbighshire County Council has started preparing the Denbighshire Local Development Plan (LDP) for 2006-2021 which will replace the Denbighshire Unitary Development Plan (UDP) 1996-2011 once adopted. The plan will be a statutory document and hence it is a legal requirement that a Strategic Environmental Assessment (SEA) is undertaken along with a Sustainability Appraisal (SA).

A Scoping Report was prepared to begin the SA process and to draw the key sustainability focus for the Local development Plan. An *initial* SA Report was produced in 2008 for the LDP documenting the assessments of the alternative strategic options. The *initial* SA Report was consulted upon alongside the Pre-Deposit LDP in the summer of 2008.

Following the receipt of the consultation responses, the Deposit LDP Strategy and SA Report was amended and work commenced on a consultation version of the Deposit LDP in conjunction with the SA process. This SA Report documents this assessments that shaped the Deposit LDP.

The Deposit LDP was subject to an extensive public consultation during October and November 2009, which invited comments on all aspects of the plan. A significant number of responses received related to the Plan have resulted in Focussed Changes being proposed. Those Focussed Changes have been screened, and where necessary assessed further as an Annex to this Sustainability Appraisal Report update (2011). In addition, some 21 comments were made relating to the Sustainability Appraisal Report (2009) and are reported as Appendix 5 to this report and changes made are highlighted through this document.

1.2 Sustainability Appraisal and Strategic Environmental Assessment

STRATEGIC ENVIRONMENTAL ASSESSMENT

The SA is a process for assessing the social, economic and environmental impacts of a plan and aims to ensure that sustainable development is at the heart of the plan-making process. It is a legal requirement that the LDP is subject to SA, under the Planning and Compulsory Purchase Act 2004. This Act stipulates that the SA must comply with the requirements of the SEA Directive 2001/42/EC which came into force in the UK on 20 July 2004 through the Environmental Assessment of Plans and Programmes Regulations 2004. The Directive set the framework for future development consent and b) are likely to have a significant effect on the environment.

The overarching objective of the SEA Directive is:

“To provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans... with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans... which are likely to have significant effects on the environment.” (Article 1)

SEA is an iterative assessment process which plans and programmes are now required to undergo as they are being developed to ensure that potential significant environmental effects arising from the plan/programme are identified, assessed, mitigated and communicated to plan-makers. SEA also requires the monitoring of significant effects once the plan/programme is implemented.

The SEA Directive and the SEA Regulations state that the SEA must consider the following topic areas.

- Biodiversity;
- Population;
- Human Health;
- Flora and Fauna;
- Soil;
- Water;
- Air;
- Climatic Factors;
- Material assets;
- Cultural heritage, including archaeological and built heritage;
- Landscape; and
- The interrelationship between these factors.

REQUIREMENT FOR SUSTAINABILITY APPRAISAL

The purpose of SA is to promote sustainable development, through a better integration of sustainability considerations in the preparation and adoption of development plans. Under the provisions of the Planning and Compulsory Purchase Act 2004, a Sustainability Appraisal is required for Local Development Plans in Wales.

Local Development Plans Wales (2006) defines SA as:

'a systematic and iterative process undertaken during the preparation (and review) of a plan which identifies and reports on the extent to which the implementation of the plan will achieve the environmental, social and economic objectives by which sustainable development can be defined and identifies opportunities for improving plan performance in relation to these'.

Whilst SEA is principally concerned with environmental factors, the SA addresses economic and social factors as well as environmental issues. Its purpose is to address the effects of these three interlinked issues from the outset of the LDP process. This will ensure that decisions made on the policies and strategy accord with sustainable development. Local Development Plans Wales 2005 advises that *'to be effective sustainability appraisal should be fully integrated into the plan making process and should provide input at each stage when decisions are taken'.*

SA thus helps planning authorities to fulfil the objective of contributing to the achievement of sustainable development in preparing their plans.

There are many definitions of sustainable development, however the most commonly used and widely accepted is that coined by the World Commission of Environment and Development in 1987 as:

"Development which meets the needs of the present without compromising the ability of future generations to meet their own needs."

The UK Strategy for Sustainable Development 'A Better Quality of Life' has been revised in March 2005. The new strategy outlines a set of shared UK principles which will be used to achieve the goal of sustainable development. The guiding principles have been agreed by the UK government, Scottish Executive, Welsh Assembly Government and the Northern Ireland Administration. They bring together and build on the various previously existing UK principles to set out an overarching approach. The five guiding principles will form the basis for policy in the UK. For a plan to be sustainable, it must respect all five of these principles in order to integrate and deliver simultaneously sustainable development:

1. **Living within environmental limits** – respecting the limits of the planet's environment, resources and biodiversity to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations;
2. **Ensuring a Strong, Healthy and Just Society** – meeting the diverse needs of all people in existing and future communities, promoting personal well-being, social cohesion and inclusion, and creating equal opportunity for all;
3. **Achieving a Sustainable Economy** – Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays) and efficient resource use is incentivised;
4. **Promoting Good Governance** – Actively promoting effective, participative systems of governance in all levels of society – engaging people's creativity, energy and diversity;
5. **Using Sound Science Responsibly** – Ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the precautionary principle) as well as public attitudes and values.

THE SA PROCESS

The requirements to carry out SA and SEA are thus distinct, but the WAG guidance for Local Development Plans concurs with the ODPM guidance in stating that it is possible to satisfy both through a single appraisal process (henceforth designated as SA) and provides methodologies and guidance for doing so. The same approach has been taken to the assessment of the Denbighshire LDP.

SCOPE OF THE APPRAISAL

The ODPM's guidance emphasises that SA is an iterative process that identifies and reports on the likely significant effects of the plan and the extent to which the implementation of the plan will achieve the social, environmental and economic objectives by which sustainable development can be defined. The intention is that SA is fully integrated into the plan-making process from the earliest stages, both informing and being informed by it.

SA AND CONSULTATION

The requirements for whom to consult during a Sustainability Appraisal are as follows:

- Authorities which, because of their environmental responsibilities, are likely to be concerned by the effects of implementing the plan or programme, must be consulted on the scope and level of detail of the information to be included in the Sustainability Appraisal Report. The 2004 SEA Regulations indicate three Consultation Bodies as follows: CADW, Environment Agency Wales and Countryside Council for Wales (CCW). The SA guidance goes further by suggesting consultation, in addition to the three Consultation Bodies, of representatives of other interests including economic interests and local business, social interests and community service providers, transport planners and providers and NGOs;
- The public and Consultation Bodies must be consulted on the draft plan or programme and the initial and final Sustainability Appraisal Report.

1.3 The Purpose of the LDP

The requirement for the preparation of and LDP is placed in the Planning and Compulsory Purchase Act 2004. One adopted it will replace the Denbighshire County Council Unitary Development Plan (1996-2011) and will run for a 15 year period from 2006, commencement date, until 2021.

The LDP is concerned with the use and development of land and consists of policies for the assessment of development proposals. The Plan will be used to guide planning officers pre-application advice and decision recommendations on planning applications.

The timetable for the preparation of the LDP is set out in Table 1.1 below.

Table 1.1 – Timetable for the Preparation of the LDP

Stage	Date
Statutory Instrument to commence LDP rather than review the UDP.	April 2005
Delivery Agreement Document approved	December 2005 (revised February 2008)
Pre-deposit Participation Phase (Regulation 14)	April 2005 – January 2007 Formal Launch September 2006.
Pre-deposit Public Consultation (Regulation 15 & 16)	June 2008 – August 2008
Deposit LDP on Proposals (Regulation 17)	October – November 2009
Consider the representations on Deposit LDP (Regulation 18-21)	Spring / Summer 2010
Submission of LDP to the Welsh Assembly Government (Regulation 22)	August 2011
Independent Examination in Public (Regulation 23)	January 2012 – February 2013
Publication of the Planning Inspector's Recommendations (Regulation 24)	May 2013
Adoption (Regulation 25)	June 2013

1.4 Habitats Regulations Assessment (HRA)

Environment protection legislation requires plan-making authorities to ensure that none of their land use plans, or thereof elements, will cause a significant effect on the designated features, i.e. habitats or / and species, of a European site. Therefore, every plan has to be subject of a 'Habitats Regulations Appraisal' (HRA), unless the plan is directly linked with the management of those sites in particular.

Denbighshire County Council has carried out a HRA screening exercise at every stage of the LDP production. In comprehensive consultation with Natural Resources Wales, former Countryside Council for Wales (CCW), it was concluded that the Plan would not have a significant effect on the designated features of a European sites providing that all identified mitigation measures are operational prior to the occurrence of any pertinent effect.

All relevant documents and correspondence with CCW can be found in the Denbighshire Local Development Plan examination library.

2 Sustainability Appraisal Methodology

2.1 Meeting the requirement of the SEA Directive

As mentioned in Chapter 1 there is a fundamental difference between the SA and SEA methodologies. SEA is primarily focused on environmental effects and the methodology addresses a number of topic areas namely Biodiversity, Population, Human Health, Flora and Fauna, Soil, Water, Air, Climatic Factors, Material Assets, Cultural Heritage and Landscape and the interrelationship between these topics. SA, however, widens the scope of the appraisal to include social and economic topics as well as environmental as it is intended to assess the impact of a plan from an environmental, social and economic perspective. This Sustainability Appraisal has been undertaken so as to meet the requirements of the SEA Directive for environmental assessment of plans. Table 2.1 sets out the way the specific SEA requirements have been met in this report.

Table 2.1: Schedule of SEA Requirements

Requirements of the Directive	Where Covered in Report
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is:	
Summary of the SA process and the SA Report in plain Welsh/English (a legislative requirement)	Non-Technical Summary (Separate Document)
a) An outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes	Chapter 1, 2 & 3 of the SA Report and Appendix 3
b) The relevant aspects of the current state of the environment and the likely evolution without implementation of the plan or programme	Chapter 4 of the SA Report
c) The environmental characteristics of areas likely to be significantly affected	Chapter 4 of the SA Report
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directive 79/409/EEC and 92/43/EEC	Chapter 4 of the SA Report
e) The environmental protection objectives established at international, community or national level which are relevant to the programme and the way those objectives and any environmental considerations have been taken into account during its preparation	Chapter 5 of the SA Report
f) The likely significant effects on the environment, including: short, medium and long term; permanent and temporary; positive and negative; secondary, cumulative and synergistic effects on the SEA topics and the interrelationship between the above factors.	Chapter 6, 7, 8 & 9 of the SA Report.
g) The measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse effects on the environment of implementing the plan or programme.	Chapter 10 of the SA Report.
h) An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	Chapter 6 of the SA Report – Assessment of Strategic Options
i) A description of measures envisaged concerning monitoring (in accordance with regulation 17)	Chapter 11 of the SA Report - Monitoring

2.2 SA Progress through the Plan preparation stages.

Table 2.2 presents the SA progress through the Plan preparation stages.

Table 2.2 SA Progress.

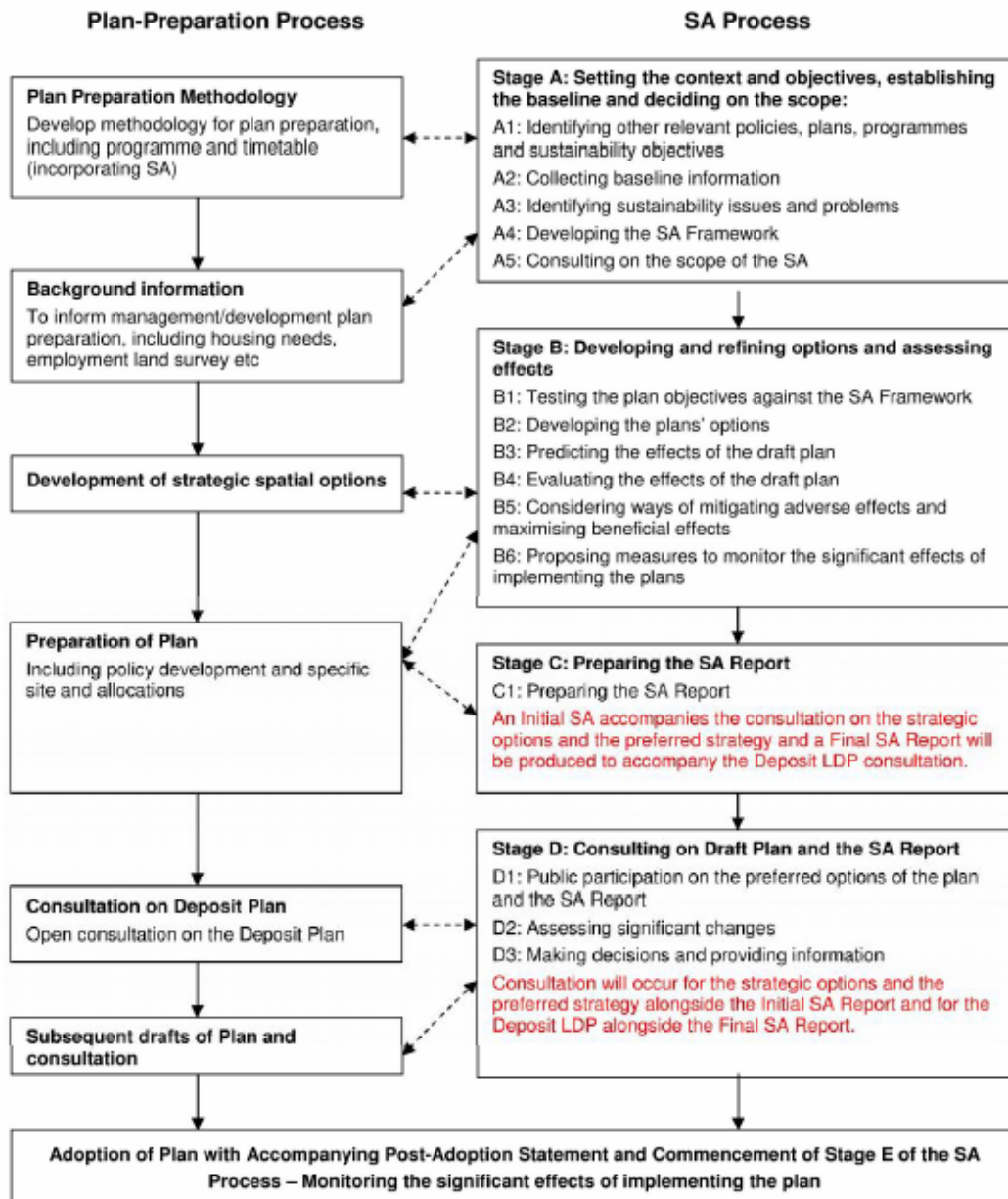
SA Stage and Task	Element of SA Process	Key Inputs and Processes
<p>Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope.</p> <p>A1: Identifying other relevant policies, plans, programmes and sustainability objectives.</p> <p>A2: Collecting baseline information</p> <p>A3: Identifying sustainability issues and problems.</p> <p>A4: Developing the SA Framework.</p> <p>A5: Consulting on the scope of the SA.</p>	Scoping	<p>The SA process commenced in late 2005 with the production of the Scoping Report for the SA of the LDP. The Scoping Report contained:</p> <p>A characterisation of relevant plans, programmes and policies that could influence the SA and the development of the LDP.</p> <p>A review of relevant plans, programmes and policies that could influence the SA and the development of the LDP.</p> <p>The identification of the key sustainability issues and opportunities.</p> <p>The SA Framework, against which the elements of the LDP would be assessed.</p>
	SA Framework	The SA Framework was developed through the Scoping stage and acts and contains a series of SA Objectives and guide questions. Following the consultation of the Scoping Report, some minor amendments were made to the SA Objectives.
	Scoping Consultation	The Scoping Report was issued for public consultation by Denbighshire County Council between the 5 th July 2006 and 4 th of September 2006. The three main statutory consultation bodies: Cadw, Environment Agency Wales and Countryside Council for Wales were formally consulted in accordance with the SEA Directive. In addition to the above statutory consultation bodies approximately 100 social, environmental and economic consultees were also consulted. Appendix 1 of the Scoping Report summarises the comments and how they were addressed in the preparation of the Revised Scoping Report
	Scoping Report Workshop	Atkins Ltd. Was appointed by Denbighshire County Council to undertake a review of the LDP SA/SEA Scoping Report that was prepared by the Planning and Public Protection Service. As part of this review, Atkins as instructed to help prepare and host a workshop session with invited delegates supported by DCC staff, to explore elements of the Scoping Report and Stage A work in greater detail. The workshop took place on Monday 26 th November 2006. The aim was to target those areas of the Scoping Report that appeared to give rise to some confusion within the comments and also areas where it was felt that a greater input would assist in better defining the baseline. A total of 37 delegates attended the workshop and a report was produced recording the main issues discussed at the workshop which recommended changes to the Scoping Report.
Stage B: Developing and	Initial SA	Work on the Strategic Options for the LDP commenced in February 2007 with discussions

<p>refining options and assessing effects. B1: Testing the plan objectives against the SA Framework B2: Developing the plan options B3: Predicting the effects of the draft plan B4: Evaluating the effects of the draft plan B5: Considering ways of mitigating adverse effects and maximising beneficial effects B6: Proposing measures to monitor the significant effects of implementing the plans</p>	<p>Reports and Consultation</p>	<p>held in the LDP Working Group (County Councillors) and the LDP Key Stakeholder Group (made up of a mix of social, economic and environmental representors). Discussions continued until January 2008 when a report was agreed by Denbighshire County Council Full Council. The options were assessed and recommendation contained in the SA Report which was consulted upon publicly in the Pre-deposit LDP consultation. Appendix X presents a table showing the responses from the statutory consultee and incorporated into the SA process as appropriate.</p>
<p>Stage C Preparing the SA Report C1: Preparing the SA Report Stage D: Consulting on the Draft Plan and the SA Report D1: Public participation on the preferred options of the plan and the SA Report D2: Assessing the significant changes D3: Making decisions and providing information</p>	<p>Final SA Report and Consultation</p>	<p>An SA Report was issued with the Deposit LDP (2009). It was issued for consultation alongside the Deposit version of the LDP to all statutory consultees and the public for comments. The statutory consultation period is 6 weeks. This report update the SA Report published in 2009 and reflects the comments received as part of the consultation. A separate Addendum report screens the proposed alterations following Deposit consultation to the Local Development Plan. This Addendum is titled SA/SEA Assessment of Denbighshire Local Development Plan Focussed Changes (May 2011). An additional Addendum has been created following the issue of the Inspectors binding recommendations (May 2013).</p> <p>This final SA Report documents the entire SA process.</p>
<p>Stage E: Monitoring</p>		<p>This SA Report contains a monitoring framework that should be used to monitor the significant effects of implementing the LDP. Monitoring will commence when the LDP is formally adopted. SA reporting will take place in the Council’s Annual Monitoring Report (AMR).</p>

2.3 Appraisal Methodology

The methodology adopted involved the completion of the SA stages A, B and C and associated tasks as outlined in Figure 2.1 below.

Figure 2.1: Relationship between SA Stages and Tasks



STAGE A: SETTING THE CONTEXT AND OBJECTIVES, ESTABLISHING BASELINE AND DECIDING ON SCOPE

A1: OTHER RELEVANT PLANS AND PROGRAMMES

Both the LDP and the SA Scoping Report should be set in the context of national, regional and local objectives along with strategic planning, transport, social, economic and environmental policies. This being the case a comprehensive review of all relevant plans, policies and programs (PPPs) was carried out as part of the SA scoping process. This ensures that the objectives in the SAR generally adhere to, and are not in conflict with, objectives found in other PPPs and also assists in the setting of sustainability objectives for the SA. In addition to this it can also be used to ascertain potential conflicts between objectives which may need to be addressed as part of the process.

In order to fully assess relevant PPPs a list was drawn up by the Council using the WAG and ODPM SA guidance and local knowledge. For the purposes of comprehensiveness higher tier PPPs were included in the list to show the hierarchy and relationships between the various plans, policies and programs. The plans, policies and programs reviewed are outlined below in Table 3.1 in Section 3. Full details of the review of each plan, policy and program can be found in Appendix 1 of the SA Scoping Report.

A2: BASELINE DATA

To predict accurately how potential plan policies will affect the environment, and social and economic factors, it is first important to understand the current state of these factors and then examine their likely evolution without the implementation of the plan.

Information describing the baseline provides the basis for the prediction and monitoring of the effects of the implementation of the LDP. It can be used as a way of identifying problems as they occur so that relevant policy changes can be made to address such matters.

Due to the fact that SA is an iterative process subsequent stages in its preparation and assessment might identify other issues and priorities that require data collection and monitoring. This makes the SA process flexible, adaptable and responsive to changes in the baseline conditions and enables trends to be analysed over time.

The most efficient way to collect relevant baseline data is through the use of indicators. This ensures that the data collection carried out is both focused and effective. The identification of relevant indicators has taken place alongside the assessment of other relevant plans policies and programs (Task A1), the identification of sustainability issues (Task A3) and developing the sustainability appraisal framework (Task A4).

Sustainability indicators have been selected for their ability to provide objective data that will, over time, offer an insight into general trends taking place.

Baseline information and data have been summarised in Section 4 of this SAR and baseline datasets are presented in Appendix 1 of the Scoping Report. The aim is to give an overview of the environmental, social and economic characteristics of the plan area and how these compare to the region and the rest of the country.

Any gaps in the required baseline data will be addressed, where applicable, by the development of a targeted and cost-effective monitoring program once the LDP is adopted. However, it is likely that external agencies will be able to provide some data through their own monitoring programs. The collection of baseline data will be refined as the LDP evolves.

A3: SUSTAINABILITY ISSUES

The key sustainability issues for Denbighshire County have been derived by analysing the baseline data and contextual information from other plans and assessing what the

likely significant issues will be over the longer term i.e. 10 years +. The key sustainability issues relevant to the LDP were identified in the following ways:

- Analysis of the objectives and issues highlighted in other plans and programmes that are relevant to Denbighshire and its communities;
- Analysis of the baseline data and trends.

In addition to this the consultation responses to this Scoping Report provided further information relating to the identification of sustainability issues for the County. These issues were set out in a table under the three sustainable development dimensions (economic, social and environmental) and covered the most relevant topics. The key sustainability issues table is presented in Chapter 5.

A4: SUSTAINABILITY APPRAISAL FRAMEWORK

A set of draft objectives and indicators, against which the policies and proposals in the LDP can be assessed, was drawn up under the three sustainable development dimensions: social, economic and environmental.

The SA objectives were derived from the various plans, policies and programmes that were reviewed as part of Task A1, collection of baseline data (Task A2) and the identification of key sustainability issues (Task A3).

A revised framework was then developed taking on board comments from the consultation on the original Scoping Report and original SA Framework. The revised framework attempts to establish the use of indicators specific to Denbighshire and to identify local targets against which to assess the LDP. The revised SA Framework is presented in Table 6.1 in Chapter 6.

A5: CONSULTING ON THE SCOPE OF THE SUSTAINABILITY APPRAISAL

At this stage Denbighshire County Council sought the views from the Consultation bodies and others on the scope and level of detail of the ensuing Sustainability Appraisal Report. A Scoping Report was prepared to that effect. The consultation results have influenced and helped shape the Sustainability Appraisal Report.

STAGE B: DEVELOPING AND REFINING OPTIONS

B1: TESTING THE LDP OBJECTIVES AGAINST THE SUSTAINABILITY APPRAISAL FRAMEWORK

A compatibility assessment of the LDP objectives against the SA Objectives was undertaken as part of the iterative process to assess the sustainability of the LDP objectives. This was undertaken to ensure that the overall objectives of the LDP were in accordance with the SA objectives and identify potential areas for further investigation as part of the detailed sustainability appraisal assessments. This is discussed in Chapter 7, para 7.4 of this report.

B2: DEVELOPING THE LDP OPTIONS

Strategic policy options have been developed by Denbighshire County Council. These options have been assessed, in broad terms, against the SA framework in order to determine their performance in sustainability terms, with reference to the social, environmental and economic factors.

Tables showing the assessment of the range of strategic policy options available for achieving the objectives under consideration were prepared. Each strategic policy option was assigned either a major positive effect (represented by +++), a minor positive effect (represented by +), a major negative effect (represented by ---), a minor negative effect (represented by -) or a range of positive and negative effects (represented by +/-) against each of the SA objectives. When no effect was anticipated a comment is made to that effect. A commentary explaining and justifying the choice of symbol with

reference to the baseline situation relevant to each SA objective was also provided. The assessment has been undertaken primarily using expert judgement which is recognised in the guidance as being an acceptable and appropriate technique to be used at this stage. The assessment of strategic options is presented in Chapter 8 of this report.

B3: PREDICTING THE EFFECTS OF THE LDP

The methodology that has been adopted for this assessment is generally broad-brush and qualitative which is generally accepted as good practice by the SA guidance.

The assessment of the LDP was broken down into 'prediction' of effects, 'evaluation' of effects (probability/frequency, duration/reversibility, secondary/cumulative or synergistic) and 'mitigation' of effects.

The prediction of effects involved the identification of the potential changes to the sustainability baseline conditions which were considered to arise from the specific policy being implemented by the LDP. The predicted effects were then described in terms of their nature and magnitude using the following parameters:

- Geographical Scale;
- Probability of the effect occurring;
- Timing of effect – short, medium, long term;
- Duration of effect – temporary or permanent;
- Nature of effect – positive, negative or neutral;
- Secondary, cumulative and/or synergistic effects.

The prediction of effects was undertaken for each receptor topic being affected through the LDP against the SA Framework.

B4: EVALUATING THE EFFECTS OF LDP

The next stage of the assessment involved the evaluation of the significant effects. The evaluation involved forming a judgement on whether or not the predicted effects would be environmentally significant. The technique that has primarily been used to assess the significance of effects in this assessment is a qualitative assessment based on judgement. Other techniques included consultation with stakeholders involved in the SA process, geographical information systems and reference to key legislation, primarily the Strategic Environmental Assessment of Plans and Programmes Regulations (2004) and Environmental Impact Assessment Regulations (1999).

As with the prediction of the effects, the criteria of assessing the significance of a specific effect used in this assessment, as outlined in Annex II of the SEA Directive, has been based on the following parameters to determine the significance:

- Scale;
- Permanence;
- Nature and sensitivity;
- Cumulative effects.

In the current practice of sustainability appraisals, the broad-brush qualitative prediction and evaluation of effects is based on a qualitative seven point scale in easily understood terms. In general, this assessment has adopted the scale set in Table 2.3 to assess the significance of effects of the LDP Policies.

Table 2.3: Assessment Notation Used to Complete the Matrices

Impact	Description	Symbol
Strongly Positive*	The policy/option contributes to the achievements of all elements of the SA Objective.	+++
Moderately Positive*	The policy/option contributes partially to the achievements of the SA Objective.	++
Slightly Positive	The policy/option contributes slightly to the achievement of the SA Objective.	+
No impact/neutral	There is no clear relationship between the policy/option and/or the achievement of the SA Objective or the relationship is neutral.	0
Slightly Negative	The policy/option detracts slightly from the achievements of the SA Objective.	-
Moderately Negative*	The policy/objective detracts from the achievement of some of the SA Objectives.	--
Strongly Negative*	The policy/option detracts from the achievement of all elements of the SA Objectives.	---
Uncertain impacts – more information required	It is not possible to determine the nature of the impact as there may be too many external factors that would influence appraisal or the impact may depend heavily upon implementation at the local level.	?
Positive and Negative Impacts	The policy/option has a combination of both positive and negative contributions to the achievement of the SA Objective.	+/-
Direct/Indirect	Direct impact of the policy/option on the SA Objective.	(d)
	Indirect impact of the policy/option on the SA Objective.	(i)
Duration of Effect	Short term (less than 5 years)	S-T
	Medium term (between 5 – 10 years)	M-T
	Long term (effect that will last over 10 years)	L-T
Level of Uncertainty	There is a high degree of uncertainty in the impact prediction	H
	There is a medium degree of uncertainty in the impact prediction.	M
	There is a low degree of uncertainty in the impact prediction	L
Type of Impact	The impact would be permanent.	P
	The impact would be temporary.	T

* Moderately and Strongly + or – have been considered to have significant effect.

The LDP policy assessment matrix, example presented in Table 2.4 below, records the likely duration of the impacts. The short-term impacts are those that will be realised between one and five years from now. The majority of impacts predicted are most likely to occur beyond the short-term.

Table 2.4: Extract of the matrix used to assess LDP Policies

LDP Policy X – Title												
SA Objectives	Scale									Permanency	Level of Uncertainty	Comments / Recommendations
	Local			Countywide			Region / Cross boundary					
	S-T	M-T	L-T	S-T	M-T	L-T	S-T	M-T	L-T			
Social												
1. Ensuring that the housing needs of the community are met.	++	+++	+++	0	-	-	0	0	0	Temporary (T)	Medium (M)	Explanation of the assessment

Assessment Assumptions

When undertaking the assessments it was vital to remember that the LDP should be read as a whole and as such, certain policies in the plan which might have the potential to result in adverse sustainability effects that could actually be avoided or mitigated through the application of other relevant policies in the Plan. For example, a housing policy, whilst having the potential to result in a variety of environmental effects, is unlikely to consider or include wording to mitigate such effects, rather this would be dealt with in another part of the LDP, such as Valuing our Environment.

Secondary and Cumulative Effects Assessments

Annex I of the SEA Directive requires that the assessment of effects include secondary, cumulative and synergistic effects. Assessment against these effects has been carried out on the LDP. The results are presented in Chapter 11 of this report. Cumulative and synergistic effects of the LDP could be realised in the following ways:

- A policy could involve numerous geographical implications, for example that would lead to the provision of multiple individual developments. This could result in incremental impacts on the baseline which either cumulative or synergistically combine to result in greater overall impacts than on a site by site basis.
- There could be cumulative effects between policies. For example, individual policies could have incremental impacts upon the baseline which when combined with other policies may have cumulative or synergistically impacts, both positive and negative.
- Individual policies may have impacts on a number of receptors which could influence other topics either cumulative or synergistically. For example, a policy could result in a direct impact upon air quality but it could also lead to increased traffic flows which would also affect air quality.

Cumulative effects assessment is, therefore, best addressed using a receptor based approach, rather than one focussed upon SA Objectives and this has been adopted for the LDP.

B5: CONSIDERING WAYS OF MITIGATING ADVERSE EFFECTS AND MAXIMISING BENEFICIAL EFFECTS

Mitigation measures have been identified during the evaluation process to reduce the scale of any significant negative effects and also maximise beneficial effects.

B6: PROPOSING MEASURES TO MONITOR THE SIGNIFICANT EFFECTS OF IMPLEMENTING THE LDP

SA monitoring involves measuring indicators which will enable the establishment of a causal link between the implementation of the plan and the likely significant effect (positive or negative) being monitored. It thus helps to ensure that any adverse effects which arise during implementation, whether or not they were foreseen, can be identified and that action can be taken by Denbighshire County Council to deal with them.

3. Review of Plans, Programmes and Policies.

3.1 Introduction

The development of a sustainability appraisal framework is a key component in completing the SA by synthesising objectives relevant to the SA, the baseline information and sustainability issues into a systematic and easily understood tool that allows the prediction and assessment of effects arising from the LDP.

3.2 Relevant Plans, Programmes and Policies

The SEA Directive requires that the Scoping Report covers:

- *‘the relationship with other relevant plans and programmes [Annex Ia]; and*
- *‘the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation’ [Annex Ie].*

There is a hierarchy of documents which affect the emerging Local Development Plan. These start at an international level, moving down through national, regional and more local levels. Generally where there are conflicts between the different levels of documentation, the higher level document takes priority.

There are a range of international plans and programmes which influence the LDP, including the Convention on Biological Diversity and the Kyoto Protocol. Most of these international programmes have now been interpreted at a national level and incorporated into guidance at this level.

One of the main influences on the content of the LDP is national planning guidance, Planning Policy Wales, Technical Advice Notes (TANs) the Wales Spatial Plan and Denbighshire’s BIG Plan which set out the Government’s strategy for development on a wide range of issues, including housing, the economy, transport and the environment.

In order to fully assess relevant plans, an initial review identified a generic LDP-related list of relevant PPPs. This was then refined to make each of these relevant to the LDP. In most instances higher tier guidance was excluded from the list of PPPs as it was felt that lower tier PPPs would already reflect the higher tier requirements.

Appendix 1 of the Initial SA Report (can be found at LDP Examination Preparation Document 003) provides comprehensive information on the main sustainability objectives of these plans / programmes, together with how the LDP can take these objectives on board. Where there are any likely conflicts between the LDP and another Plan / Programme, this has been identified. Table 3.1 provides a comprehensive list of the documents that have been reviewed.

Table 3.1: List of Plans, Policies and Programmes Reviewed

Name of Plan, Policy & Programmes
International
The Johannesburg Declaration on Sustainable Development (2002)
Rio Declaration on the environment and development (1992)
European Spatial Development Perspective (EC 1999)
European Habitats Directive
Nitrates Directive
Water Framework Directive (2000)
Air Quality Directive (1996/62/EEC)
Directive on Waste Framework (75/442/EEC) replaced by Directive (2006/12/EC)
Directive on Environmental Noise (2002/49/EC)
Bathing Water Quality Directive (76/160/EEC)
Promotion of Electricity from Renewable Energy Directive (2001/77/EC)
EU 6 th Environmental Action Plan
Kyoto Agreement
Council Directive on the Conservation of Wild Birds
Directive on Landfill of Waste (99/31/EC)
The Aarhus Convention (October 2001)
Convention on Biological Diversity
Bern Convention on the Conservation of European Wildlife and Natural Habitats
United Nations Framework Convention on Climate Change
Directive on Assessments and Management of Flood Risk (2007/60/EC)
National (UK)
The UK Strategy for Sustainable Development
The UK Biodiversity Action Plan (1994)
National Waste strategy “Wise about Waste”
River Basis Management Plans
Water Resource Management Plans
Energy White Paper: Our Energy Future – Creating a Low Carbon Economy (ODPM 2003)
Providing Accessible Natural Greenspace in Towns and Cities: A Practical Guide to Assessing the Resource and Implementing Local Standards for Provision, Countryside Council for Wales
Countryside and Rights of Way Act (2000)
Natural Environment and Rural Communities Act (2006)
Water Resources for the Future: Strategy for England and Wales, Environment Agency (2001)
National (Wales)
One Wales (2007)
Wales Sustainable Development Scheme & Action Plan
Environmental Strategy Wales (2006)
People, Places, Futures, The Wales Spatial Plan (2004) and Update 2008.
WDA “Property Strategy for Employment In Wales 2004-2008 (published 2005)
Planning Policy Wales Edition 5 (2012)
Minerals Planning Policy Wales (2000)
Woodlands for Wales, Welsh Assembly Government Woodland Strategy (2001)
Energy Wales: A Low Carbon Transition (2012)
Planning for Climate Change (consultation draft 2006)
Technical Advice Notes (TANs)
TAN 1: Joint Housing Land Availability Studies (2006)
TAN 2: Planning and Affordable Housing (2006)
TAN 3: Simplified Planning Zones (1996)
TAN 4: Retailing and Town Centres (1996)
TAN 5: Nature Conservation and Planning (2009)
TAN 6: Agricultural and Rural Development (2010)
TAN 7: Outdoor Advertisement Control (1996)

TAN 8: Renewable Energy (July 2005)
TAN 10: Tree Preservation Orders (1997)
TAN 11: Noise (1997)
TAN12: Development and flood risk (2004).
TAN 13: Tourism (1997)
TAN 14: Coastal Planning (1998)
TAN 15: Development and Flood Risk (2004)
TAN 16: Sport and Recreation and Open Space (2009)
TAN 18: Transport (2007)
TAN 19: Telecommunications (2002)
TAN 20: Welsh Language (June 2000)
TAN 21: Waste (November 2001)
TAN 22 : Planning for Sustainable Buildings (2010)
MTAN (Wales) 1: Aggregates (2004)
MTAN (Wales) 2 : Coal (2009)
Regional
North West England Regional Spatial Strategy
North Wales Regional Waste Plan and 1 st review 2008.
North Wales Economic Development Strategy
North Wales Regional Planning Guidance (October 2002)
North East Wales / West Cheshire Sub Regional Spatial Strategy
Conwy / Denbighshire Sub Regional Spatial Strategy (2007)
Draft Regional Technical Statement: Aggregates (consultation draft 2008)
Transport 2000
North Wales Regional Transport Plan (2009)
North Wales Regional Waste Plan 1 st Review (2008)
Clwydian Range AONB Management Plan (2009-2014)
Local
The BIG Plan 2011-2014 (incorporates the Community Strategy, Health, Social Care & Well Being Strategy, Children and Young People Plan, Community Safety Plan)
Denbighshire County Council Local Housing Strategy (2007)
Denbighshire County Council Local Biodiversity Action Plan – Approved (May 2003)
Denbighshire County Council Habitat Action Plans
Denbighshire County Council Species Action Plans
Denbighshire County Council Landscape Strategy
Denbighshire County Council Tourism Strategy
Denbighshire County Council Culture and Leisure Strategy (Approved 2002)
Denbighshire County Council Crime and Disorder Strategy 2002-2005
Denbighshire County Council Countryside Strategy, 'Caring for our Countryside' (1998)
Denbighshire Municipal Waste Management Strategy (2005)
Environment Agency Wales Dee Catchment Flood Management Plan (Draft)
Environment Agency Wales Conwy/Clwyd Catchment Flood Management Plan (Draft)
Environment Agency Wales Dee Catchment Abstraction Management Strategy (2008)
Liverpool Bay Shoreline Management Plan SMP2
Denbighshire County Council Area Partnership Plans (5 area plans)
Small Towns and Village Enterprise Initiative Plans
Wrexham County Council LDP (ongoing - emerging)
Flintshire County Council UDP (2011)
Conwy County Borough Council LDP (ongoing - emerging)
Local Geodiversity Action Plan (ongoing – emerging)
North Wales Coastal Strategic Regeneration Area
Denbighshire Empty Homes Officer (2009)

A brief summary of key implications is presented below.

INTERNATIONAL SUMMARY

Some of the key themes identified relevant to LDP include:

- Ensure that the development plan is based on the principle of sustainable development for now and in the future;
- Protection and enhancement of biodiversity and the natural environment, particularly sites of international importance e.g. Special Protection Areas, Special Areas of Conservation;
- Produce a resource efficient development plan aiming to be more sustainable in production and consumption;
- Protect all water resources
- Promote sustainable travel patterns and energy consumption.
- Recognise the challenge of climate change and implementing appropriate action to deal with it;
- The need to promote renewable energy and energy efficiency;

The International documentation reviewed raised broad environmental themes and some land use and design themes, which are likely to be the main inputs of the LDP.

NATIONAL SUMMARY

A review was undertaken of relevant white papers, plans and strategies. One of the most important documents viewed was the UK Sustainable Development Strategy which has an explicit focus on environmental limits. There are 5 shared UK principles of sustainable development. For a policy to be sustainable it must respect all five principles, being;

- Living within environmental limits;
- Ensuring a strong, healthy and just society;
- Achieving a sustainable economy;
- Using sound science responsibly; and
- Promoting good governance.

In the Welsh context, the majority of the documents reviewed were the planning based Technical Advice Notes which developed themes of sustainable design, consumption and use. They also built on community well-being, spatial planning and methods/dependencies of public and private transport mode, town centre retailing, renewable energy, provision of range of housing to meet community needs, provision of recreation space etc.

Another key document is the Wales Spatial Plan which focuses on improving housing quality and access, increasing prosperity through increased economy activity and staff training investment and the promotion of environmental awareness and respect. A strategic hub is identified in the north of the County and improved accessibility to more rural areas is also a key priority.

In summary the LDP will need to ensure all key themes are considered to minimise conflict.

REGIONAL / LOCAL SUMMARY

At a more local level there are other documents such as Housing Strategy, the Local Biodiversity Action Plan, Health, Social Care and Well Being Strategy, Tourism Strategy, Crime and Disorder Strategy which will influence the LDP. These set out the aspirations and needs of different villages and communities. Where needs are identified the planning process can help to meet these requirements, for example by working with communities to provide affordable housing sites and community facilities.

A key strategy influencing the LDP is the Community Strategy prepared by the Denbighshire Community Strategy Partnership. It aims to co-ordinate the activities of the public, private, voluntary and community sector organisations in trying to achieve an agreed vision for

improving the economic, social and environmental well-being of Denbighshire. The Community Strategy is now the principal strategic document for the County and has been produced following extensive consultation with the people of Denbighshire and the various partners. The Local Development Plan will provide a spatial expression to the elements of the community strategy (as expressed in the action plan) which relate to the use and development of land.

The County Vision identified local aspirations for the future of the County and is set out in Table 3.2.

Table 3.2: The Denbighshire BIG Plan

No.	Statement
1.	Older people lead independent and fulfilled lives.
2.	People and places in Rhyl benefit from regeneration activity.
3.	Children and young people in Denbighshire achieve and have skills for life.
4.	Vulnerable families in Denbighshire are supported to live a life free from poverty, where they can be independent and flourish.
5.	Needs of our rural communities are recognised and met.
6.	People in Denbighshire have healthy lifestyles.
7.	Children, young people and vulnerable adults in Denbighshire are safe.
8.	Denbighshire has a thriving and sustainability economy and a skilled workforce.

The different plans and strategies influencing the LDP raise a series of challenges and requirements that the Council must try to address. One main challenge is the need to accommodate development whilst ensuring that there is protection of the built and rural character of the County. For example, diversification schemes and businesses in rural areas have the potential to increase traffic and more buildings could adversely affect the undeveloped nature of the countryside.

In addition to the themes of the County BIG Plan other key sustainability themes have emerged from the analysis of relevant PPPs, as follows:

SOCIAL

- Improving health and reducing health inequalities;
- Improving access to good quality, affordable and efficient housing;
- Ensure accessibility for all to jobs, health, education, leisure, retail, parks and open spaces and community facilities;
- Reduce crime, disorder and fear of crime;
- Improving educational achievement, training and opportunities for lifelong learning and employability;
- To reduce noise pollution;
- Improve choice and use of sustainable modes and reducing the need to travel.

ENVIRONMENTAL

- Providing adequate protection for the natural and built environment including biodiversity, habitats and protected designated sites (i.e. AONB, SSSI, Conservation Areas, World Heritage Site, Special Areas of Protection, Special Areas of Conservation, UK BAP Priority Habitats and Species and LBAP Habitat Action Plans and Species Action Plans) and sites of local importance;
- Manage waste sustainably, minimise its production, and increase reuse, recycling and recovery rates;
- Improve and protect inland, coastal and groundwater quality;
- Restore and protect soil quality and quantity;

- To reduce the risk of flooding;
- Manage and adapt to climate change;
- To respect 'environmental limits' to ensure no irreversible damage to the environment;
- The need to improve local air quality and reduce air pollution;
- To reduce CO₂ emissions; and
- To support the use of renewable energy schemes and energy efficiency in new developments.

ECONOMIC

- To support the economic regeneration of the county through the provision of adequate employment land and supporting the role of tourism in contributing to the local economy; and
- To support economic development and regeneration.

The key sustainability themes identified will be used to assist in developing the Sustainability Appraisal Framework which forms the basis of the assessment. Appendix 1 provides details of the environmental protection objectives established at International, European, National and local level as well as the social and economic priorities. The following chapter will look at trends and issues with Denbighshire.

4 Baseline Context and Sustainability Issues

4.1 Introduction

Characterising the environmental and sustainability baseline, issues and context is an important activity in devising the SA Framework.

The SEA Directive stipulates activities which must be undertaken as part of the SA. The activities relevant to setting the context and establishing the baseline are outlined below:

“relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan’ and ‘the environmental characteristics of areas likely to be significantly affected” [Annex 1b] [Annex 1c]

“any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC” [Annex 1c]

Baseline information provides the basis for predicting and monitoring effects and helps to identify sustainability problems and alternative ways of dealing with them. Sufficient information about the current and likely future state of the development area is required to allow the LDP’s effects to be adequately predicted.

The ODPM’s guidance emphasises that the collection of baseline data and the development of the SA Framework should inform each other. The review and analysis of relevant plans and programmes will also influence data collection. The collection of baseline data should not be viewed as a one-off exercise conducted at Stage A only. Further data collection has been undertaken as the SA develops. In deciding what and how much baseline data to collect, the key determining factor will be the level of detail required to appraise the LDP against the SA objectives.

4.2 Methodology

A preliminary set of baseline data has been extracted from a wide range of available publications and datasets. Baseline information and data have been summarised in this section, and full baseline datasets are presented in Appendix 1 of the SA Scoping Report (can be found at LDP Examination Preparation Documents 003). Sources have included, among others:

- Review of relevant local, regional and national plans, strategies and programmes;
- Data research based around a series of baseline indicators developed from the ODPM’s guidance and previous consultation recommendations from similar SEA’s;
- Consultation workshops held on the 14th June 2005 hosted by BE group consultants;
- Responses from the Scoping Report consultation Summer 2006;
- Consultation workshops held on 20th November 2006 hosted by Atkins Ltd and DCC; and
- Responses to the Pre-Deposit LDP initial SA Report consultation Summer 2008.

The baseline indicators and summaries below have been divided into baseline topics for ease of presentation, and there are many overlaps between the baseline

indicators and the topics. Each of the baseline indicators identified in the SEA Directive have been represented in some form. The SEA Directive also requires that 'material assets' be considered within the SEA. Material assets refer to the stock of valuable assets within a study area and can include valuable landscapes, natural and cultural heritage, quality of agricultural land, flood defence infrastructure etc.

The 10 SEA Directive baseline indicators are:

- Biodiversity including flora and fauna;
- Population;
- Human Health;
- Soil (including waste and contaminated land issues);
- Water (water quality and resource);
- Air;
- Climate factors (including strategic flood risk);
- Material assets (including geographical interests and infrastructure);
- Cultural Heritage;
- Landscape.

4.3 Social Baseline

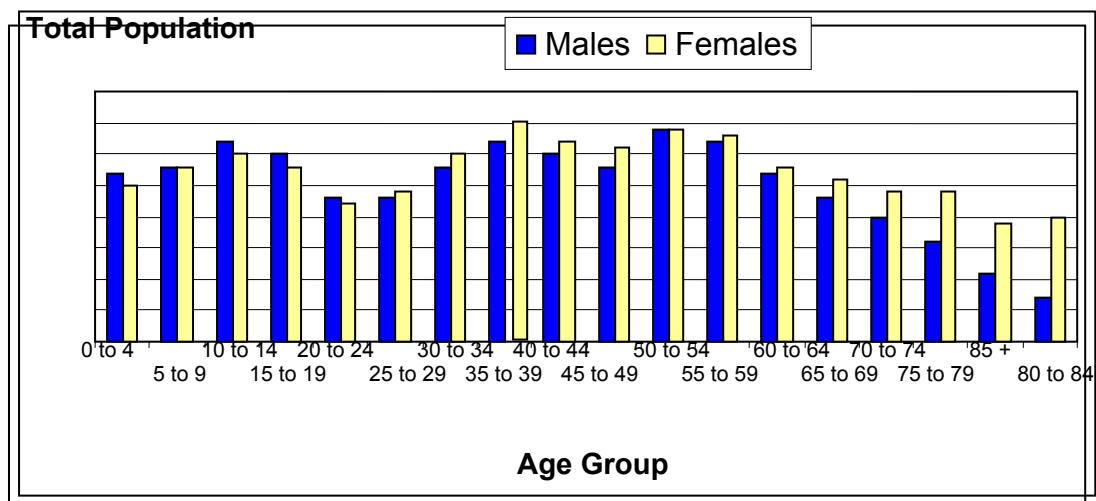
Population

Low birth rates together with an increase in life expectancy have resulted in an aging population. Figure 4.1 illustrates the population distribution by age in Denbighshire in 2002.

Although there has been out-migration by young people (aged 20 – 24), from Denbighshire¹ and reduced birth rates, this has not resulted in a reduced population. In-migration by older working age groups accompanied by their families has resulted in net population growth.

In the short to medium term there is not expected to be much change in overall dependency rate; the rising number of elderly people will be offset by declining number of children. Over the long term, on present trend, significant declines in the working age population could be expected².

Figure 4.1: Denbighshire Population Composition



Source: (Roger Tym & Partners 2004)

Population Distribution

The Office for National Statistics has produced a classification of rural and urban areas in England and Wales (2004) based on settlement form and scarcity by Census Output Area. The settlement types include urban, small town & fringe, village and hamlet & isolated dwellings. These are then categorised as either sparse or less sparse. The classification is referenced against the Census Output areas (i.e. each of the 319 output areas in Denbighshire are assigned a settlement type).

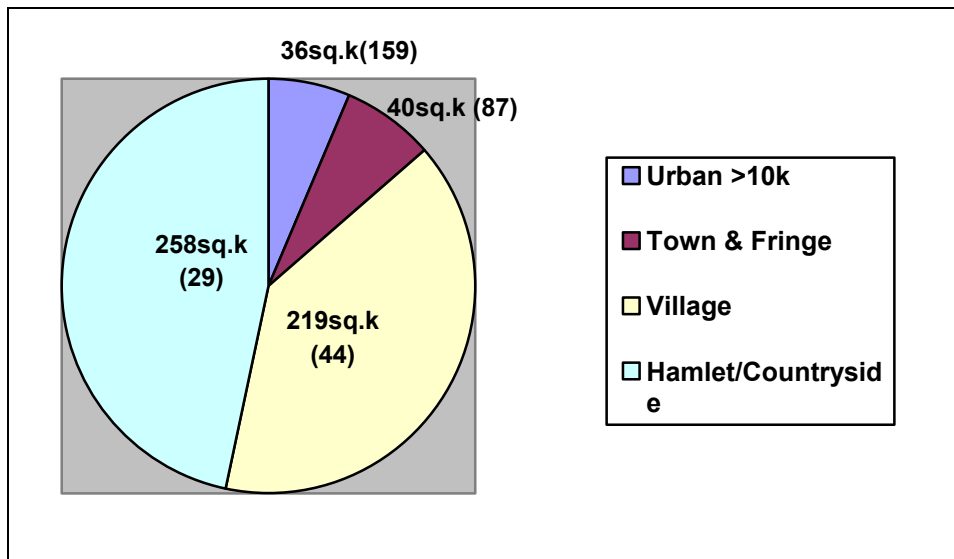
Total square kilometre area of Denbighshire County is 844 km². The total residential area is 553 km². Total residential percentage of Denbighshire is 66%. Figure 4.2 below illustrates the proportion of residential areas by settlement type. Within the chart there are two figures expressed for each of the four settlement types (chart segments). The number of square kilometres is expressed and the figure in brackets is the total census output areas.

¹ Roger Tym & Partners – August (2004) Denbighshire Population & Household Study.

² People, Places Futures – The Wales Spatial Plan, Welsh Assembly Government (2004)

High number of Census output area in a small km² area equals high residential density.

Figure 4.2: Proportion of Residential Areas by Settlement Types



(Internal source – Finance and Performance Department)

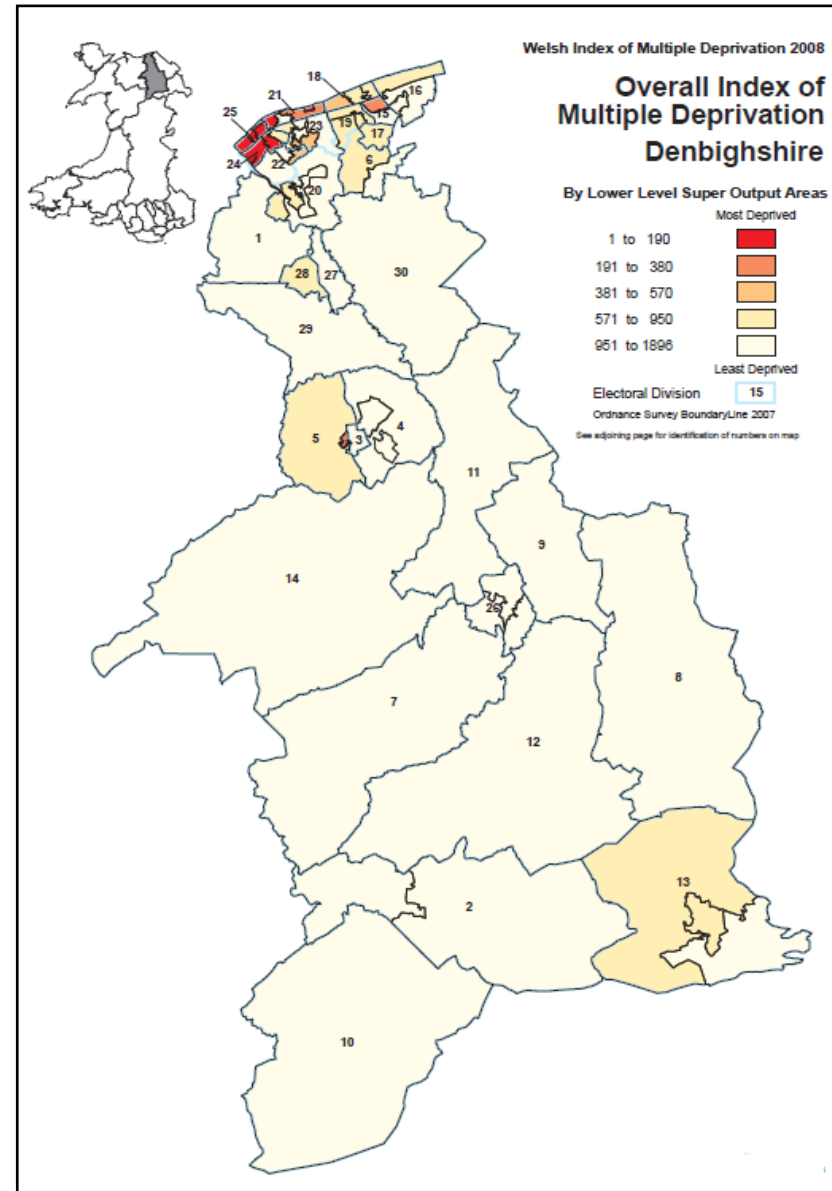
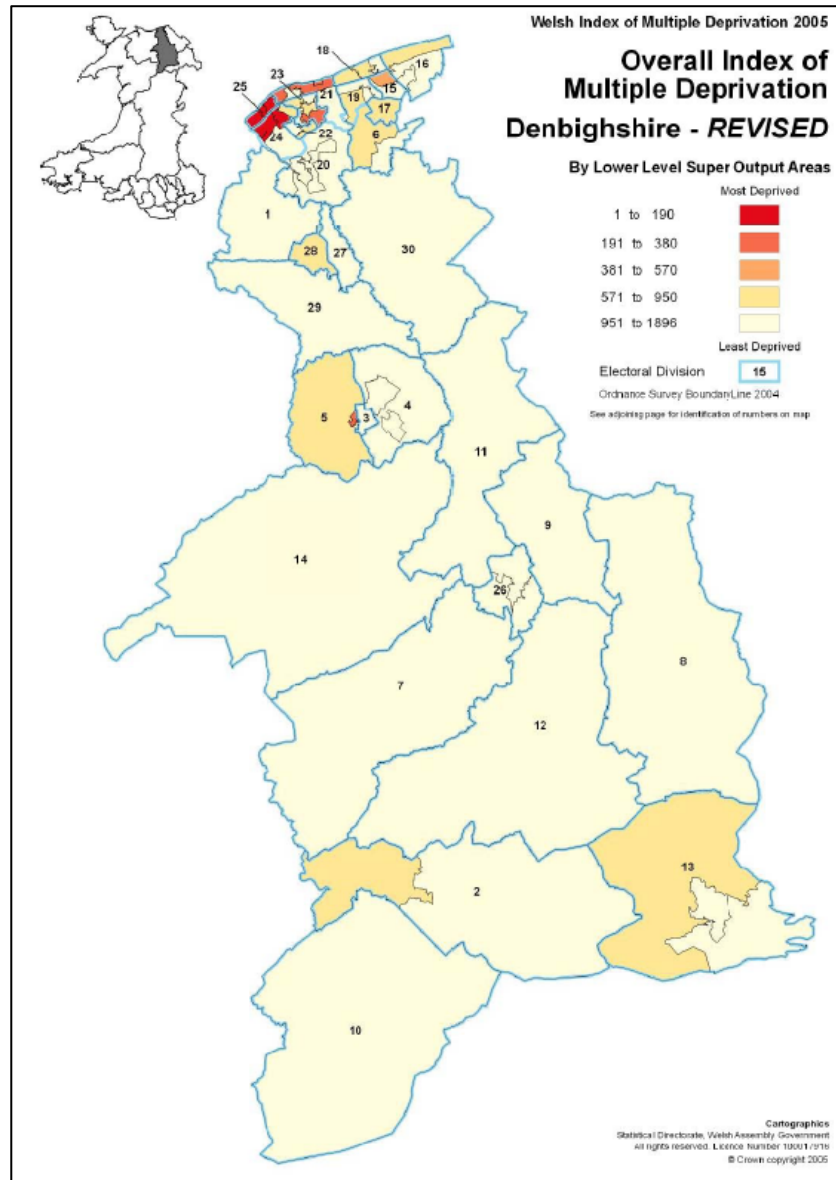
Social Deprivation

The Welsh Assembly Government published the Welsh Index of Multiple Deprivation 2008 which is the official measure of deprivation for small geographical areas in Wales.

The overall Index of Multiple Deprivation (IMD) shows that most of the deprived areas are located in population centres along the northern coast and the southern valleys of south Wales, (as shown in Figure 4.3). The 6 most deprived wards in the County are: Rhyl West 1 & 2, Rhyl South West, Meliden, Denbigh Upper/Henllan and Rhyl East. In comparison with the rank for Wales on the whole, Rhyl West is the most deprived electoral division in Wales.

Patterns observed for most of the deprivation domain indices including Income, Employment, Health, Environment, Housing, Access and Community. But the most deprived domain in the wards is housing and education.

Figure 4.3: Welsh Index of Multiple Deprivation – Overall Index



Housing

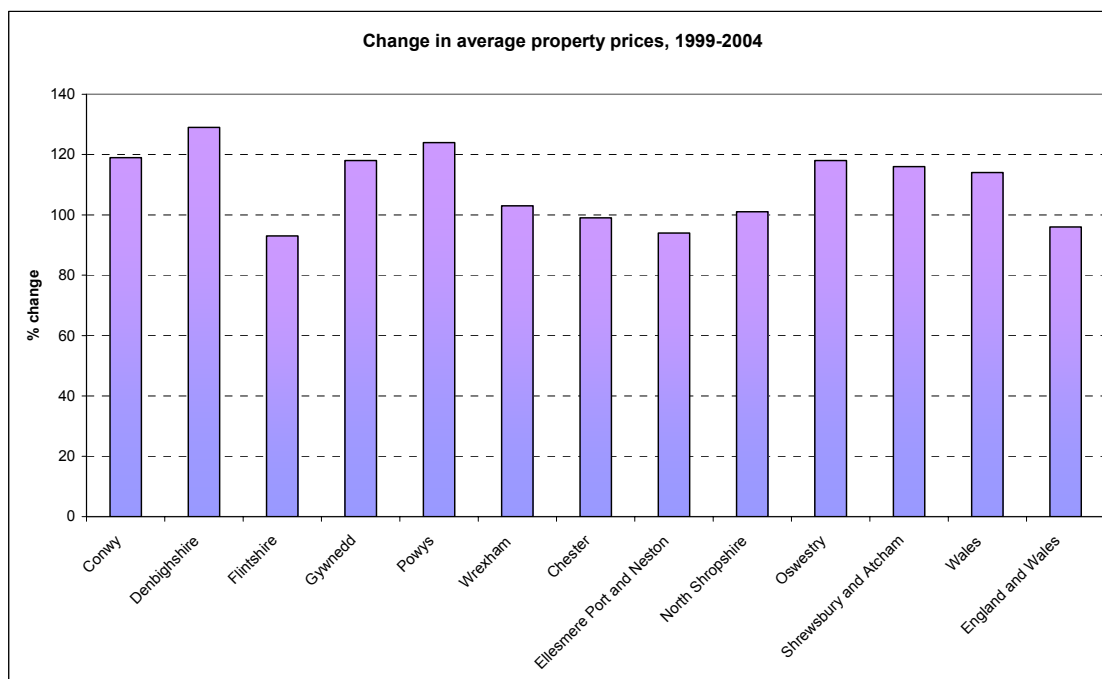
Table 4.1 demonstrates that from 2002 to 2005 the average house price in Wales increased by 64%, a rate that clearly outstrips the UK average.

Table 4.1: Average house prices in 2002 and 2005

Area	Average 2002	Average 2005	% Increase 02-05
Wales	£84,197	£138,328	64%
UK	£137,035	£184,153	35%
UK (excl.LON/SE)	£110,765	£159,757	44%
Scotland	£84,765	£126,795	49%

In the same time the Gross Disposable Household Income in Wales has only increased from £9,056 to £11,137. Earnings in Wales have not increased in line with the increase in house prices³. The house price on average in Denbighshire has increased in line with the neighbouring authority's average and as illustrated in Figure 4. below. The average house price in Denbighshire exceeded the national average over the period of 1994 – 2004.

Figure 4.4: Change in Average House Prices



Source: (Roger Tym Partners – August 2004)

Affordable Housing Needs

Although building homes is intended to meet the need for housing, market forces deny access for many in society.

When assessing the local conditions on affordable housing and the steps that should be taken, the following areas must be assessed; the house prices in the area, the rents in the area, the income in the area, the availability and condition of (affordable) housing and what is the need of the local market.

³ Sources: www.wales.gov.uk/keypubstatisticsforwales/housing/housing.htm,
www.landreg.gov.uk/propertyprice/interactive, www.statistics.gov.uk

The first Denbighshire Housing Market Assessment was published in 2003. An assessment was made of the ability of potential households (namely persons who currently live as part of another household) to access the private sector housing market. There are three elements of housing need; the existing, the potential and the homeless, and Denbighshire having a backlog of provision due to historic annual average figure of 20% completions. Combining backlog of need and recent trends in market house prices affordability is a key issue. Table 4.2 illustrates the affordable housing need in Denbighshire⁴.

Table 4.2: Denbighshire’s Annual Affordable Household Needs

Element	Total number of households
Backlog of existing need	160
Newly Arising Need	853
Gross Affordable Housing Requirement	1,013 units
Supply of Affordable Units	368
Net Affordable Housing Requirement	645 units per annum

Key Trends:

- An increasing ageing population based on natural change.
- Increased numbers of out-migration of younger sectors of the population and in-migration from other Welsh Authorities.
- Housing deprivation is due to rapid increase in house prices leading to poor provision and need for affordable housing.
- Backlog of housing provision.
- Concentrated residential density in urban areas.

Predicted Future Trends without Implementation of the LDP:

- The County would be faced with less school pupils and increase demands for old people homes, social and health care services.
- The existing UDP policies restrict development in villages and smaller settlements.
- Density figures are not currently controlled. No control over market house prices.
- Supplementary Planning Guidance in place to provide for affordable housing.
- Undertaking the LHNA survey the backlog of housing provision has now been identified.
- Without an LDP, housing allocation will be cannot be extended.

Crime

Denbighshire has considered community safety to be a priority since its inception in April 1996, and has worked in close partnership with North Wales Police to make Denbighshire a safer place to live in, to work in and to visit.

With the introduction of the Crime and Disorder Act in 1998, however, this work became one of the Council’s statutory requirements and so took on an even greater importance.

The Council, in partnership with the Police, and having involved a number of other agencies undertook an audit of crime and disorder in the County in 1998. This was used to develop a strategy and action plan which was aimed at tackling the problems identified. The Denbighshire Crime and Disorder Strategy 2002 -2005 published a 12.4% increase in recorded crime with 79 crimes per 1000 of the population. The

⁴ Denbighshire’s Local Housing Needs Survey (2003)

North Wales average for the same period was 73 per 1000 population and the Wales average 81 per 1000 population.

The highest levels of recorded crime are concentrated in the Rhyl West ward to the north of the county, approximately over 30% of all recorded crime in the County.

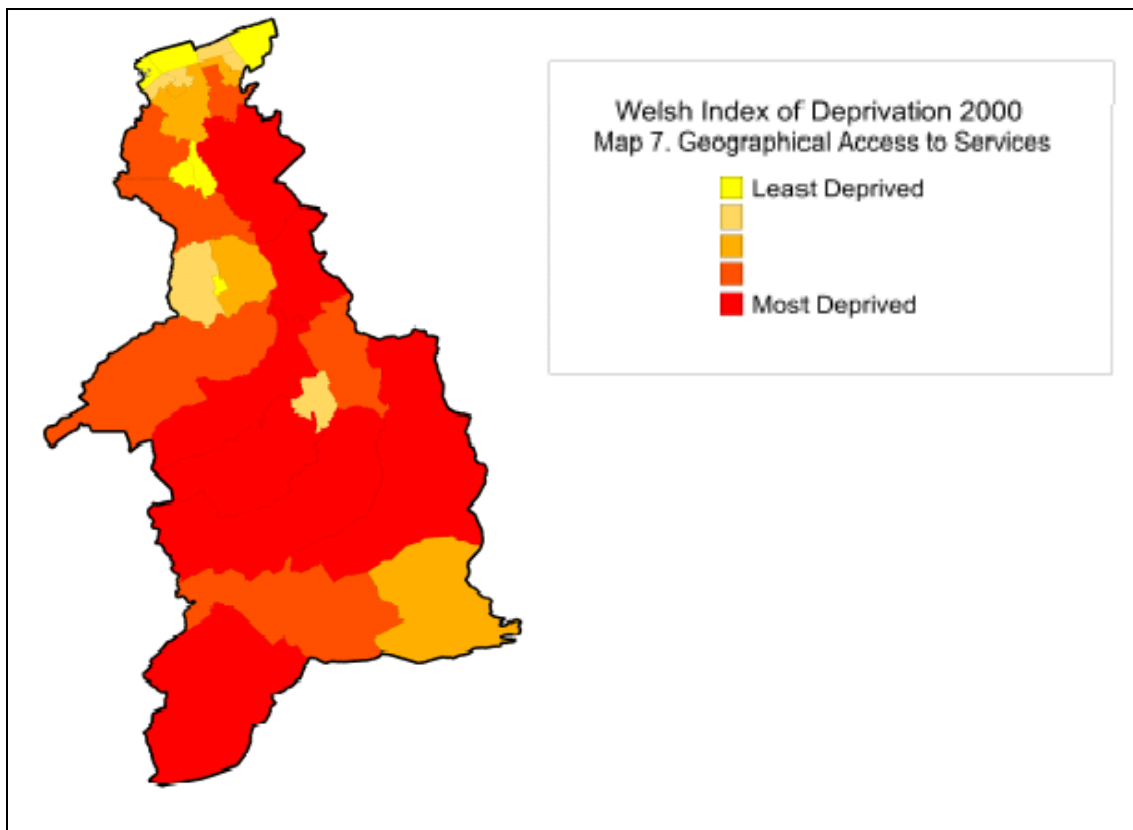
The perception or fear of crime has not been formally recorded.

Access to Services

The Welsh Assembly Government has published the Welsh Index of Multiple Deprivation 2005 which is the official measure of deprivation for small geographical areas in Wales. Patterns of housing deprivation, described earlier, are concentrated in the urban areas of the county. When considering access to service the pattern of deprivation is reversed. This is a key issue in remoter rural areas of Denbighshire as illustrated in Figure 4.5. Access to service deprivation is linked to ease of access residents have to the following:

- Food shop (10 minutes)
- Public library (15 minutes)
- GP surgery (15 minutes)
- Leisure centre (20 minutes)
- Primary school (15 minutes)
- NHS dentist (20 minutes)
- Post office (15 minutes)
- Secondary school (30 minutes)

Figure 4.5: Geographical Access to Services Deprivation in Denbighshire



Key Trends:

- High percentage of recorded crime appears to correlate with the most multiply deprived wards in the County.
- Rural wards within the County deprived of access to services linking to higher use of the car to travel or reduce choice of services.

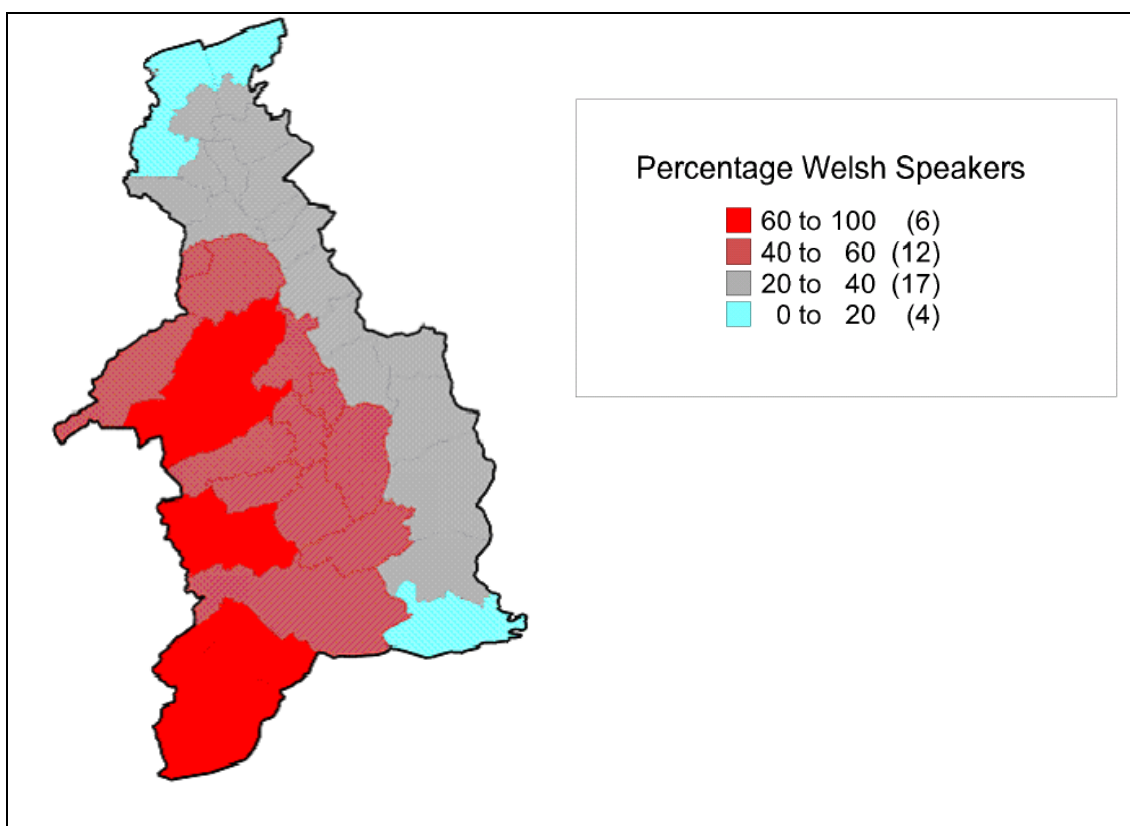
Predicted Future Trends without Implementation of the LDP

- A high percentage of recorded crime is likely to continue unless the housing stock is improved and economic opportunity improved.
- Reduced access to service in the rural wards is a trend likely to continue as the existing UDP policies concentrates growth in the main urban areas and restricted development growth in the countryside.

Welsh Language

The Welsh Assembly Government TAN 20: The Welsh Language (2000) uses a figure of 20% for the National average of the total population of Wales speaking Welsh. The Census (2001) data states 21% an increase of 1%. The total Denbighshire population figure for Welsh speakers is 26.7%⁵ which is above the National average. There are geographical differences throughout the County with the highest concentration of Welsh speakers in the most rural areas. Figure 4.6 illustrates this geographical variation.

Figure 4.6: Percentage of Welsh Language Speakers in Denbighshire



⁵ Menter Iaith Sir Ddinbych (01745) 812822. <http://www.mentrau-iaith.com/>

4.4 Environmental Baseline

Heritage and Built Environment

Denbighshire possesses an extensive and well preserved historical character much of which is recognised as being of national importance. The presence of sites, features and buildings and Conservation Areas undoubtedly adds to the distinctiveness of the County, the quality of our lives. The physical remains of our past are to be valued and protected as a central part of our culture, heritage and sense of national identity.

CADW have included 25 parks and gardens from Denbighshire on a register as being of special historic interest. No additional statutory controls follow as a result of being on the register, but local planning authorities are required to take into account in preparing local plans and in deciding planning applications anything which would affect a registered park or garden and its setting. In addition 5 areas of landscape have been designated on the Register of Historic Landscapes. The Vale of Clwyd is designated as 'outstanding' landscape and the other 4, Lower Elwy Valley, Berwyn, Vale of Llangollen and Eglwyseg, Mynydd Hiraethog are designated as 'special' landscape. These historic sites provide an insight into the lives of historic communities of Denbighshire e.g. the trade, industry, agricultural practices.

There are also 34 Conservation Areas which were assessed last in 1997. The Clwydian Range Area of Outstanding Natural Beauty was designated in 1985 (AONB) and a candidate Llantysilio and Berwyn AOB was designated in 1947. The percentage of the 1,803 Listed Buildings in the County at high risk is 10% with 65% not at risk and the others un-surveyed⁶. 96 of them are Grade I or II*. The Pontcysyllte Aqueduct and Llangollen Canal have been listed as a World Heritage Site and a landscape buffer zone is identified to protect the wider historic and social context.

The condition of Scheduled Ancient Monuments (SAM's) has been monitored since 1985 on a five-yearly basis. The most recent data relates to 1995.

Number of Scheduled Ancient Monuments:

WALES	DENBIGHSHIRE
3,400	168

6% of SAM's were considered to be in an improved condition, 76% were stable with 10% deteriorating to some extent, though in only 1.5% of cases was this considered severe. The deterioration is principally due to natural decay, erosion by livestock, agricultural operations, visitors and overgrowth by vegetation.

The Authority's designated Archaeologist is contacted should a development proposal be located near on an archaeological site. The Historical Environment Records (which lists non-statutory archaeological sites and findings, and more) are used to guide the appropriate planning advice and mitigation.

In June 2009 the Pontcysyllte Aqueduct and Canal achieved World Heritage Site status because it's Outstanding Universal Value to the whole of humanity. Value and significance of WHSs are clearly expressed within the integrity and authenticity of its features and its landscape and cultural setting.

⁶ DCC Development Services Department information.

The Outstanding Universal Value of the World Heritage Site is not contained purely within the inscribed area. The cultural, settled and aesthetic landscape which contribute to the presentation, setting, sense of arrival and history of the World Heritage Site are all important to the integrity of the designation. A Buffer Zone has therefore been drawn around the World Heritage Site to allow its Outstanding Universal Value to be conserved.

Figure 4.7 shows the location of the built environment features.

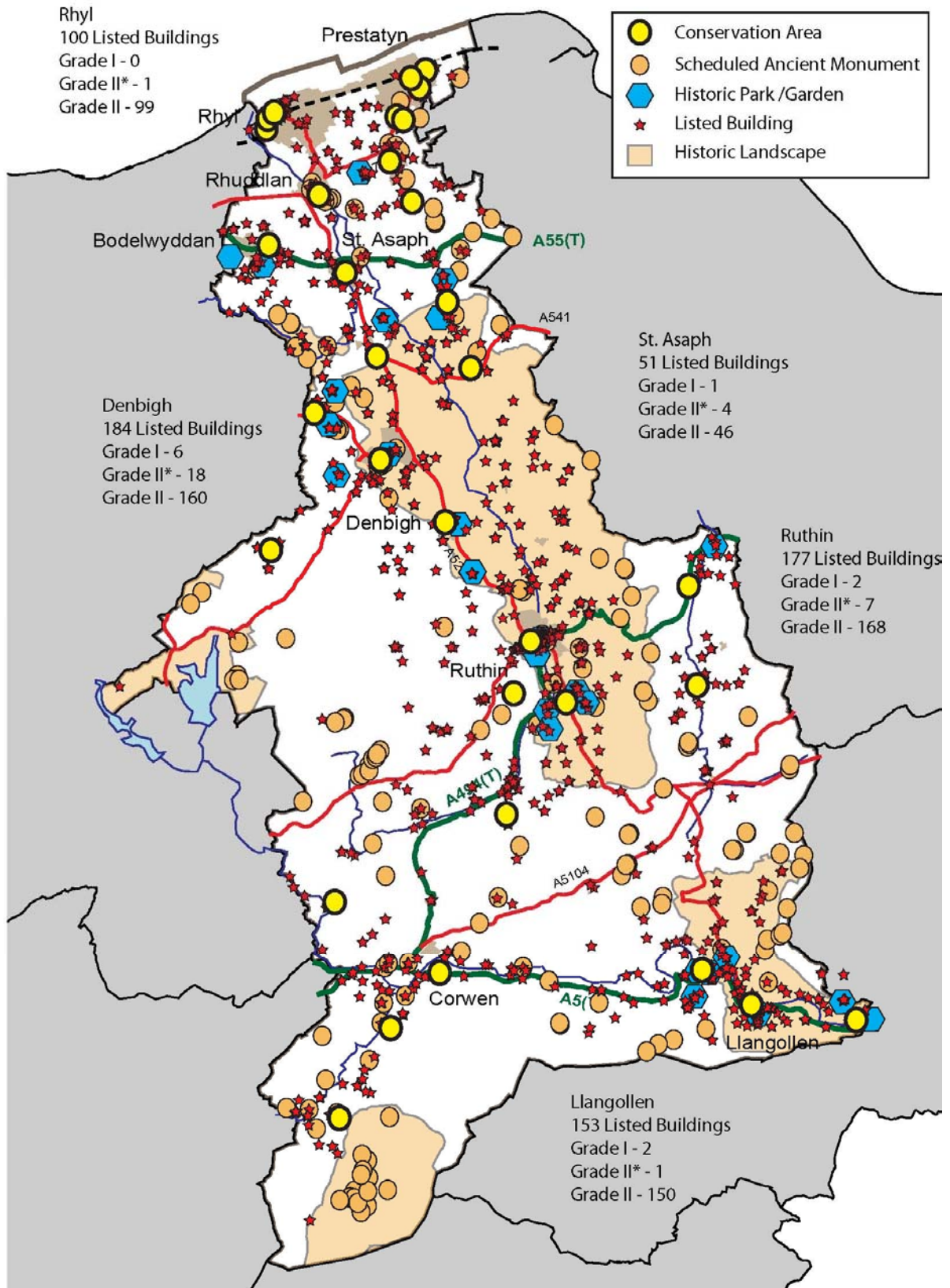
Key Trends:

- Higher percentage of Welsh speakers in the County than the national average.
- Numbers of Welsh speakers varies by geographical location.
- Continued pressure threatening the condition of cultural heritage sites and monuments.
- Need to address the number of Listed Buildings at high risk.

Predicted Future Trends without Implementation of the LDP

- Decrease in the opportunity to use/hear/see the Welsh language in urban areas.
- The Denbighshire UDP protects the status of Listed Buildings, Historic Parks and Gardens, AONB and AOB through planning control policies.

Figure 4.7: Built Environment



Biodiversity

One of Denbighshire's greatest assets is its high quality environment (Figure 4.7) which is valued by those who live and work in the County as well as by visitors to the area. The protection of this environment is seen as a positive measure that will bring wider benefits to the County, especially for tourism and attracting new investment.

Concern regarding the protection of nature conservation sites has been reflected in an increase in European and National legislation enacted to protect and enhance the environment. Much of this legislation relates directly or indirectly to planning and will be taken into account in the preparation of the LDP.

The LDP also required Appropriate Assessment screening as required by the EU Habitats Directive. The Habitats Regulations Appraisal assesses whether a land use plan, either alone or in combination with other plans and projects, is likely to have a significant effect on a European Sites. The Habitats Regulations Appraisal results can be found as a separate document accompanying the Denbighshire Local Development Plan.

Denbighshire County has an array of statutory and non statutory nature conservation sites; which are described in Table 4.3

Table 4.3: Statutory and Non Statutory Nature Conservation Sites in Denbighshire

Scale	Title	Designation
International	The Dee Estuary	Ramsar Site
	Berwyn	SPA
	The Dee Estuary	SPA
	Liverpool Bay/ Bae Lerpwl	pSPA
	The Dee Estuary	cSAC
	Llwyn	SAC
	Elwy Valley Woods/ Coedwigoedd Dyffryn Elwy	SAC
	Alyn Valley Woods/ Coedwigoedd Dyffryn Alun	SAC
	Berwyn and South Clwyd Mountains/ Berwyn a Mynyddoedd de Clwyd	SAC
	River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid	SAC
	Halkyn Mountain/ Mynydd Helygain	SAC
	Deeside and Buckley Newt sites	SAC
	National	Partly 1 National Nature Reserve - (Berwyn). Wholly or partly 30 Sites of Special Scientific Interests. 1 AONB (Clwydian Range) and 1 AOB (Y Berwyn)
Local	3 Local Nature Reserves (additional 1 pending). Approximately 250 Local Wildlife Sites (non-statutory).	

Landscape

Denbighshire have completed a landscape assessment utilising the LANDMAP methodology (Countryside Council for Wales). LANDMAP indicates a significant part of the County obtained high/outstanding evaluations within the Visual and Sensory Aspect of the study. Subsequent landscape characterisation has confirmed Denbighshire has a diverse, high quality landscape. Other evaluations are expected to be completed and on the LANDMAP website by the end of 2009.

Landscapes are under pressure from a variety of current human activities and natural processes. These include:

- Development pressure;
- Agricultural practices;
- Soil erosion;
- Flooding and drought events;
- Tourism and leisure; and
- Windfarms.

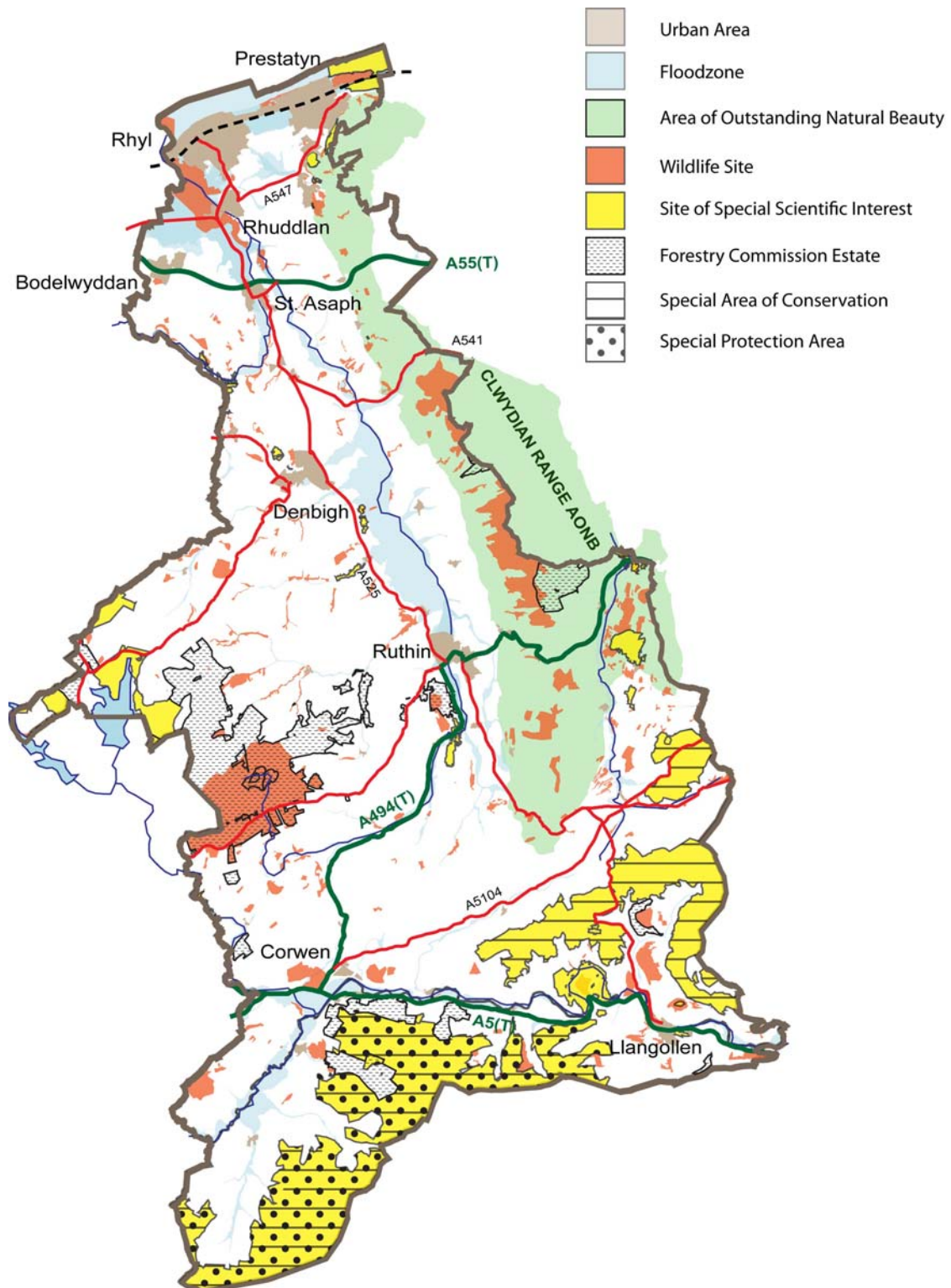
Key Trends:

- Continued pressure from natural processes, volumes of visitors and man-made development.

Predicted Future Trends without Implementation of the LDP

- Without consideration of LANDMAP derived prescriptions for landscape management and enhancement there may be degradation through the impacts of development.
- Climatic changes are the biggest threat to landscapes as currently known.

Figure 4.1: Natural Environment



Water Quality and Quantity

Quality of surface water and ground water is an indicator of a healthy environment. Compliance with the Water Framework Directive, Bathing Water Directive, European Blue Flag and UK Seaside awards is a statutory requirement and also an indicator of the health of our beaches.

Coastal Water Quality

The Environment Agency Bathing Water report (2005) concludes that Denbighshire had no failures of the “I” standard (coli form) except for one recorded breach in Rhyl during 2004 due to a season high return tide.

River Basin Water Quality

In comparison with the remainder of the UK, the quality of lakes, streams, rivers, estuaries and coastal waters in Wales is generally good.

Denbighshire falls into two River Basement Management Plans, the Dee and Western Wales. For surface waters, there are two separate classifications for water bodies, ecological and chemical. For a water body to be in overall ‘good’ status both ecological and chemical status must be at least ‘good’. For groundwater, there are two separate classifications for groundwater bodies; chemical status and quantitative status. Each must be reported in addition to the overall groundwater body status. For a groundwater body to be at good status overall, both chemical status and quantitative status must be good.

In the Western Wales river basin district 29% per cent of surface waters meet good status or better; 71% per cent do not meet good status. 96% of groundwater bodies are at good status with the rest being poor status. The majority of surface water bodies fail to meet good status because of the diatoms, fish, phosphate, invertebrates, priority substances element(s) of classification.

In the Dee river basin district 28 per cent of surface waters meet good status or better; 72 per cent do not meet good status (78 water bodies). 83 per cent of groundwater bodies are at good status with the rest being poor status. The majority of surface water bodies that fail to meet good status fail because of the fish, invertebrates and phosphate element(s) of the classification. Fish help to assess the impact of abstraction, point and diffuse pollution and morphological alterations.

Ground Water Quality

Groundwater Vulnerability Zones in Wales. The County has two major ground water aquifers that need protecting from pollution entering via the water catchment.

Maintaining water quality is a material planning consideration in the allocation of development land and the determination of a planning application.

Flooding

Denbighshire County Council have identified that flooding places significant constraints on development options of the LDP, therefore precautionary work was necessary to understand the flood risks. Denbighshire’s Strategic Flood Consequences Assessment (SFCA March 2007) will play a fundamental role in the assessment of site allocation in the Local Development Plan.

The two most populated towns within the County (Rhyl and Prestatyn) are both situated in a C1/C2 flood plain (source TAN 15, Welsh Assembly Government’s

Development Advice Maps (DAMs). Precluding development and investment in existing urban areas could lead to negative economic and social consequences.

A number of inland towns and villages are at high risk from fluvial flooding, namely the river Clwyd and the Dee. The growth of the town of Corwen, village of Glyndyfrdwy and smaller settlement of Llidiart y Parc is constrained significantly by flood.

Key Trends:

- Water quality is at an acceptable level.
- Higher risk of ground water pollution due to the geology of the County.

Predicted Future Trends without Implementation of the LDP

- Inappropriately sited development could reduce water quality.
- Low number of planning applications containing Sustainable Urban Drainage Systems increase pressure on existing utility leading to pollution instances.
- Flooding occurrences are likely to be more frequent.

Air Quality

Air pollution can lead to increased ill health, reduced life expectancy, lower crop and forestry yields and declines in plant and animal species.

Levels of air pollution in Wales are generally low. The 2001 Welsh Assembly Government Air Quality Sustainable Development Indicator showed worse urban air quality than the England and Wales average, but better rural air quality than the average. Despite improvements, problems of high levels of fine particles, oxides of nitrogen and ozone and pollution from acid and nitrogen deposition in rural areas continue.

The 2004 air quality monitoring figures from the Welsh Air Quality Forum⁷ indicate that there is a negligible risk of UK air quality objectives being exceeded in Denbighshire.

Denbighshire undertakes a Review and Assessment of Air Quality in its area. One purpose of the Assessment is to identify those areas where elevated pollution level may be experienced and where a more focused detail assessment may be required.

To date further assessments have shown that there are no exceedances of the objectives and therefore no need to declare Air Quality Management

Climate Change

There is clear evidence that climate change is happening: the global average surface temperature has increased by 0.6°C over the 20th century; the 1990s was the warmest decade, and 1998 the warmest year since the instrumental record began; snow cover and ice extent have decreased; and global average sea level has risen (IPCC 2001). Ample research has been carried out to predict the impact of climate change on society, the environment and the economy. Impacts such as an increase in rainfall in summer, reduced rainfall in winter but higher risks of flash flooding, increases in temperature leading to a reduction in biodiversity loss, the list is endless.

Current efforts to reduce greenhouse gas emissions include improvement of energy efficiency, reduction of energy demand and the sourcing of energy from renewable and sustainable sources. The Welsh Assembly Government has a target of 4 TWh of

⁷ Air Pollution in Wales 2002 Welsh Air Quality Forum 2005
http://www.welshairquality.co.uk/news_reports.php?n=action=report&t=2

electricity to be generated from renewable sources by 2010 and 7 TWh by 2020⁸. At present 0.782 TWh is being generated from renewable sources Wales wide, with no figures currently available for Denbighshire⁹.

When considering the concentration of carbon dioxide, it is clear that traffic contributes to emissions even outside the urban areas. The Energy Route Map consultation indicates that CO² concentration figures for each local authority will be evaluated soon. Denbighshire's contribution will need to be scrutinised.

Key Trends:

- Much of the air pollution is concentrated in urban areas.
- Road transport is the main source of air pollution outside of the built up areas.
- Sea level trends continue to rise.
- Continued rise in carbon dioxide emissions.
- Proportion of electricity from renewable sources is expected to increase.

Predicted Future Trends without Implementation of the LDP

- Inappropriately sited and considered development could increase road traffic and have a knock on effect on air quality.
- Limited growth in rural villages under current UDP policies.
- Current UDP makes little reference to the TAN 8 requirement of allocating land for on-shore windfarms in Denbighshire

Soil

Soil contamination

There is limited national information regarding the extent of contaminated land. It is understood that a soil protection strategy and a series of indicators are now being developed. The strategy will help Wales comply with European environmental legislation, most notably the Water Framework Directive.

New contaminated land regulation have also led to the development of Contaminate Land Inspection Strategies and given the Environment Agency and Local Authorities new powers and duties.

Denbighshire has a Register of Contaminated Land and monitors the effectiveness of remediation measures.

Soil erosion

Soil erosion takes place over many years, so can be seen as stable on a human timescale, but has to be considered in the long term. Particularly as climate change will result in an ever-increasing affect on the landscape. The principle is the same in our coastal landscape; however some of the costal geomorphic forms erode at an increased pace (particularly the effect of tourism on fragile sand dunes). The design of coastline defences need to be given careful consideration.

Agricultural Land Grade

Soil quality is determined by the agricultural land classification (Figure4.2). There is no high quality (1 or 2 grade) land to the south of Llanfair Dyffryn Clwyd which corresponds with the historic form of the river bed.

⁸ Technical Advice Note 8: Planning for Renewable Energy (WAG: 2005)

⁹ Consultation of the Environment Strategy for Wales (WAG: 2005)

The Welsh Assembly Government are responsible for undertaking assessments of agricultural land quality to prevent the Best and Most Versatile land from being developed and consequently permanently lost. Due to the laborious task of undertaking surveys WAG react to land take pressures.

The WAG undertook surveys of the initial findings and recommendation of the LDP Preferred Strategy. Agricultural soil surveys commenced in summer 2007 in Bodelwyddan, St Asaph and Rhyl. We now have the results of those records which reports that the majority of land at Bodelwyddan is grade 3a/3b, St Asaph is 3b and Rhyl has a mix of grade 2, 3a and 3b.

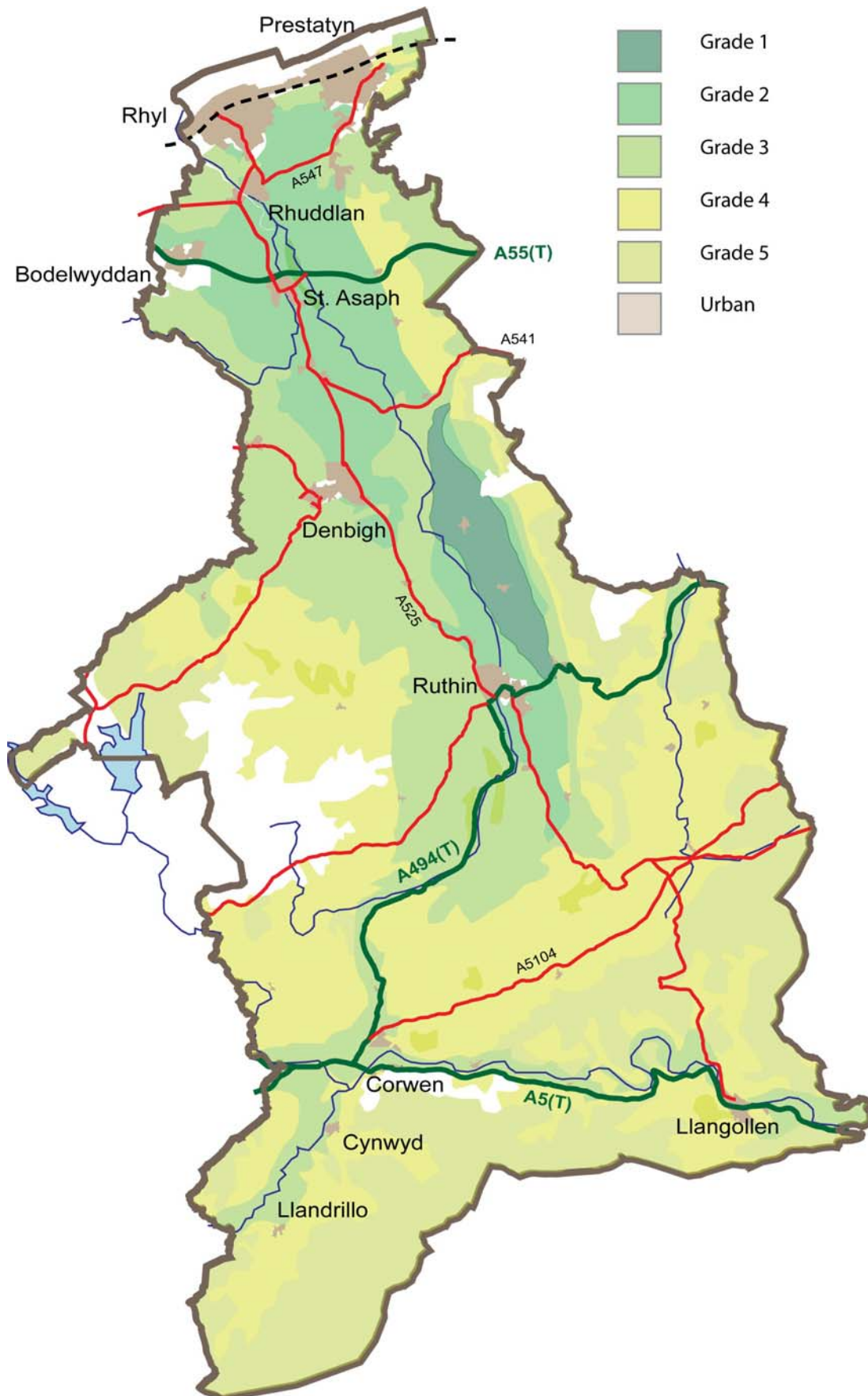
Key Trends:

- Loss of Best and Most Versatile (BMV) land low.
- Pressure for limited expansion of some settlements which are located in the Vale of Clwyd.
- There is no major soil polluting industry operating in Denbighshire.
- Alteration in the management of some of the County's upland forests, namely Clocaenog, could lead to increase in soil erosion.

Predicted Future Trends without Implementation of the LDP

- The River Basement Management Plans will annually monitor the sedimentation effects on river quality and work in partnership with land holders, such as the Forestry Commission to highlight possible management impact on soil erosion.
- Threat of developing BMV land is low as the existing Unitary Development Plan restricts development in the open countryside and outside of development boundaries. However, when the UDP comes to an end plan-less development pressure could lead to some of the BMV land been put under pressure.

Figure4.2: Broad Agricultural Land Classification



Minerals

Mineral reserves work on a cross boundary scope rather than as an individual Authority. The North Wales Regional Aggregates Working Party monitors the need for a 10 year supply of rock minerals and 7 years supply of sand and gravel from the North Wales reserves. Denbighshire have earmarked available supply but the lack of current data prevents current monitoring of Denbighshire's amount of mineral reserves.

Likewise there is no data available for the amount of minerals reused as aggregates in construction within Denbighshire. The recycling and use of aggregates reduces the pressure on minerals extraction.

Waste

Waste should be managed (or disposed of) as close to the point of generation as possible to ensure that waste is not exported to other regions. Denbighshire does not have any waste treatment or waste disposal facilities within the county. The majority of the waste that Denbighshire's citizens produce is currently 'exported' to other councils' areas.

The Council collects 44,523 tonnes of waste every year which is disposed of to three separate landfill sites outside of the County at Ruabon, Buckley and Llandulas. Of this annual total, 33,703 tonnes of domestic waste is collected from 44,365 households with the remaining 10,820 tonnes arising from non-domestic premises. The Council manages seven closed landfill sites within the County and also six civic amenity sites for households to bring waste material to a disposal point.

The Denbighshire Waste Management Strategy (DWMS) states that Denbighshire County Council is running behind other Authorities on recycling performance. Whilst reaching the 15% national recycling target in 2004-2005 the DWMS realised that an even greater shift was required to achieve the 25% target for 2006-2007, in fact 26% was achieved. The DWMS sets out the action to achieve this target.

The County Vision of 2006 has identified an aspiration for 'Zero waste and 100% recycling'.

Key Trends:

- No available data on the amount of mineral reserves or the amount of re-use of aggregates in construction.
- Proposed action for reducing waste suggests that Denbighshire are behind in reaching the targets.

Predicted Future Trends without Implementation of the LDP:

- The uncertainty of figures regarding use and reuse of minerals and aggregates needs to be addressed to evaluate existing impact/trends.
- There are existing adopted policies in the Denbighshire Unitary Development Plan

4.5 Economic Baseline Trends

Employment/Unemployment Rates

The Office of National Statistics provides Census 2001 data on this topic. In 2001 70.1% of Denbighshire residents were of working age (71.5% Wales average). Of this figure 62.4% (61%) were economically active; 37.6% (39%) economically inactive and 5.5% (5.7%) unemployed. The data shows that Denbighshire has a lower than average rate of residents of working age and the number of unemployed residents is lower than the national average and a higher than average working trend.

The numbers of unemployed claimants, according to the Denbighshire 2008 unemployment figures, are just above the national average 2.7% (2.4% Wales). However, the number of claimants in the West Rhyl ward is 14.1% almost 7 times higher than the UK average – 2.2%.

Town Centre Retail

Denbighshire County Council has commissioned two pieces of work that cover Town Centre Health Checks. There is a trend of declining vacancy rates between the 2003 (Roger Tym and Partners) study and 2005 (Donaldsons) study with the exception of Rhuddlan, Prestatyn and Denbigh who have experienced an increase in vacancy. Some of the factors that influence the vacancy rates are:

- Seasonal fluctuations
- Small units not suited to the need of modern investors
- Physical condition of units
- Turnover of adjoining units

The quality of the town centre was also assessed with 2003 study concluded that the retail ranking of Rhyl (North of the County), Prestatyn (North of the County) and Denbigh (Centre of the County) had slipped in relation to other centres such as Wrexham, Chester and Llandudno which have been improving trends. Ruthin (Centre of the County) and Llangollen (South of the County) both received a relatively healthy check in 2003/2004.

Economic Sectors

Denbighshire County Council has also commissioned an employment sites study as part of the background work undertaken as part of the LDP preparation process. The BE Group report (2004) provides a pointer towards the structure of future employment sectors. By using the Cambridge Econometric Forecast the study forecasts 3.8% increase in the number of jobs provided in the County between 2003 and 2015.

By 2015, 41,400 people are forecast to be employed, with decline in the agricultural, manufacturing and construction, mining and quarrying, transport and communications and government sectors to be off set by growth in finance, business and distribution and hotels.

Transport

The Census 2001 provides data regarding transport pressure within the county. The number of Denbighshire residents travelling to work by car is 69.6% (70.2% is the Wales average); this figure is in line with the rural nature of the County.

Key Trends:

- Whilst there are annual fluctuations in the rate of vacant town centre properties only two of the six main centres score reasonably on the Health Check.
- The forecasted trends predict decrease in the traditional sectors and a greater emphasis upon office premises and the sites and environments applicable to those uses.

- High percentage of dependency on car as a mode of transport.

Predicted Future Trends without Implementation of the LDP

- The retention rate of retail spending in the main town centres is likely to deteriorate as other cross boundary retail towns expand.
- The allocated sites for employment in the UDP have not been developed and are likely to remain undeveloped.
- Nature of the rural authority to have high car dependency unless there is an improved public transport system.

Table below provides a summary of the key trends identified in this chapter. More work is undertaken on the predicted future trends in Chapter 8 under Business as Usual scenario.

Table 4.4: Key Baseline Trends and the Predicted Future Trends without the Implementation of the LDP

Sustainability category	Summary of current baseline trends	Predicted future trends without the LDP plan.
SOCIAL	The demographic structure of the County demonstrates a decrease in young and school age people and increase in elderly people.	County would be faced with less school pupils and increased demand on old people homes, social and health care services. Planning has restricted control over increasing population numbers.
	Rising house prices and inefficient use of development land.	Density figures are not currently controlled. No control over market house prices.
	Availability of rented housing lower than average for Wales.	Continue to be low, no existing control.
	Affordable housing provision in the County is low.	Supplementary Planning Guidance in place to provide affordable housing.
	Higher than Wales average in Welsh language speakers.	UDP policy in place to consider the impact of development on the identity and character of the area.
	Population travelling to work by car is in line with Wales's average.	UDP policy in place to question sustainable means of transport access to development
	Higher than Wales average recorded crime figures.	UDP policy to 'design out crime' to lessen the impact on crime figures.
ECONOMIC	Percentage of serviced employment land is under Wales's average figure.	Exclude potential business and cross subsidy investment because of the lack of serviced provision. No planning policy in place to encourage services on site.
	Seasonal variation work based on the agricultural economy and the tourism economy.	Continue to grow to certain level without economic diversification. UDP has allocated employment land vacant and unserved.
	Higher than average of population are economically active and lower than average are unemployed.	With existing UDP allocations for employment there is opportunity for further economic development.
ENVIRONMENTAL	Congestion is short term with high car dependency in rural county.	Further dependency on travel by car with lack of choice in travel method leading to environmental pollution and degradation. Existing UDP policies directs development within settlement boundaries for sustainable reasons.
	Parts of the County at severe risk from coastal and river flooding.	TAN 15 has been issued to control vulnerable development in flood risk areas overriding the UDP.

4.6 Issues and Constraints with Baseline

The collection of baseline data has highlighted the following constraints:

Gaps in Data Sources

This includes:

- Frequency of monitoring of Employment Land;
- Achievement of Denbighshire LBAP targets via the UK BAP reporting system;
- LANDMAP data needs to be Quality Assured prior to use;
- Transport GIS data i.e. the proportion of new development built within 500m of public transport;
- The availability of information on individual planning applications. Improvements are required to the Planning Register in order to allow for effective monitoring in the future. This includes monitoring of design statements, BREEAM assessments, Sustainable Urban Drainage Systems, access to open space, provision of Travel Plans and energy efficiency measures; and

DCC recognises that the collection of baseline data is an ongoing process and will attempt to fill these data gaps as the SA/SEA progresses.

Confidentiality

Some of the baseline data sources which are identified may hold sensitive information, e.g. this includes the location of statutorily protected species.

Up to Date Information

The most up to date statistics / information have been used where-ever possible. However, much of the data collected relies on information contained in the 2001 census, or survey data which may now be out of date. Where this is the case it has been highlighted in the report.

4.7 Conclusions

The purpose of this chapter was to collect and analyse relevant social, environmental and economic information in order to provide the evidence base against which the effects of the LDP options and objectives can be assessed and monitored.

The following chapter completes the identification of sustainability issues and/or problems facing the County with links back to the data source and evidence.

5 Identifying Sustainability Issues

5.1 Introduction

Issues and problems identified for Denbighshire County Council are linked to evidence by reference to the baseline information and the identification of historical or likely future trends within the County. It should be noted that some issues are cross-cutting and could have been placed under any one of headings. However, issues have been placed under one section only for ease of discussion and to link in with sustainability key topics and objectives.

Certain sustainability issues are of particular significance in Denbighshire County Council and are therefore highlighted below as key areas that the Sustainability Appraisal Report attempts to address. We acknowledge that this is a comprehensive list of all the issues and an attempt to acknowledge those which are priority within Denbighshire County Council. Including the full list allows stakeholders an opportunity to comment on their priority issues.

The key sustainability issues relevant to the LDP were identified in the following ways:

- Earlier experience with local issues identified in other plans and programmes, for example the County Vision 2006;
- Analysing baseline data and trends;
- Consultation with the public and key stakeholders, including meetings, workshops, exhibitions and feedback from the Local Development Plan Member Working Group, LDP Key Stakeholder Group, Pre-Deposit and Deposit consultation.

This was supplemented with direction from the key international, national and regional/local planning documents identified in The Scoping Report (consultation 2006) and *initial* SA Report (consultation 2008), SA Report to accompany the Deposit (2009) a list of which are presented in Chapter 3.

The following tabulated sections sets out the key sustainability issues and associated trends. The table also focuses on the opportunity within the Local Development Plan to address these key issues and trends. The final column indicates the relationship the key sustainable issue has with the emerging SA/SEA framework.

Table 5.1: Key Sustainability Issues to be considered by the LDP for Denbighshire.

POPULATION

Key Issues and Problems	Current Status and Trends	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<p>• A declining, ageing population when based on natural change alone but decline offset by in-migration. Population has decreased due to natural change from around 400 per annum in the 1970s to a fairly constant level of around 250 persons in the 1990s continuing into the new century.</p> <p>Although there has been out-migration by young people (ages 20-24) and reduced birth rates this has not resulted in a reduced population. In-migration by older working groups accompanied by their families has resulted in the net effect of population growth.</p> <p>With a dramatically increasing elderly population there is the increasing demand on old people homes, social and health care services. The dependency ratio is likely to climb to a level that will place a severe burden on service providers within the County.</p>	<p>• The County currently has a population of 93,065 (Census, 2001).</p> <p>• Given that due to natural change the total population of Denbighshire would be declining,</p> <p>• Natural change in Denbighshire i.e. the number of births over deaths: ~ Deaths have continually exceeded births ~ an indication of the improving health of the population.</p>	<p>• Safeguard land for healthcare / extra-care facilities</p> <p>• Use number, type and range housing to attract younger population to improve demographic profile</p>	<p>• Roger Tym and Partners Population and Household Projections</p> <p>• North Wales Research Group Population & Household Projections 2005.</p> <p>• 2001 Census</p>	<p>Promote community health and well-being</p> <p>Ensure the housing needs of the community are met locally and that good quality affordable housing is available to all</p>

Key Issues and Problems	Current Status and Trends	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • With a declining younger and school age population (significant losses of population in the 19-30 year age range) in real terms the County would be faced with less school pupils leading to more school closures especially in rural areas. There is overcrowding in the schools on the coastal belt, whilst the majority of rural schools have surplus school places. 	<ul style="list-style-type: none"> • This loss of the younger age ranges of population could have an impact on school rolls especially in rural areas • Pupil numbers in primary schools are likely to remain relatively constant up to 2011. In the secondary sector there could be a fall of approximately 450 pupils in the same period as a result of the falling primary school figures starting to enter the secondary sector. However, this is closely linked to migration trends and there are pupils who attend Denbighshire Schools residing outside the County. 	<ul style="list-style-type: none"> • Examine the need for the retention of and making the best use of existing community facilities, especially in rural areas. 		<p>Promote community health and well-being</p>
	<ul style="list-style-type: none"> • If birth rates continue to fall and the proportion of the population that is elderly increases then natural change figure may rise again in the future. 	<ul style="list-style-type: none"> • Consider the need for greater community based schemes rather than focusing provision in the main centres. • To consider the impact of new developments on existing health care and education facilities. This is closely linked to changes in population and growth scenarios and the location of new development. This could have a cumulative impact on the capacity and quality of health care services provided. 		<p>Promote community health and well-being</p> <p>Improve accessibility to education, employment, health, homes and community services for all sectors of the community</p>

TABLE 5.2 HOUSING

Key Issues and Problems	Current status and Trends (Current and Future)	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • Of the Counties in North Wales house prices in Denbighshire have risen the most (15%) over 1999-2004. • Since this period to March 2005 house prices in the County have continued to rise. • The provision of affordable housing is an important issue for the County and recent trends show that such provision has been poor. • There is an identified unmet need for affordable housing throughout the County. 	<ul style="list-style-type: none"> • From 1999-2004 Denbighshire has exceeded the growth rate in house price for Wales by 15%. • Recent trends in affordable housing provision have been poor. • In July 2005 the Council approved Supplementary Planning Guidance which seeks a requirement for 30% affordable housing provision on all new developments of 3 or more units. ~ Following the approval of this SPG it is expected that the trends in the provision of affordable housing would improve. ~ The first housing schemes granted permission under this SPG is now coming on stream. ~Based on an average of 280 dwellings per year we would expect that there will be an average of 84 affordable dwellings granted permission in the County per annum. 	<ul style="list-style-type: none"> • Ensure that the affordable housing can remain affordable in perpetuity and they should be provided in both rural and urban areas. • Contain policies to ensure that affordable housing is provided as part of any new housing developments in order to meet current needs • The type, number and location of housing land supplied should be appropriate to meet the need of population. 	<ul style="list-style-type: none"> • Roger Tym and Partners Population and Household Projections • Fordhams – Local Housing Needs Assessment (2003) • North East Wales LHMA draft 2008 • DCC Urban Potential Study (Entec 2007) • DCC Housing Strategy 	<p>Ensure the housing needs of the community are met locally and that good quality affordable housing is available to all</p>

Key Issues and Problems	Current status and Trends (Current and Future)	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • Land is being used inefficiently for local development, which may require additional land allocations to accommodate future growth if current densities remain the same. Housing density on new allocations has been an average of 25 dwellings / hectare. • The housing densities on new developments in the County are likely to remain at similar levels. • Given the rural nature of the County this could result in an increase in the loss of greenfield land. ▪ Denbighshire has a number of long-term empty homes which are becoming an eyesore in towns and villages. 	<ul style="list-style-type: none"> • Of these new dwellings a high proportion of new development is through conversions and small sites (<10 units). <p>Denbighshire Empty Homes Strategy (2009) has identified approx. 800 homes throughout the County which have been empty for over 6 months. The Strategy aims to bring these back to use by offering grants or take-overs by Housing Associations.</p>	<ul style="list-style-type: none"> • Ensure the County makes the best use of land that being developed efficiently and effectively whilst protecting the environment and the amenity of residents. <p>Need to support the efforts of the Empty Homes Officer and count the number of empty homes into the equation of housing need.</p>	<ul style="list-style-type: none"> • Land Registry Data (2005) • TAN 1 • TAN 2 • Welsh Assembly Government Population Projections • Wales Spatial Plan 2004 and 2008 update • PPW chpt 9 	<p>Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes</p>

TABLE 5.3 ACCESS AND TRANSPORTATION

Key Issues and Problems	Current status and Trends (Current and Future)	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • Given the rural nature of the county Denbighshire residents are likely to remain reliant on the car. Approximately 70% of the County's working population travel to work by car. There is a need to promote a modal 	<ul style="list-style-type: none"> • Denbighshire does not suffer from serious traffic congestion problems. This is in line with the Wales national average. • No data is currently available for Traffic Flow trends, the proportion of new development within 500m 	<ul style="list-style-type: none"> • To provide opportunities for travel by sustainable transport, i.e. walking, cycling and public transport, in new developments. • To aim to reduce traffic congestion where possible 		<p>Increase the provision of public transport, walking and cycling networks and reduce the dependency on the private car</p>

<p>shift to more sustainable forms of transport</p>	<p>of public transport or the proportion of new development within 500m of cycleway and footpaths. It is anticipated that this information will be collected and used in the future monitoring of the SEA.</p> <ul style="list-style-type: none"> • It is likely that travel by car is likely to remain at the current levels, given the predominantly rural nature of the County. 	<ul style="list-style-type: none"> • To promote sustainable mixed development which reduces the need to travel by car and increase travel by walking and cycling. • To undertake traffic demand management and to encourage a switch from the car to other means of transport. 		
---	---	--	--	--

TABLE 5.4 HEALTH AND WELL BEING

Key Issues and Problems	Current status and Trends (Current and Future)	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • The general distribution of primary health care facilities is basically contained in / around the main settlements. • However, geographical access to services is poor in the South. 	<ul style="list-style-type: none"> • Information on access to primary health care, capacity and quality, is contained in the LHB / Strategem Estates Strategy (June 2005). • Baseline data on Primary Health Care provision in the County includes delivery of services from: <ul style="list-style-type: none"> ~ 16 General Practices ~ 12 dental practices ~ 24 pharmacies ~ 14 ophthalmic opticians • The general practitioners in the County have an average list size of 1,894 compared to the all Wales average of 1700. Ruthin is the only locality with a list size average below the Welsh average. Prestatyn, Rhyl and Corwen all have average list sizes significantly above the Welsh average. • Given the rural nature of the 	<ul style="list-style-type: none"> • It is unclear how the LDP can assist in the current / future provision, including capacity, of health services. • Provision of these Health Care facilities is beyond the scope of the LDP. ~ However, 'Local' Plans (including the LDP, Community Strategy and other Council Plans) and Urban Regeneration could be an 'enabler' to delivering better services (para. 7.30). <ul style="list-style-type: none"> ▪ Opportunities should be sought to improve the health and well-being in the County. 	<ul style="list-style-type: none"> • DCC Local Health Board • DCC Community Strategy • DCC Health, Social Care and Well Being Strategy • DCC Crime and Disorder Strategy (2002-2005) • Conwy and Denbighshire NHS Trust 	<p>Promote community health and well-being</p> <p>Increase the provision of public transport, walking and cycling networks and reduce the dependency on the private car</p>

Key Issues and Problems	Current status and Trends (Current and Future)	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
	County and the clustering of facilities around major centres, the trends are likely to remain in the future. There are likely to be cumulative impacts on these services, closely linked to changes in population / demographics.		• Indices of Deprivation (2000/2005)	
No significant problem.	• Glan Clwyd Hospital, Bodelwyddan is a hospital of regional importance	• Consider the safeguarding of land in this location for any future development needs of the hospital.		Promote community health and well-being
• There has been a limited number of Health Impact Assessments (HIA) applied in Planning.	• i.e. accompanying planning applications / informing the preparation of policies/ proposals • Use of Health Impact Assessments is likely to remain nil or low.	• Encourage the use of HIA on new developments within the County		Promote community health and well-being
• The County has experienced an increase in recorded crime over recent years but there are significant regional variations in crime levels.	• Wales has had a national decline in the levels of recorded crime. • There are significant regional variations in these levels. ~ Approximately 30% of all recorded crime in the County is located in West Rhyl. ~ Denbigh Central has the 2nd highest levels of crime. ~ Elsewhere in the County crime levels are low, particularly in Rhuddlan, Ruthin, St Asaph and Corwen. • These trends are outside the scope of the LDP. The trends for the future are unknown and are	• Encourage developments and buildings methods to 'design out crime'.		Promote safer neighbourhoods and contribute to a reduction in the fear of crime

Key Issues and Problems	Current status and Trends (Current and Future)	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
	likely to vary by the number type and location of crime.			
<ul style="list-style-type: none"> • Deprived areas are identified as which may affect the opportunities for development. • Five most deprived areas are identified within the County which are Rhyl East; Rhyl West; Rhyl South West; Meliden; Denbigh Upper/ Henllan. It is likely that there will continue to be a geographical variation in the ranking for Wards in Denbighshire which may affect the opportunities for development. 	<ul style="list-style-type: none"> • In comparison to the rank indices of deprivation for Wales as a whole, Rhyl West is the most deprived electoral division in Wales. In the 2005 Indices of Deprivation this is no longer the case. • The index of Deprivation is made up of the following factors; <ol style="list-style-type: none"> 1. Income 2. Employment 3. Health & Disability 4. Education, training and skills 5. Housing 6. Geographical access to services • Many of these factors are outside the scope of the LDP. The future trends are unknown but it is likely that there will continue to be a geographical variation. 	<ul style="list-style-type: none"> • Contribute to improvements in the indices of deprivation, particularly in relation to employment and housing. 		<p>Improve accessibility to education, employment, health, homes and community services for all sectors of the community</p> <p>Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment</p>

TABLE 5.5 ECONOMIC GROWTH

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> The percentage of new business registrations are below the Wales average, with the percentage of de-registrations being higher than the Wales average. 	<ul style="list-style-type: none"> The key statistics for economic inactivity, unemployment and claimant rates for Denbighshire are all below the average for Wales which suggest the County is performing well economically. Although County wide Job Seekers Allowance claimant rates are low, there are regional variations in this. ~ Rhyl West has an exceptionally high percentage of claimants (8.8%) – this is over 3 times higher than the Wales average. In contrast to this the majority of Denbighshire’s electoral wards have less than 2% of claimants. Since January 1996 there has been a general declining trend in the % of claimants within the County 	<ul style="list-style-type: none"> To consider methods of retaining, expanding and creating employment sites in the County Ensure that there is adequate provision of a range / of types, sizes and locations of employment land within the County Consider methods of promoting and attracting inward investment and indigenous company expansion in the County by providing attractive conditions and attractive premises. 	<ul style="list-style-type: none"> DCC Unemployment Rate (2005) BE Group Employment Land Survey North Wales Economic Development Strategy North Wales RPG (2002) 2001 Census 	<p>Support County economic development and regeneration, including the provision of opportunities for rural diversification.</p> <p>Maintain and enhance the vitality and viability of town and rural centres</p>
<ul style="list-style-type: none"> Seasonal nature of employment within Denbighshire with marked variations between the winter and summer months 	<ul style="list-style-type: none"> This trend is likely to continue in the future with a gradual levelling off of the overall percentage of claimants. 	<ul style="list-style-type: none"> Diversification and regeneration of the economy in the County, i.e. to overcome seasonal variations in employment. This includes rural diversification and tourism diversification. 	<ul style="list-style-type: none"> Official Labour Market Statistics (2003) 	<p>Improve accessibility to education, employment, health, homes and community services for all sectors of the community</p>

TABLE 5.6 EMPLOYMENT LAND

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> The take up of employment land within Denbighshire has been relatively low. From 1996-2003 there has been an annual take up of approximately 4.7ha / annum. Based on the existing UDP policy a total of 104ha is vacant and potentially available for development. However, many sites are being retained by landowners for their own expansion, or are being held for non-employment use or are located in areas of low demand. 	<ul style="list-style-type: none"> The employment development that has taken place within the County has been in the North and in close proximity to the A55 transport corridor, particularly on St Asaph Business Park. This trend is likely to remain in the future leading to a mismatch between the supply and demand for employment land. 	<ul style="list-style-type: none"> Ensure that important Employment land can be protected from alternative forms of development. Consider methods of encouraging development of employment land, i.e. the scope for cross subsidy from other forms of development. 	<ul style="list-style-type: none"> BE Group Employment Land Survey 2004 DCC Employment Land Monitoring Report 2004 DCC UDP Environment Strategy Wales (2006) WDA "Property Strategy for Employment in Wales 2004- 2008 (published 2005) 	<p>Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes</p>
<ul style="list-style-type: none"> Demand for employment land in the future is likely to remain near to the A55 and in the North of the County. The current mismatch 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Consider through larger mixed use schemes in order to overcome existing constraints to development. 		<p>Improve accessibility to education, employment, health, homes and community services for all sectors of the community</p> <p>Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes</p>

TABLE 5.7 BIODIVERSITY, FLORA AND FAUNA

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<p>The County has a high quality natural environment, which includes both statutory and non-statutory designated sites of nature conservation importance.</p>	<p>These sites are of international, national, regional and local importance and include part of a Special Protection Area (Llandegla/Berwyn SPA); 5 Special Areas of Conservation (SACs); one National Nature Reserve (Berwyn); 30 Sites of Special Scientific Interest (SSSIs); one Area of Outstanding Natural Beauty (Clwydian Range) and one AOB (Y Berwyn), 3 Local Nature Reserves and approximately 250 non-statutory Local Wildlife Sites 10 of the 30 SSSIs surveyed by CCW illustrated features in 'unfavourable' condition.</p> <p>All sites should be afforded an adequate level of protection.</p>	<ul style="list-style-type: none"> • Aim to meet the targets contained in the LBAP wherever possible. • Identify areas of restraint and areas of growth/development in order to minimise any impact on nature conservation and to take the pressure from a more sensitive areas • Ensure Coastal Sand Dunes and Vegetated Shingle habitat is fully protected through the planning system and is fully accounted for in the Shoreline Management Plan. • Ensure the distribution information is available to Local Planning Authorities and encourage LBAP to ensure the local population is not threatened by development. • To ensure that statutory sites of international / national importance are protected and enhanced where ever possible. • To ensure that statutory and non-statutory sites are also protected from harmful development and any 	<ul style="list-style-type: none"> • DCC Local Biodiversity Action Plan • DCC Habitat Action Plan • DCC Species Action Plan • The UK Biodiversity Action Plan (1994) • TAN 5 • TAN 10 	<p>Protect and enhance all international, national and locally designated nature conservation sites and protected species and avoid their damage or fragmentation</p> <p>Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment</p>

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
		adverse effects are minimised and mitigated against.		
<ul style="list-style-type: none"> • The Denbighshire Local Biodiversity Action Plan identifies key species and habitats which will require protection through the planning process. These are: <ul style="list-style-type: none"> - Black Poplar - Dormouse - Welsh Hawkweed - Otter - Grizzled Skipper - Badger - Wet Woodlands - Upland Oak Woodland - known and potential Water Vole colonies - Juniper -Hedges - Scrub Woodlands - Black Grouse 		<ul style="list-style-type: none"> • Encourage the Planning Authority to adopt policies and procedures that will be of benefit to Barn Owls, especially in relation to the provision of and safeguarding of nest sites. • Planning conditions should be imposed on building conversions that may affect Barn Owls. Provision of boxes, owl holes or other means to enable nesting should be incorporated in any plans for conversion work. • No building work should take place between the end of March and the end of September where necessary. • To create new habitats and prevent the further fragmentation of habitats from new development. Mitigation measures should be incorporated into new development proposals where possible 		Protect and enhance all international, national and locally designated nature conservation sites and protected species and avoid their damage or fragmentation

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • Maintain and improve the agricultural practices and management on forestry, development, and natural resources 	<ul style="list-style-type: none"> • Agricultural practices: Agri-environment schemes have led to a recent improvement with farming practices becoming more environmentally friendly and sympathetic to wildlife. Future trends will be influenced by the reform of the Common Agricultural Policy and the funding of such agri-environment schemes. • Forestry: Many types of woodland have suffered from a lack of management in the past. New initiatives in Denbighshire encourage better management and protection of native woodlands. The situation is therefore improving. Recent National Planning Guidance has identified Strategic Search Areas for wind farm development which may have some impact on this trend. 	<p><i>No plan / programme</i></p>		<p>Protect and enhance all international, national and locally designated nature conservation sites and protected species and avoid their damage or fragmentation</p> <p>Safeguard soil quality and function and maintain long term productivity of agricultural land</p>
	<ul style="list-style-type: none"> • Development: Past development has had an indirect effect upon wildlife and biodiversity through species / habitat disturbance, fragmentation and pollution. Recent trends show an improvement in this situation with any potential species / habitat loss being mitigated and new habitats being created as part of development proposals. However, development pressures will continue to pose a threat to species / habitat protection if not managed appropriately. • Water management, air quality and climate change: These will continue to have an effect on the future trends in biodiversity, flora and fauna. 			<p>Protect and enhance all international, national and locally designated nature conservation sites and protected species and avoid their damage or fragmentation</p> <p>Protect and improve the water quantity and quality of inland and coastal waters</p> <p>Protect and improve air quality</p>

TABLE 5.8 LANDSCAPE AND HERITAGE

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • The Council undertook a Conservation Area Character Appraisal in 1997 which illustrated that some amendments may be required to the existing boundaries where there has been a decline in the quality of the character and appearance of some areas. • Improve and maintain the quality / condition of Conservation Areas and cultural heritage. • Further survey work is required to establish if these appraisals are still valid. ▪ Pontcysyllte Aqueduct and the Llangollen Canal have been put forward as a potential World Heritage Site. 	<ul style="list-style-type: none"> • There are many important local sites of culture and heritage importance • Denbighshire has a high quality and varied culture and heritage. This includes: <ul style="list-style-type: none"> ~ 1803 Listed Buildings, many of which are grade I or II* ~ 34 Conservation Areas ~ 164 Scheduled Ancient Monuments ~ 27 Historic Parks and Gardens • Many of the sites of culture and heritage importance identified are nationally designated and remain static although their condition / quality may deteriorate. • The quality / condition of many buildings and Conservation Areas have been improved through grants and town schemes operating in the County. • The Denbigh Townscape Heritage Initiative is a good example of such a scheme. Castell Dinas Bran is a Scheduled Ancient Monument which has received grant aid from Cadw and a programme of conservation is being undertaken to improve the overall condition of the site. Heather and Hill Forts is another such project. 	<ul style="list-style-type: none"> • Aim to prevent any future deterioration in the quality of the built environment including listed buildings, Conservation Areas and Historic Parks and Gardens through appropriate policies and proposals. 	<ul style="list-style-type: none"> • DCC Listed Buildings at Risk Survey 2001 / 2002 • DCC Landscape Strategy • DCC Countryside Strategy: "Caring for our Countryside" (1998) • Clwydian Range AONB Management Plan (2004) • Liverpool Bay Shoreline Management Plan (Cell 11a) • Wales Spatial Plan 	<p>Safeguard and enhance the County's heritage assets</p> <p>Preserve and enhance landscape character across the County, particularly the AONB</p>

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • Conservation Areas in Town Centres. 	<ul style="list-style-type: none"> • There is a need to support town centres in order to support these listed buildings and conservation areas and the need to find a beneficial economic use for these properties. 	<ul style="list-style-type: none"> • All proposals for development should consider the culture and heritage issues. 		Safeguard and enhance the County's heritage assets
<ul style="list-style-type: none"> • Denbighshire has a high quality landscape which includes features of both national and local landscape importance. These include: <ul style="list-style-type: none"> ~The Clwydian Range Area of Outstanding Natural Beauty (AONB) – statutory, national importance ~Llantysilio and Berwyn Area of Outstanding Beauty (AOB) – non-statutory, locally important ~Local Landscape Areas (LLAs) ~Coastal Landscape Areas ~Regionally Important Geological Sites (RIG) ~1 landscape of outstanding historic interest ~4 landscapes of special historic interest ~5 Historic Landscapes (Lower Elwy Valley, Vale of Clwyd, Vale of Llangollen and Eglwyseg, Berwyn and Denbigh Moors) ~Areas of high quality open countryside i.e. Vale of Clwyd • These account for approximately 45% of the total land area of the County and provide an attractive setting to many settlements. • The high quality of the landscape is likely to remain given the designated protected 		<ul style="list-style-type: none"> • To ensure that new development would not have an adverse impact on the high quality landscape in the County. • To ensure that statutorily designated sites of landscape importance are protected and enhanced where possible • Any Development that affects local sites is restricted where possible. • To assess ways in which the LANDMAP data can be used in the planning process. 		Preserve and enhance landscape character across the County, particularly the AONB

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
areas of national and local importance. A LANDMAP assessment of the County has also been undertaken which categorises the overall quality of the landscape in 45 character areas. This data has yet to go through a quality assurance process and is not yet fully available for use online. It is intended that this data will be used in future SA / SEA monitoring.				

TABLE 5.9 WATER

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
No significant problem.	<ul style="list-style-type: none"> • Surface Water ~Water supply in Denbighshire includes the Clwyd Valley. Permo-Triassic units are used for river augmentation and potable public supply. ~The quality of surface water in the County is good, based on the Environment Agency Wales General Quality Assessment (GQA) of rivers and canals in the County. ~Surface water quality for both chemistry and biology has remained very good / good for majority of stretches of water. It is likely that there would be a continuation of existing trends for the future. • Ground Water 	<ul style="list-style-type: none"> • Care needs to be taken when development occurs above aquifers without drainage, i.e. Rhualt • To avoid any development that does not provide mains drainage and SUDS, especially in aquifer zones. • New Development should not have an adverse impact on the quality of water resources in the County 	<ul style="list-style-type: none"> • Environment Agency Wales: General Quality Assessment (GQA) of rivers and canals River Basement Management Plans • TAN14 • TAN15 	Protect and improve the water quantity and quality of inland and coastal waters

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
	<p>~The Environment Agency has advised that aquifer reports are being produced for the groundwater monitoring units in Denbighshire, although they are yet to be completed. Information on the quality of groundwater is limited at present.</p>			
<ul style="list-style-type: none"> • The likely sources of bathing water pollution are agricultural run off (rather than built development) from the Clwyd Valley that is raising levels of bacteria in the Clwyd during wet conditions. This is then carried onto Rhyl beach under certain tidal conditions. • The whole of the River Clwyd Catchment may be designated as a Nitrate Vulnerable Zone which will have considerable implications for the farming community. 	<ul style="list-style-type: none"> • The Environment Agency Wales advise that the quality of Bathing Water in Denbighshire is also good. • There were no failures of the mandatory “I” standard at EC identified beaches in 2004. • There was one single breach of imperative standards at an EC designated Bathing Water in Denbighshire during the 2004 bathing season at Rhyl. • Funding has been secured by the Environment Agency Wales to target certain catchments in the Clwyd valley until the end of June 2005. This should enable the Agency to reduce problems of bathing water pollution. Future trends in the quality of Bathing Water beyond June 2005 are unknown. 	<ul style="list-style-type: none"> • Care needs to be taken to ensure that any development would not have a deleterious effect on bathing waters 		<p>Minimise the vulnerability to flooding and ensure new development does not increase flood risk</p>

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
The contribution that surface water run-off makes to the severity of flood incidents and negative impact on the infrastructure due to overloading. The planning application accompanied with SuDS has been low.	<ul style="list-style-type: none"> • Sustainable Drainage Systems (SuDS) have an important role in controlling surface water run off, slowing down the rate that water enters the water course and avoiding peak discharges which could ultimately present a risk of flooding (TAN15, para. 8.2). • This data is not currently available from the Councils Planning Register but it is anticipated that this will be updated for future monitoring. 	<ul style="list-style-type: none"> • Encourage the use of SuDS in new developments to prevent any potential adverse impacts arising from increased surface water run off rates 	WAG TAN 15 (2004) and Denbighshire County Council Strategic Flood Consequence Assessment (March 2007)	Protect and improve the water quantity and quality of inland and coastal waters
<ul style="list-style-type: none"> • Several parts of the County are identified as being at risk from Coastal and River flooding. 	<ul style="list-style-type: none"> • The incidence of flooding (number and severity) is increasing which has serious implications on loss of life and damage to property. Following the introduction of the development advice maps in TAN15, new development in flood risk areas is likely to be reduced in the future. <ul style="list-style-type: none"> ▪ In addition to TAN 15, Denbighshire County Council commissioned consultant to undertake Strategic Flood Consequence Assessment 	<ul style="list-style-type: none"> • To reduce the amount of development that is located in areas of known flood risk as identified in TAN15/ DCC SFCA. • To mitigate against the effects of flooding whenever necessary. 		'Prevent development in areas of high flood risk, minimise the vulnerability to flooding and ensure new development does not increase flood risk

TABLE 5.10 AIR

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<ul style="list-style-type: none"> • The current air quality for Denbighshire is good, and 	Based on the results of DCC Air Quality Monitoring in 2005. There	<ul style="list-style-type: none"> • To ensure new development is not located close to sources of air 	<ul style="list-style-type: none"> • Denbighshire County Council Air 	Protect and improve air quality

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
<p>there is a need to maintain these high air quality standards</p>	<p>is no local information available on the following pollutants; ~Carbon Monoxide ~Benzene ~1-3 Butadiene ~Carbon Monoxide ~Lead</p> <ul style="list-style-type: none"> • The air quality objectives for these are likely to be achieved in 2005. • Nitrogen Dioxide and Sulphur Dioxide monitoring shows that Denbighshire is unlikely to exceed the objectives in relation to air quality. • The Environment Agency has advised there are currently 3 operators in Denbighshire (Telsol Ltd, Thales Optics Ltd and Novar ED S Ltd), all of which have a fairly low impact on air quality. • There is a negligible risk of UK air quality objectives being exceeded in Denbighshire. 	<p>pollution</p> <ul style="list-style-type: none"> • To ensure carbon dioxide levels in the County remain low by reducing the need to travel by car and providing opportunities for travel by sustainable transport, i.e. walking, cycling and public transport, in new developments 	<p>Quality Review and Assessment</p>	
<p>In responds to climate change, the need of reducing carbon dioxide emissions is addressed.</p>	<p>Include energy efficiency measures as part of new developments – this can be measured via BREEAM assessments.</p> <ul style="list-style-type: none"> • Carbon dioxide emissions for Denbighshire are low, the highest concentrations being in the urban areas of Rhyl and Prestatyn in the North and along transport routes. • Carbon dioxide emissions are 	<ul style="list-style-type: none"> • Support the provision of renewable energy and consider wind farms developments 	<p>National Atmospheric Emissions Inventory (NAEI)</p> <ul style="list-style-type: none"> • Building Research Establishment • Environment Agency Wales 	<p>Improve waste facilities.</p> <p>Lack of waste recycling and disposal site provision.</p> <p>Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency</p>

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
	<p>likely to remain relatively constant in the future.</p> <ul style="list-style-type: none"> • In order to reduce carbon dioxide emissions, the provision of renewable energy is supported through national planning policy. • TAN8 identifies a 'Strategic Search Area' within Denbighshire where the principle of large scale wind farm developments would be considered acceptable. 		<ul style="list-style-type: none"> • TAN 8 • TAN 12 (2009) • Wales Spatial Plan ▪ MIPPS (01/2009) ▪ Draft TAN 22 	
<ul style="list-style-type: none"> • There is a need to match the quality of the natural environment in Denbighshire to the quality of the built environment 	<ul style="list-style-type: none"> • TAN12 objective stated that need to raising standards of design in all new developments including the submission of a Design Statement with planning applications. • To date, the number of Design Statements received by the Planning Authority has been low. • Without change to the current UDP, the future provision of Design Statements / BREEAM assessments with new planning applications is likely to remain low. 	<ul style="list-style-type: none"> • Encourage the submission of Design Statements alongside new planning applications to improve the design quality of new developments. • Aim to raise standards of design in new developments in the County. 		<p>Protect and enhance all international, national and locally designated nature conservation sites and protected species and avoid their damage or fragmentation</p>
<ul style="list-style-type: none"> • Despite several major schemes, to date no BREEAM assessments have accompanied planning applications for new development either on public or private schemes. 	<ul style="list-style-type: none"> • BREEAM assessments can assess the performance of new and existing buildings, covering a range of environmental and energy efficiency measures. • It is anticipated that there will be an increase in the number of new commercial planning applications that are accompanied by BREEAM assessments as 	<ul style="list-style-type: none"> • Consider methods of improving energy efficiency in new commercial developments through BREEAM assessments including redevelopment, conversions and extensions. • To encourage BREEAM assessments in new developments. 	<ul style="list-style-type: none"> • TAN 12 (2009) • Wales Spatial Plan ▪ MIPPS (01/2009) ▪ Draft TAN 22 	<p>Contribute to a reduction in greenhouse gas emissions (especially CO₂) Increase energy conservation and efficiency in development Support increased provision and use of renewable energy</p>

Key Issues and Problems	Description	Implications for LDP preparation	Source	Relationship of the issue to the emerging objectives in the SA Framework
Code for Sustainable Homes	<p>national planning guidance has been prepared on this.</p> <p>New national guidance has been issued to require new residential development to achieve level 3 of the Code for Sustainable Homes.</p>	Need to consider the contributions this can make to energy efficiency and renewable energy production.		

6 DEVELOPING THE SA FRAMEWORK

6.1 Introduction

The next task (Task A4) in the Sustainability Appraisal is the development of the sustainability appraisal framework. The SA Framework is a key component in completing the SA by synthesising the baseline information and sustainability issues into a systematic and easily understood tool that allows the prediction and assessment of effects arising from the implementation of the LDP. It consists of sustainability objectives which should where possible be expressed in the form of indicators and targets. Though the SEA Directive does not specifically require the use of objectives or indicators in the SEA process, they are a recognised and useful way in which environmental effects can be described, analysed and compared at key stages of the plan development. The sustainability objectives are distinct from the objectives of the LDP, though they may in some cases overlap with them. As the assessment progresses the degree of overlapping between the LDP and SA objectives will increase.

6.2 Methodology

A set of objectives, assessment rationale (guidance questions) and indicators, against which the policies and proposals in the LDP can be assessed, was drawn up under the three sustainable development dimensions: social, economic and environmental.

The SA objectives have been derived from the various plans, policies and programmes that were reviewed as part of Task A1, collection of baseline data (Task A2) and the identification of key sustainability issues (Task A3). The SA objectives have been worded so that they reflect one single desired direction of change for the theme concerned and do not overlap with other objectives. They include both externally imposed social, environmental and economic objectives and others devised specifically in relation to the context of the LDP being prepared. The SA objectives have also been worded to take account of local circumstances and concerns feeding from the analysis on sustainability issues. The link back to the SEA topics is also made in the table.

A preliminary set of indicators has been derived to capture the change likely to arise from the LDP's implementation and will play a role in the assessment itself. As the SA progresses it is likely that the set of indicators will be refined. Where appropriate existing data sources and indicators which are already monitored in the County have been used. In some cases, specific new indicators are proposed which will require monitoring by relevant bodies. Should significant effects relating to the SA objectives concerned will be identified as part of the assessment of effects during SA Stage B. When known, national, regional and local targets have also been included.

The SA framework of objectives, indicators and targets against which it is proposed to assess the LDP is set out in Table 6.1Tabl. It should be noted that the SA Framework has been reviewed and updated since the publication of the *initial* SA Report to take account of consultee comments. The application of the SA Framework is presented in Chapter 7.

Table 6.1: SA Framework

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
SOCIAL				
01	Ensure the housing needs of the community are met	<p>Will it increase or decrease the supply and quality of housing appropriate to local needs and affordability?</p> <p>Will it influence on the ability of housing policies to delivery the availability of appropriate homes for all due to location?</p>	No. of affordable homes delivered per annum and the % of eligible residential planning permissions where affordable housing has been negotiated	Material assets, Population and Human Health
			% of vacant housing.	
			Households on the Housing register	
			% of unfit housing against the Welsh Housing Quality Standard	
			Average property price compared against average earnings	
02	Promote community health and well-being	<p>Will it improve access to health facilities?</p> <p>Will it indirectly improve health for all?</p> <p>Will it indirectly or longer-term effects upon health?</p> <p>Secondary consideration of reducing air pollution, ensuring homes are of a decent standard.</p> <p>Will it lead to secondary effect such as improving walking and cycling for purposeful and/or recreational trips, improve access to greenspace?(2nd)</p>	Life expectancy	Population and Human Health
			Death rate per 100,000 by Chronic Heart Disease	
			Death rate per 100,000 by cancer	
			Death rate per 100,000 by suicide	
			Death rate per 100,000 by accidents	
			No. of planning applications incorporating Health Impact Assessment (HIA)	
			Community Satisfaction / perceptions surveys – Housing Estate Surveys	
			WIMD – Health Indices of deprivation	
			Proportion of households not living within 400m of their nearest natural green space.	
			Proportion of households within 800m walking distance of key health services	
03	Promote safer neighbourhoods and contribute to a reduction in the fear of	Will it engender a sense of safety, reduce crime, and fear of crime through indirect measures such as	Overall crime rates by type	Population and Human
			Fear of crime per Denbighshire ward during the day and at night	

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
	crime	<p>incorporating design features in new development (such as additional lighting, CCTV)?</p> <p>Will it seek to deliver an increase in the range and availability of community facilities (places to discourage incidences of anti-social behaviour and opportunistic crime)?</p>	Average crime rate in Denbighshire per 1000 population	Health
04	Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment	<p>Will it improve directly or indirectly the quality and range of recreation facilities, accessible countryside and greenspace, parks, open spaces and natural reserves through siting, improved transport measures, pedestrian and cycle links.</p> <p>Additionally will it improve community safety and security measures?(2nd)</p>	<p>Accessibility / availability of community facilities</p> <p>Hectares of accessible countryside and local green space</p> <p>Number and % residents using parks, open spaces and nature reserves annually</p>	Population and Human Health
05	Improve accessibility to education, employment, health, homes and community services for all sectors of the community through modes of transport other than the private car	<p>Will it directly (through new or significantly enhanced provision) or indirectly (through improved transport links) increase accessibility to employment opportunities and the following services:</p> <ul style="list-style-type: none"> • Schools; • Health and Social Facilities; • Nurseries; • Further Education Establishments; • Children's Centres; • Community Halls; • Churches; • Church Halls and Day Centres; • Libraries; • Residential Homes for the 	<p>No of visitors to community facilities (schools, health and social facilities, nurseries, further education establishments, community halls, churches, libraries, residential homes for the elderly, cemeteries, open space, sports facilities, supported accommodation, theatres and cinemas).</p> <p>% of rural residential population within walking distance of key services</p> <p>Travel to work data/modal split</p> <p>Traffic volumes</p> <p>Proportion of new developments (housing/ economic/ retail) located within 500m of public transport, cycle ways and footpaths</p> <p>Frequency/reliability of public transport</p>	Population and Human Health

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
		<p>Elderly;</p> <ul style="list-style-type: none"> • Cemeteries; • Open Space; • Sports Facilities and Centres; • Supported Accommodation; and • Theatres and Cinemas. <p>Will it provide sustainable modes of transport, or promote the use of such modes and restrict the use of cars?</p> <p>Will it reduce traffic levels in the County as well as other non-intrusive traffic management/exclusion measures (such as the quality of the pedestrian environment)(2nd)?</p> <p>Anti-poverty considerations;</p> <ul style="list-style-type: none"> - adult (A/H, HMO, Regeneration, Employment) - fuel poverty (to do with energy efficiency). - child (access to play opportunities) 	<p>Length of bus network</p> <p>No. of settlements served by bus</p> <p>No. or settlements served by rail</p> <p>WIMD – Geographical Access to Services Deprivation Domain.</p>	
06	Protect and enhance the Welsh Language and culture, including the County's heritage assets.	<p>Will it protect and enhance the Welsh language, culture (landscape, people, buildings, materials), heritage assets (buildings, sites, artefacts)?</p> <p>1) directly through policy interventions (e.g. the provision of facilities, services, safeguarding, protecting or enhancing), or</p> <p>2) indirectly through protection of</p>	<p>Proportion of Welsh speakers</p> <p>Proportion of people with skills in the Welsh Language</p> <p>Welsh medium schools as a proportion of all schools</p> <p>Bi-lingual published material – Council Policy</p> <p>Quality of SAMs, Historic Parks and Gardens, Landscape Areas and Conservation Areas</p> <p>Number of listed buildings on the 'Buildings at Risk Register'</p> <p>% of SAMS subject to positive actions undertaken by DCC as a result of plan proposals</p>	Population and Cultural Heritage

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
		cultural and heritage assets, particularly in a physical sense (e.g. respecting the character of the built form (human structures) and natural form (natural geological/river process)).	% of application demolished buildings or otherwise in Conservation Areas % of Conservation Areas with an up-to-date character appraisal Number of Conservation Areas adversely affected by plan proposals Number of listed buildings adversely affected by plan proposals Number of historic parks and gardens adversely affected by plan proposals Number of monuments/archaeological sites adversely affected by plan proposals	
ECONOMIC				
07	Support County economic development and regeneration, including the provision of opportunities for rural diversification.	Will it support maintaining and extending the range of wealth generating activities? (retail, leisure, recreation and tourism in addition to business and educational facilities) Will it encourage rural diversification overall quality and attractiveness of the area? Will it cope with climate change?	GVA per capita GVA per worker Proportion of economic activity by sector % changes in the number of VAT registered enterprises Employment / unemployment rates Unemployment claimant count with proportion of residents of working age population Take up of employment land	Population
08	Maintain and enhance the vitality and viability of town and rural centres	Will it be successful in reducing the number of vacant units in town and rural centres as well as adding to the diversity of town and rural centres through new development? Will it increase the vitality of town centres through improvements to public transportation and access; physical environment improvements; regeneration works; and measures that encourage increased length of stay for residents and visitors? Does it consider adaptation or mitigation to climate change?	Vacancy rates in town centres Quality of town centres (perception surveys) % changes in total number of VAT registered enterprises in town and rural centres % change in total number of shops, pubs and post offices in rural centres No of tourist days spent in the County including the number of people employed in the tourism industry.	Population

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
09	Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes	<p>Will it ensure the best use of land and buildings in locations served by sustainable transport modes?</p> <p>Will it indirectly effect improvement to accessibility since this can allow more intensive land uses?</p> <p>Does it consider the wildlife value of some PDL?</p>	% of dwellings built on previously developed land	Soil, Biodiversity, Landscape, Material Assets
			Number of developments meeting densities of between 30-50 dph and higher % in town centres and areas with high public transport accessibility	
			Amount of derelict land	
			No of empty properties	
10	Safeguard soil quality and function and maintain long term productivity of agricultural land	<p>Will it reduce or increase the chances of soil contamination?</p> <p>Safeguard agricultural soil quality (particularly the best and most versatile land (grades 1, 2 and 3A in the national classification)? Reduce land-take?</p> <p>Raise awareness of soil function? (Construction management methodology).</p>	Total area of contaminated land	Biodiversity, Human Health, Soil, Water
			Total area investigated and remediated as part of new development	
			Area of the best and most versatile agricultural land lost to development	
ENVIRONMENTAL				
11	Protect and enhance all international, national and locally designated nature conservation sites, protected species and geo-diversity sites and avoid their damage or fragmentation. Protect, enhance and create appropriate wildlife habitats in urban and rural areas thus enhancing biodiversity	<p>Will it have a positive or negative effect on internationally and nationally designated sites and locally important habitats and species (either through fragmentation, proximity or disturbance effects)?</p> <p>Will it have a positive or negative effect on Regionally Important Geological and Geomorphological Sites (RIGS) and other non-designated sites of local geological importance?</p> <p>Will it have a positive effect on non-designated habitats and species (e.g. through increased connectivity</p>	Area and condition of statutory / non-statutory nature conservation sites	Biodiversity, soil
			% of designated sites improved by the LA.	
			Number of proposals/policies resulting in the loss or damage to designated sites	
			Achievement in the Biodiversity Action Plan targets.	
			No. of Regionally Important Geological and Geomorphological Sites (RIGS)	
			Area of land actively managed for nature conservation	
			Number of development schemes which include design in ecological features	
			Maintenance regimes in place for new habitats	

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
		or reduced disturbance). Additional consideration of whether the policies will result in the conservation, enhancement or creation of habitats.	Record of S106 contributions towards wildlife enhancement or mitigation.	
12	Preserve and enhance landscape character across the County, particularly the AONB	<p>Will it directly or indirectly maintain and enhance the landscape quality of the County, including historic landscape features (e.g. field boundaries and hedgerows/hedgebanks).</p> <p>Will it consider the effects on the special qualities of the AONB and proposed extension to AONB. Will it impact on LANDMAP studies (landscape quality and quantity of areas)? Will it result in the potential loss to the quality/quantity of tranquil areas? Does it promote high quality design that reflects local distinctiveness and materials? Can the new development restore local distinctiveness?</p>	<p>% of county designated for landscape</p> <p>% of county designated as high or outstanding landscape quality (LANDMAP studies)</p> <p>Changes in the LANDMAP evaluation and extent of that change as a result of development</p>	Landscape
13	Protect and improve the water quantity and quality of inland and coastal waters	<p>Will it have positive or negative effects on maintaining and improving the quality of surface, ground and coastal waters? Is there adequate supply?</p> <p>Will it encourage a responsible approach to aspects such as surface water run-off from impermeable surfaces?</p> <p>Proximity of development to water courses?</p> <p>Water use, re-use and water conservation?</p>	<p>% of watercourse classified as good biological and chemical quality</p> <p>Compliance with Bathing Water Directive, European Blue Flag and UK Seaside awards</p> <p>Groundwater quality</p> <p>Distribution of aquifers and their vulnerabilities</p> <p>Number of incidents of major and significant water pollution</p> <p>Surface water and groundwater abstractions (licensed and private)</p> <p>% of planning permissions with water saving devices</p> <p>% of planning permissions with grey water recycling</p>	Water, Biodiversity, Population

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
14	Minimise the vulnerability to flooding and ensure new development does not increase flood risk	<p>Will it have positive or negative effects on tidal and fluvial flood risk either;</p> <p>1) directly through proximity/location within areas of flood risk, 2) indirectly through exacerbation of effects downstream.</p> <p>Will it result in an increase/decrease of flooding and other climate change effects e.g. by using sustainable drainage systems and reducing greenhouse gas emissions?</p>	<p>% of planning applications with SUDS required as part of conditions</p> <p>No. of new vulnerable development granted planning permission in C1 and/or C2 floodplain area contrary to advice from the Environment Agency</p>	Water, Climate Factors
15	Protect and improve air quality	<p>Will it reduce or increases in traffic- and industry- derived pollutant concentrations. Effect of policy interventions on predicted changes in road traffic numbers and the effect on the concentrations of certain pollutants (NO₂ and PM₁₀).</p> <p>Will it promote the use of more sustainable modes of transport? Reductions in private vehicle use? Sustainable location of industrial activities (as near the workforce as possible)?</p> <p>Better integration of land use and transport planning? Local key services within walking/cycling distances? Resist development that would adversely affect air quality, especially by exacerbating existing air quality problem areas?</p>	<p>Levels of main pollutants</p> <p>No. of days when air pollution is moderate or high for NO₂, SO₂, O₃, CO or PM₁₀</p>	Biodiversity, Air, Human Health

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
16	Contribute to a reduction in greenhouse gas emissions (especially CO ₂) by increasing energy conservation and efficiency in development and support increased provision and use of renewable energy	<p>Will it result in reductions or increases of greenhouse gas emissions and to what extent? This includes a consideration of emissions arising from buildings, land use change and transport.</p> <p>Will it directly reduce energy demand by encouraging energy efficiency and micro-generation by efficient sources?</p> <p>Will it have indirect effects, e.g. development located to reduce transport distances and design factors such as building orientation (linked to passive solar gain) and building form?</p> <p>Will it directly encourage the use of renewable energy technologies in new developments and renewable generation schemes?</p> <p>Will it promote the use of low embodied energy materials from sustainable sources and material from local sources and suppliers in the construction of new developments?</p> <p>Will it require new build and retrofit development to meet a minimum requirement of 4* in the Code for Sustainable Development?</p>	Annual greenhouse gas emissions by sector	Biodiversity, Human Health, Climate Factors, Material Assets, Air Quality, Population
			Number of new developments built to achieve carbon neutrality	
			Total domestic energy consumption per household and per capita	
			No. of Code assessments accompanying new developments	
			% of energy produced in the County generated from renewable sources	
			No. of buildings incorporating renewable energy production (solar panels, wind turbines, photovoltaic's, ground-source heat)	
			Construction projects incorporating on-site recycling	
			Travel to work data/modal split	
17	Protect mineral resources from development that would preclude	Will it prevent development from occurring that would preclude mineral extraction?	Amount of mineral reserves	Soil, Material Assets
			Reuse of aggregates in construction	

Code	SA/SEA Objectives	Assessment Rationale	Indicator(s)	SEA Topics
	extraction	Will it require or encourage the reuse of aggregates in construction, which will have benefits in terms of safeguarding the longevity of supply locally? (2 nd)	Number of planning applications approved resulting in the sterilisation of mineral reserves	
18	Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency	<p>Will it directly reduce the generation of waste and increase recycling of waste against standard levels expected for development, e.g. by providing recycling facilities within and near to homes?</p> <p>Will it consider construction waste reduction, re-use and recycling? Will it contribute sufficient land to be allocated within the County to encourage regional self-sufficiency in waste management and processing?</p>	<p>Household, construction and demolition and industrial waste production (tonnage)</p> <p>% of household, construction and demolition and industrial waste recycled</p> <p>% of household, construction and demolition and industrial waste landfilled</p> <p>% of household, construction and demolition and industrial waste composted</p> <p>% of household, construction and demolition and industrial waste used to recover heat or energy</p>	Biodiversity, Human Health, Soil, Air, Climate Factors, Material Assets, Landscape

6.3 Testing the Compatibility of the SA/SEA Objectives

It may be useful to test the internal compatibility of the SA / SEA objectives using a matrix approach. In the *initial* SA Report, the SA/SEA Objectives was tested against themselves to determine their compatibility. The assessment table and recommendation are displayed below (Table 6.2). Tensions between objectives that cannot be resolved can be highlighted. This sort of compatibility assessment will clarify these so that subsequent decisions are well based, and alternatives and mitigation can be considered. The main areas of contention fall with population increase in towns/villages near vulnerable wildlife sites (particularly European designation sites) or the need to protect precious landscapes from visual detractors which cannot be mitigated (wind turbines)

Table 5.2: Testing the Compatibility of SA/SEA Objectives

		COMPATIBILITY OF SA / SEA OBJECTIVES																	
SA / SEA OBJECTIVES		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SA / SEA OBJECTIVES	1 Ensure housing needs of community are met.		✓	✓	✓	✓	✓	✓	✓	?	?	?	✓	✓	✓	✓	?	✓	✓
	2 Promote community health and well-being.			✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	-	-
	3 Promote safer neighbourhoods and contribute to a reduction in fear of crime.				✓	✓	-	✓	✓	-	-	-	-	-	✓	-	-	-	-
	4 Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment.					✓	✓	✓	✓	✓	-	?	?	?	✓	✓	-	-	-
	5 Increase the provision of public transport, walking and cycling networks and reduce the dependency on the private car						✓	✓	✓	✓	-	?	-	?	-	✓	✓	-	✓
	6 Protect and enhance the Welsh Language and culture, including the County's heritage assets.							✓	?	✓	✓	✓	✓	-	✓	-	?	-	✓
	7 Support County economic development and regeneration, including the provision of opportunities for rural diversification.								✓	✓	✓	✓	✓	✓	✓	?	?	✓	✓
	8 Maintain and enhance the vitality and viability of town and rural centres.									✓	✓	✓	✓	-	✓	-	✓	✓	✓
	9 Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes										✓	✓	✓	-	✓	✓	✓	✓	✓
	10 Safeguard soil quality and function and maintain long term productivity of agricultural land.											✓	✓	✓	✓	✓	✓	✓	✓
	11 Protect and enhance all international, national and locally designated nature conservation sites and protected species and avoid their damage or fragmentation. Protect, enhance and create appropriate wildlife habitats in urban and rural areas thus enhancing biodiversity.												✓	✓	✓	✓	✓	✓	✓
	12 Preserve and enhance landscape character across the County, particularly the AONB.													✓	✓	✓	✓	✓	✓
	13 Protect and improve the water quantity and quality of inland and coastal waters.														✓	✓	✓	✓	✓
	14 Minimise the vulnerability to flooding and ensure new development does not increase flood risk.															✓	✓	✓	-
	15 Protect and improve air quality.																✓	✓	✓
	16 Contribute to a reduction in greenhouse gas emissions (especially CO ₂) by increase energy conservation and efficiency in development and support increased provision and use of renewable energy.																	✓	✓
	17 Protect mineral reserves from development that would preclude extraction.																		✓
	18 Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency.																		

KEY
 ✓ Objectives of the SA / SEA are compatible
 x Objectives of the SA / SEA are not compatible
 - No links between the Objectives of the SA / SEA
 ? Unknown – compatibility may be dependant on implementation

Justification:

Compatibility of SA/SEA Objective 1 is dependant of the location of the proposed housing development. In order to ensure that community needs are met it may be necessary to build new homes on greenfield land due to the lack of brownfield land in the County. New rural developments could be reliant on the private car but sustaining the communities by building new homes to meet the local need could help maintain the existing services enjoyed.

Compatibility of SA/SEA Objective 4 the protection of species and habitats, landscape and water quality is dependant on the level of recreation activity by humans.

Compatibility of SA/SEA Objective 6 is dependant on the conservation and protection of landscapes, buildings, materials, statues, heritage assets, sites and artefacts. Compatibility may be dependant on positioning of renewable energy generation mechanisms, or the design of new developments to safeguard the setting of the asset. With regard to welsh language avoiding major community changes in the predominantly welsh communities and promoting the language and culture through development proposal mitigation.

Compatibility of SA/SEA Objective 7 will depend on the implementation of sustainable transport and sustainable industries aiming for minimal air pollution. Also the reduction of Co2 is important and may be possible by ensuring services and amenities are available locally for all; by encouraging economic development and over all increasing energy efficiency.

Compatibility of SA/SEA Objective 11 is dependant on it having a positive impact on designated conservation sites, protected species and geo-diversity and avoids their damage or fragmentation. Creation of appropriate wildlife habitats in urban and rural areas through either increased connectivity or reduced disturbance.

Compatibility of SA/SEA Objective 12 will come under pressure with the drive to increase the amount of renewable energy the County generates. Visual impact of wind turbines can be long range.

7. Assessment and Development of Strategic Options

7.1 Introduction

The SEA Directive requires that reasonable alternatives are considered in the SA Report, the paragraph states:

'reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' and give 'an outline of the reasons for selecting the alternatives dealt with' (Article 5.1 and Annex Ih).

7.2 Identification of LDP Strategic Options

Denbighshire County Council has undertaken a process of identifying the strategic options to achieve the objectives of the LDP. Initially a set of strategic options were developed for the future development of the County. These options included:

GROWTH OPTIONS

Three realistic growth options were put forward for assessment, Option 1 based on the current UDP growth rate (the Business as Usual scenario); Option 2 based on the level of growth required to meet the mid range projections of housing and employment need; Option 3 was based on the higher end of the projected housing and employment needs.

SPATIAL OPTIONS

Having looked at the various options for overall growth, the spatial distribution of that growth was then considered. In the first instance the broad approach of dispersing growth across the County as in the current UDP was considered (Option 1) with Option 2 looking at concentrating growth into a smaller number of large sites.

SPATIAL OPTION REFINEMENT

The option of concentrating development into a smaller number of larger sites emerged as the one most likely to deliver more positive effects from the spatial options assessments. The type of land requirements were then considered for the larger sites. Option 1 looked at siting the larger mixed use developments on Greenfield land. Option 2 looked at siting larger sites on previously developed land and Option 3 looked at the current UDP approach (again the Business as Usual scenario).

7.3 Assessment of the Strategic Options

The Strategic Options identified for the LDP were assessed against the SA Objectives to enable the identification of the strengths and weaknesses of each potential option. The assessments were undertaken to assist the LDP progress with the identification of the most appropriate and sustainable options. The process is documented in the initial SA Report (June 2008) with this SA Report presenting a summary of the findings and the recommendations used to aid the decision making process. The full results of the options review are tabled in Appendix 3 of the initial SA Report (June 2008) (can be seen in LDP Preparation Document 003).

The tables below provide the summary of each option assessed at the initial SA Report and a summary of the overall comments / recommendations and how the comments were taken on board in the Deposit LDP. Pre-Deposit LDP / initial SA Report consultation responses made very few comments regarding this section. EAW noted that Growth Option 2 and 3 will result in a significant increase in potable water demand and increase effluent loading on sewage works. Consultation responses can be viewed at Appendix 1 & 2 of this Report

Table 7.1 – Strategic Options Assessment – Strategic Growth Options

Key: +++ strongly positive ++ major positive + minor positive, 0 Neutral - minor negative
 -- major negative --- strongly negative +/- dependent on implementation of option

Options	Performance			Summary Assessment
	Economic	Environmental	Social	
Assessment of the range of options for achieving strategic development sites in the Denbighshire LDP				
<i>Option 1: Lower Growth – Current UDP Policy 300 houses per annum and 40 hectares of employment land.</i>	+/-	-	+/--	<p>The three options provide different outcomes and there are a range of positive and negative effects for each of the three.</p> <p>From an economic perspective, Options 2 and 3 perform better than Option 1, with option 3 outperforming Option 2 on most issues. Both Option 2 and 3 will be regarded as having the greatest role in meeting predicted economic projections. However Option 3 will have a significant negative effect on the productivity of agricultural land.</p> <p>From a social perspective, Options 2 and 3 again outperform Option 1 and provide significant positive benefits. These are largely to do with being able to better meet the need of resident through better matching housing and employment land requirements to projected demands. It is considered that meeting these needs would be beneficial to the community. Higher growth levels under these two options would also enable greater community benefits to be realised through Planning Gain / Section 106 legal agreements etc. However, with Option 3 a significant negative effect must be recognised, in that the level of growth and potential pace of change within communities may lead to a negative impact upon local communities.</p> <p>From an environmental perspective, not surprisingly Option 1 comes out better than Options 2 and 3. The main reason for this is that the amount of development needed would be less, which means there would be less need to develop greenfield land within the County and generally a smaller environmental impact from new development e.g. greenhouse gases, flooding impact etc.</p>
<i>Option 2: Moderate Growth - Meeting Housing and Employment Needs. 500 houses per annum and 50 hectares of employment land.</i>	++-	--/+	+++/-	
<i>Option 3: High / Accelerated Growth – 650 houses per annum and 70 hectares of employment land.</i>	+/-	---/+	+++/-	

SPECIFIC ISSUES RAISED BY THE OPTIONS ASSESSMENT:

- Careful consideration needs to be given to the way in which affordable housing provision will be delivered through each of the options – specific approaches should be developed and set out in the Deposit version policies.

How the issue was taken onboard in the Pre-Deposit LDP.
The Moderate Growth Option 2 was proposed for the Pre-Deposit LDP consultation. Key Policy 4: <i>House Types</i> attempted to address the lack affordable housing issues. The policy set out the approximate percentage figure for securing affordable housing on sites in urban and rural areas. It was estimated that approximately 2,250 homes could be provided over the plan period with the Moderate Growth Option.
How the issue has been forwarded in the Deposit LDP.
The economic climate and cross-border Local Development Framework Examination scrutiny revealed the need to undertake an <i>Affordable Housing Viability Study</i> to examine the deliverability of a policy which states a high percentage of affordable housing. The conclusion of this study was not available at the time of writing this report.

- The Deposit version policies will need to make explicit reference to planned approaches to addressing crime and fear of crime, particularly through design.

How the issue was taken onboard in the Pre-Deposit LDP.
Key Policy 7: <i>Community Safety</i> addressed the issue of design.

How the issue has been forwarded in the Deposit LDP.
--

Policy RD 1: Sustainable and good standard design includes a criteria (iix) to take into account the personal and community safety aspects within design.

- The delivery of additional open space/recreational facilities is, under options 2 and 3, reliant in part upon the realisation of economies of scale. This should be more fully articulated through the Deposit version policies.

How the issue was taken onboard in the Pre-Deposit LDP.

Key Policy 1 and 11: <i>Growth Strategy</i> and <i>Open Space and Play Space in residential developments</i> aimed to address this issue.

How the issue has been forwarded in the Deposit LDP.
--

Policy BSC 5 and BSC 11: <i>Key Strategic Site – Bodelwyddan</i> and <i>Recreation and Open Space</i> make positive contributions towards addressing this issue.
--

- The scale of growth under options 2 and 3 in particular, are likely to require investment in the strategic transport infrastructure. This should include measures to promote the use of sustainable modes of transport such as bus lanes, rail development and cycle routes;

How the issue was taken onboard in the Pre-Deposit LDP.

Key Policy 16: <i>New Transport Routes</i> raised awareness of his issue.

How the issue has been forwarded in the Deposit LDP.
--

Policy RD 1: Sustainable and good standard design includes a criteria (vii) to take into account accessibility in design. The development of identifying a key strategic site and Policy BSC 5: <i>Key Strategic Site – Bodelwyddan</i> looked at the importance of sustainable transport modes and Policy ASA 1,2, & 3 have been worded in favour of sustainable transport.
--

- At the strategic scale it is not clear what impacts growth levels may have on Welsh Language and Culture. The process of Deposit version policy development should include greater consideration and representation of this issue.

How the issue was taken onboard in the Pre-Deposit LDP.

Key Policy 12: <i>Welsh Language and Culture</i> raised awareness of the locations of language sensitive areas in an attempt to avoid proposing key strategic growth in these areas.
--

How the issue has been forwarded in the Deposit LDP.
--

Policy RD 4: The Welsh language and social and cultural fabric of communities will secure the need to address significant development impacts of this Moderate Growth strategy. A draft outline report on the main impacts on Welsh language and culture of the Key Strategic Site at Bodelwyddan has been undertaken to support background evidence.

- The levels of growth set out in Options 2 and 3 present considerable opportunities for social development including additional demand generated for retail, employment, community facilities and services. There will be a need for the Deposit version policy development to reflect and seek to capitalise upon this potential, with a view to maximising the benefits that are contained within the County and limiting the outflow of spending to neighbouring areas.

How the issue was taken onboard in the Pre-Deposit LDP.

Key Policy 9: <i>Retail</i> outlined a draft retail hierarchy for the key towns recognising that a Key Strategic Site would require an element of retail to address the local demand.

How the issue has been forwarded in the Deposit LDP.
--

Policies BC 12, PSE 2, 3 and PSE 6 address the need to allocate land for employment of the people predicted to live and work in the County by 2021. Policy BSC 5: <i>Key Strategic Site – Bodelwyddan</i> also recognises the need to address local community facilities. The impact of the moderate growth option has been considered in the policy assessments.

- Options 2 and 3 will also require close collaboration with other public sector agencies such as the police and health service providers – this will ensure that there is adequate investment to match the changes generated through the options.

How the issue was taken onboard in the Pre-Deposit LDP.
Representatives of the Health Board and Denbighshire education teams attended various Key Stakeholder group meetings and were provided with a copy of the Pre-Deposit LDP. The education team had been working on improving physical schools standards and were reporting on this post consultation.
How the issue has been forwarded in the Deposit LDP.
Discussions with Key Stakeholders regarding the education and health provisions for the Key Strategic Site is still ongoing, however Policy BSC 3 – Securing infrastructure in new development enables this further work and studies to evidence need to be taken into consideration as an when made available.

- The potential loss of greenfield land to development will be a significant issue, even with the maximisation of use of brownfield land. Close collaboration will be required with nature conservation, agricultural land, landscape and mineral interests to ensure there are no unacceptable effects.

How the issue was taken onboard in the Pre-Deposit LDP.
The presumption for favouring allocating land on brownfield was to be considered as the Deposit using the Site Assessment Criteria.
How the issue has been forwarded in the Deposit LDP.
Due to the nature of the County and the limited amount of brownfield land present the majority of new allocations have been on greenfield sites. Please view the housing trajectory table in the LDP Appendices.

- All options are likely to have negative effects in increasing flood risk without mitigation. The potential impact increases with the amount of development – so options 2 and 3 will have the greatest impact. There is a need to consider the requirements of TAN15 and incorporate flood mitigation measures in the design of new development.

How the issue was taken onboard in the Pre-Deposit LDP.
The flood risk issues on sites were to be considered in the Site Assessment Criteria.
How the issue has been forwarded in the Deposit LDP.
The only flood risk issue is within the search area of Llidiart y Par hamlet. Local Town Council wanted to address the housing needs of the local community by allocating a criteria fro new homes there.

- Deposit version policies should encourage a reduction in greenhouse gas emissions through improved energy efficiency, seeking new development to provide a proportion of energy requirements for renewable sources and through encouraging alternatives to the car.

How the issue was taken onboard in the Pre-Deposit LDP.
Key Policy 6: Sustainable and good standard design aimed to address the need to reduce the energy demand when erecting new dwellings or other buildings.
How the issue has been forwarded in the Deposit LDP.
In the interim, following Pre-Deposit consultation the Welsh Assembly Government have issued national policies regarding achieving sustainable buildings. The LDP and SAR will be a tool for monitoring the local success of the national policies. Allowing a higher percentage of new build will help further the renewable energy and energy efficiency technologies and skills. This will hopefully lead to further initiatives, out of the LDP's control, to encourage existing homeowners to adapt their homes.

Table 7.2: Strategic Options Assessment – Spatial Options

Key: +++ strongly positive ++ major positive + minor positive, 0 Neutral - minor negative
 -- major negative --- strongly negative +/- dependent on implementation of option

Options	Performance			Summary Assessment
	Economic	Environmental	Social	
Assessment of the range of options for achieving strategic development sites in the Denbighshire LDP				
<i>Option 1: Dispersal – Disperse development into a larger number of smaller sites across the County (existing UDP policy)</i>	+/--	+/-	+/-	The two options provide different outcomes and there are a range of positive and negative effects for each of them.
<i>Option 2: Concentration – Concentrate development into major new development sites in the north of the County, with smaller scale new development in other County settlements</i>	+++/--	+/-	++/--	<p>From an economic perspective, Options 2 broadly performs better than Option1 – this is primarily because it is considered that most development can be concentrated where it is most needed. The one significant negative environmental impact associated with Option 2 is due to its potential impact of developing high quality agricultural land</p> <p>Options 1 and 2 both have positive and negative impacts upon social objectives. The greater positive impact emerge from Option 2 – this is primarily because (as with economic performance) it is considered that development social needs can be concentrated into areas where they are most needed. However, Option 2 also has the greatest negative social impacts – this is because the option may accelerate the pace of change within community which may have adverse impacts upon a locality (particularly if the changes are not reflected by changes in policing budgets etc).</p> <p>From an environmental perspective, both options have small positive and negative impacts. Option 1 may lead to the need to travel more (an issue exacerbated by the fact that development will be in more car dependent areas). However, option 2 will have larger development sites, which will have local noise / pollution impacts. However, overall there were many impacts from Options 1 and 2 which were unknown – this is largely because the actual geographic location of new development is currently unknown.</p>

SPECIFIC ISSUES RAISED BY THE OPTIONS ASSESSMENT:

- Careful consideration needs to be given to the way in which infrastructure, services and facilities will be delivered in association with the two options.

How the issue was taken onboard in the Pre-Deposit LDP.
Initial discussions began as part of the Pre-Deposit consultation.
How the issue has been forwarded in the Deposit LDP.
The Strategic Masterplan Study (2009) of the 3 options for Key Strategic Sites was undertaken in discussion with a number of Key Stakeholders. The LDP Strategy has been agreed by Council following the Consultation Report's recommendations.

- It is important in implementing either option – but particularly Option 2 – that development is matched to where the greatest social and economic need are i.e. demand for affordable housing / demand for employment land etc

How the issue was taken onboard in the Pre-Deposit LDP.
The Pre-Deposit Plan concentrated growth in the north of the County and identified 3 options for Key Strategic Sites within the north east Wales Spatial Plan hub.
How the issue has been forwarded in the Deposit LDP.
Site choice has now been made.

- It is particularly important under Option 2 to ensure that there is collaboration with other public agencies (e.g. police, fire, health services, as well as the Council's public service providers e.g.

libraries, education etc) because this option may have significant impacts upon particular communities.

How the issue was taken onboard in the Pre-Deposit LDP.
The Pre-Deposit LDP was widely circulated for consultation.
How the issue has been forwarded in the Deposit LDP.
The Strategic Masterplan Study (2009) of the 3 options for Key Strategic Sites was undertaken in discussion with a number of Key Stakeholders. Following Deposit consultation, subject to the approval of the Key Strategic site further local consultation will be required to address services and education arrangements.

- Option 2 may provide significant 'economies of scale' in the implementation of public open space and leisure opportunities for specific communities. Careful consideration will be required to ensure that the needs of all communities are met.

How the issue was taken onboard in the Pre-Deposit LDP.
The Pre-Deposit LDP consultation exhibitions outlined the benefits of 'economies of scale'.
How the issue has been forwarded in the Deposit LDP.
The Strategic Masterplan Study (2009) of the 3 options for Key Strategic Sites tested the economy of scale principle and the Bodelwyddan site was the only option to be self-funding.

- As with the higher strategic growth options, it is considered that there is potentially significant greenfield encroachment associated with Option 2 in particular. Careful consideration will be required of these impacts with various organisations and these should be fully explored in Deposit policies.

How the issue was taken onboard in the Pre-Deposit LDP.
Early discussion of the agricultural land grade was already taking place.
How the issue has been forwarded in the Deposit LDP.
The LDP Working Group took the decision on the Key Strategic Site. All three options involved the loss of greenfield land. The Welsh Assembly Government provided the LDP team with Agricultural Land Classification maps for the three sites in late 2007. Parts of the Bodelwyddan site and the Rhyl site were classed as having some Best & Most Versatile land.

- The impact of flooding could be a significant issue in either option, but is probably more acute in Option 2. Again, careful consideration of this (including the implications of TAN 15 and the Denbighshire Strategic Flood Consequence Assessment) will be required.

How the issue was taken onboard in the Pre-Deposit LDP.
The Pre-Deposit LDP land for the Key Strategic Sites were outside of any flood risk zone. With the exception of part of the Rhyl site, which had some flood risk issues.
How the issue has been forwarded in the Deposit LDP.
The Strategic Masterplan Study (2009) of the 3 options for Key Strategic Sites identified that only employment could be sited within the flood risk zone on the Rhyl site. This did not result in amendment being necessary to the site boundary. The Rhyl site has been taken out of the Deposit LDP.

- There will be a need for the Deposit policies to consider how waste management and sustainable waste treatment can be incorporated into development at a strategic scale.

How the issue was taken onboard in the Pre-Deposit LDP.
Key Policy 15: Waste identified the need to ensure the waste principles of reduce, re-use and recycle were a material consideration to any development proposal.
How the issue has been forwarded in the Deposit LDP.
Policy VOE 6, 7 and 8 of the Deposit LDP deal with waste management issues. There are some potential opportunities identified for the Key Strategic Site. Criteria ix) of policy BSC 5 notes the need to address the carbon neutral ambition of the County Vision. Potential links with renewable energy and waste incineration have been identified and will be further explored as part of an energy strategy for the master plan should be Deposit LDP consultation be agreed.

Table 7.3 – Spatial Option Refinement - Land Use Type

Key: +++ strongly positive ++ major positive + minor positive, 0 Neutral - minor negative
 -- major negative --- strongly negative +/- dependent on implementation of option

Options	Performance			Summary Assessment
	Economic	Environmental	Social	
Assessment of the range of options for achieving strategic development sites in the Denbighshire LDP				
Option 1: Large Mixed Use Site Priority	++/-	++/--	++/--	<p>There are differences between each of the three options, particularly in terms of their relative performance against the three dimensions of sustainability. It is particularly notable that in almost all cases, the options are predicted to have a combination of positive and adverse effects against the three dimensions of sustainability.</p> <p>From an economic perspective, options 1 and 2 are considered to have the greatest potential for positive effects as, in supporting a greater number of sites for the development of strategic employment across the County, they are both likely to deliver greater beneficial effects than option 3, albeit that the distribution of this growth differs between options 1 and 2. It should also be noted that, whilst the overall performance is ranked the same for options 1 and 2, it is the former that offers the greatest potential for benefits arising from a combination of a masterplanned approach and economies of scale.</p> <p>In addition, the greatest potential for economic investment comes from concentrating site near to available labour.</p> <p>From a social perspective, options 1 and 2 are predicted to have the greatest potential for positive effects, yet option 1 is considered likely to have a substantial amount of adverse effects, thus option 2 could be considered to offer the more favourable sustainability performance. In contrast, option 3 is only predicted to have minor adverse effects; however, the scale of beneficial effects associated with this option is less than in options 1 and 2. The complexities of the differences between the assessments are linked to the differing emphasis that each of the options places on maximising benefit from existing infrastructure and using new development to deliver much improved infrastructure, as well as the varying impacts on existing community networks and vernacular, which are very much dependent on the settlements into which development will be placed.</p> <p>From an environmental perspective, options 2 and 3 are predicted to have less severe negative effects than option 1. Principally, this is on the basis that they seek to direct strategic development to previously developed land, whereas option 1 does support the release of greenfield sites for development where appropriate in terms of scale and location. Therefore, option 2 allows for greater protection of designated and non-designated biodiversity, landscape character, historical assets and valuable agricultural soils. However, in essence all of the options involve adverse effects arising from a combination of transport movements, loss of productive soils to development pressure, increased risk of water and air pollution, likely severance of habitats and negative effects on biodiversity, including brownfield diversity. In all cases, these negative effects are likely to require avoidance and mitigation.</p>
Option 2: Brownfield Land Priority	++/-	++/-	++/-	
Option 3: Continuation of Current UDP policies	+/-	++/-	+	

SPECIFIC ISSUES RAISED BY THE OPTIONS ASSESSMENT:

- Ensure employment site are located near available labour.

How the issue was taken onboard in the Pre-Deposit LDP.

A determining factor for the choice of 3 Key Strategic Sites was this location in proximity to the north east Wales Spatial Plan hub. The vision for the hub is for economic prosperity.
--

How the issue has been forwarded in the Deposit LDP.
--

In December 2008 an area along the north Wales coast, including the north east Wales Spatial Plan hub was designated as a Strategic Regeneration Area. Five wards in Rhyl are in the top 10 of the Wales Index of Multiple Deprivation and unemployment is high. Locating a serviced employment site in the hub area brings links to social opportunities.
--

- To ensure improvements to infrastructure and to deliver serviced employment buildings the site must be free from constraints.

How the issue was taken onboard in the Pre-Deposit LDP.

Some initial screening for brownfield land was made at the Pre-Deposit LDP stage. Only a limited amount of brownfield land was available in the hub area and none of it could accommodate the growth required. Hence, mixed use sites at three Key Strategic locations were proposed as options.
--

How the issue has been forwarded in the Deposit LDP.
--

There are no significant constraints of the land allocated for Key Strategic development. The Deposit LDP is confident that the mixed use scheme can deliver the serviced employment land and associated development infrastructure. The Strategic Masterplan Study (2009) of the 3 options for Key Strategic Sites discusses the viability in more detail.

- To minimise the environmental impacts sites must be evaluated for impacts.

How the issue was taken onboard in the Pre-Deposit LDP.

This issue was to be addressed by the Site Assessment Criteria.

How the issue has been forwarded in the Deposit LDP.
--

Strategic Sites have been evaluated in the 'Strategic Masterplan Study (2009)' for their environmental impacts.

7.4 Assessment of Key Strategic Sites

Previous development plans have sought to distribute growth around the County, with smaller scale incremental additions being made to settlements. These incremental additions have added to the pressure on services and local infrastructure but have not been of sufficient scale to generate additional infrastructure or community facilities. Incremental change can be unsustainable and result in lack of connectivity to jobs and facilities. The Council's Urban Potential Study (2007) demonstrated that there is insufficient brownfield land to meet the housing needs of the County and therefore there is a need for Greenfield development.

In the initial stages of development of the Local Development Plan, it was established that one of the key issues facing the County that could be addressed through the Plan was the need to provide adequate infrastructure in new developments to ensure that sustainable communities are created and maintained. This issue translated into Objectives regarding the provision of infrastructure and the concept of using mixed use developments to ensure delivery of infrastructure and other community benefits. The initial concept of having major strategic sites was explored in the Mixed Use Sites Assessment study (BE Group 2005/7), this study suggested sites that were suitable for further consideration.

A total of 6 sites across the County were initially considered and assessed in line with the SA Objectives. The summary of the assessments are outlined in Table 7.4 below. However, only 3 sites in the north of the County were considered as options for further investigation. Those three sites formed part of the Pre-Deposit LDP which was consulted Summer 2008. The full assessment of all 6 sites can be seen at Appendix 3 of the *initial* SA Report (June 2008) (can be seen in LDP Preparation Document 003).

Table 7.4 – Pre-Deposit Key Strategic Sites Assessment

Options	Performance			Summary Assessment
	Economic	Environmental	Social	
Assessment of key site options for achieving sustainable development in the Denbighshire LDP				
Rhyl South East	++/--	++/-	+++	<p>There are variations between each of the six potential sites, particularly in terms of their relative performance against the three dimensions of sustainability. It is particularly notable that in almost all cases, the options are predicted to have a combination of positive and adverse effects against the three dimensions of sustainability.</p> <p>From an Economic Perspective Cae Fron, Denbigh performs best; this is mainly due to it being a town centre regeneration site on previously developed land. In terms of the ability to bring forward strategic employment sites in areas of demand Rhyl SE, Bodelwyddan and St Asaph West perform best. These sites also offer the greatest potential arising from the masterplanned approach and economies of scale.</p> <p>From an Environmental perspective Cae Fron in Denbigh performs best as it offers the opportunity to beneficially regenerate a currently partly derelict brown field site. All of the other sites have a combination of potentially positive and negative effects depending on implementation. Cilmedw, Llangollen performs worst due to the presence of the River Dee SAC.</p> <p>In essence all of the sites involve adverse effects arising from a combination of transport movements, loss of productive soils to development pressure, increased risk of water and air pollution, likely severance of habitats and negative effects on biodiversity. In all cases, these negative effects are likely to require avoidance and mitigation.</p>
Bodelwyddan	++/-	++/-	++	
St Asaph West	++/--	++/-	++	
Cae Fron, Denbigh	+++	+++	+/-	
Clawdd Poncen, Corwen	+/-	++/-	++	
Cilmedw, Llangollen	+/-	+/-	+/-	

				From a Social perspective the impacts of the potential sites are largely positive. Cae Fron performs less well due to the limited amount of housing to meet the population's needs that is likely to be generated; Cilmedw is a considerable distance from the town centre and may encourage greater reliance on the private car. Each site is different and the assessments are linked to the differing emphasis that each of the sites places on maximising benefit from existing infrastructure and using new development to deliver much improved infrastructure, as well as the varying impacts on existing community networks and local styles and character, which are very much dependent on the settlements into which development will be placed.
--	--	--	--	---

The site at Cae Fron in Denbigh was recommended in the SA for progression as a regeneration site in the Local Development Plan. The site has subsequently been granted planning permission for a major retail development scheme and this is reflected in the Local Development Plan allocation for the site.

The Clawdd Poncen site in Corwen was for mixed use and involved the de-allocation of an existing employment allocation nearby (Ty'n y Gottel). Planning permission was subsequently granted for employment/waste use on this site and it is proposed to roll this employment commitment forward into the Local Development Plan. The residential element of the Clawdd Poncen potential Key Strategic Site has been included in the Local Development Plan.

The appraisal concluded that the Cilmedw site performed poorly across the three aspects of sustainability, particularly environmental. The Cilmedw site lies some 1.2 km from the town centre and it was considered that this edge of settlement location would lead to increased dependence on the private car.

The Wales Spatial Plan identifies a 'hub' to provide a focus for future employment, housing and retail growth that covers the Rhyl, Prestatyn, St Asaph and Bodelwyddan area in Denbighshire. This hub is also identified as being capable of providing support and opportunity for growth and regeneration for the wider area. The three potential Key Strategic Sites that were progressed past the Pre-Deposit stage all lie within this 'hub' area.

Specific issues raised by the options assessment for the 3 potential key strategic sites:

- Careful consideration needs to be given to the way in which infrastructure, services and facilities will be delivered in association with the sites. In particular, there is a need to take differing land values into account in considering the potential benefits that can be achieved through the application of planning obligations. This should be more fully articulated through the Deposit plan policies.

How the issue was taken onboard in the Pre-Deposit LDP.
Pre-Deposit consultation document circulated to all Key Stakeholders.
How the issue has been forwarded in the Deposit LDP.
The Strategic Masterplan Study (2009) of the 3 options for Key Strategic Sites was undertaken in discussion with a number of Key Stakeholders. The costs of delivering these infrastructure, services and facilities was scrutinised prior to a decision being made on the preferred site.

- Phasing of sites should ensure that employment land, community facilities and infrastructure are provided in advance of residents needs to engender sustainable patterns of travel and to promote community development and identity.

How the issue was taken onboard in the Pre-Deposit LDP.
N/A
How the issue has been forwarded in the Deposit LDP.
The precise phasing will need to be addressed post Deposit consultation in the form of a masterplan and in consultation with the local residents. Some Deposit LDP policy assessments

raise few recommendation regarding phasing, see Chapter 9.
--

- Additional detail will be required regarding the likely mix of uses and precise location of the best prospects for development.

How the issue was taken onboard in the Pre-Deposit LDP.

N/A

How the issue has been forwarded in the Deposit LDP.
--

The Strategic Masterplan Study (2009) discusses the prospect of delivery. There was some debate about the likelihood of the Rhyl site delivering the best prospects for employment.

- The scale of growth for the Rhyl South East; Bodelwyddan and St Asaph West sites is likely to require investment in the strategic transport infrastructure. This should include measures to promote the use of sustainable modes of transport such as bus lanes, rail development and cycle routes.

How the issue was taken onboard in the Pre-Deposit LDP.

N/A

How the issue has been forwarded in the Deposit LDP.
--

One drawback for the selection of the Bodelwyddan site is the distance between the site and the north Wales coast railway service. The recommendations in the SA assessments, found in Table 7.5 below, highlights the need to address this with sustainable transport routes and for it to be phased in early to influence behavioural change of residents.
--

- As identified in the spatial options assessment, the potential loss of greenfield land to development needs to be considered. The development of Deposit plan policies should be closely linked to the findings of the capacity assessment and seek to maximise brownfield use in order that greenfield development can be kept to a minimum.

How the issue was taken onboard in the Pre-Deposit LDP.

N/A

How the issue has been forwarded in the Deposit LDP.
--

Making use of previously developed land was a criteria for Site Assessment. The balance of new allocations on brownfield and greenfield sites can be seen the Housing Trajectory of the Deposit LDP (2009).

- New development of a strategic scale could have significant negative effects on the existing water and wastewater infrastructure. The Deposit plan policies should consider a range of approaches including SuDS, greywater recycling, wastewater treatment requirements and infrastructure expansion.

How the issue was taken onboard in the Pre-Deposit LDP.

N/A

How the issue has been forwarded in the Deposit LDP.
--

The availability of water was a key consideration in the choice of Key Strategic Site. The Strategic Masterplan Study (2009) discussed the capacities of each site with the relevant private water companies prior to a decision being taken. In addition, Policy RD 1 (xi), BSC 5 (ix) and VOE 6 require development to consider the impacts on water quality and quantity.
--

Table 7.5 below provides a summary of the assessments for each of the three Key Strategic Sites. The assessments were undertaken following receipt of the initial draft of the Strategic Masterplan Study (2009) and prior to the LDP Working Group giving their recommendations on the choice of Key Strategic Site to go forward in the Deposit LDP.

The Strategic Masterplan Study (2009) identified development options for each site to assess the potential of the Pre-Deposit Preferred Strategy. The Preferred Strategy was to place all development at one of the Key Strategic Sites or a mixture of sites e.g either all in Rhyl or all in Bodelwyddan or part in Rhyl and Bodelwyddan, or Rhyl and St Asaph or Bodelwyddan and St Asaph.

The options for each site were:

Rhyl	Option 1	100 new homes and an estate road
	Option 2	1,200 new homes, 5ha of employment land, new link road and associated community facilities.
	Option 3	2,000 new homes, 20 ha of employment land, new link road and associated community facilities.
Bodelwyddan	Option 1	2,105 new homes, 26 ha of employment land, new link road and associated community facilities.
	Option 2	1,700 new homes, 26 ha of employment land, new link road and associated community facilities.
St Asaph	Option 1	70 ha of mixed use development with new link road and associate community facilities.

Key factors in considering the **Rhyl** site:

- Parts of the site subject to flood risk, limiting potential site layout;
- Some designated wildlife status and potential presence of protected species;
- Need for a spine road through the site, estimated cost £20.6 million. Spine road would require Regional Transport Grant assistance, scheme is not in the programme and there is no guarantee that an economic case for funding would be successful.
- Multiple land ownerships, some landowners opposed to scheme, compulsory purchase would be necessary.
- Considered better to concentrate on regeneration of existing sites within Rhyl, greater impetus and direction likely to be achieved through the Strategic Regeneration Initiative.
- Potential development of agricultural land of grades 2 and 3a.
- Potential disruption to significant number of public rights of way.

Key factors in considering the **Bodelwyddan** site:

- Development scale able to deliver a range of community facilities and benefits including, serviced employment land, improved open space, local retail and other off-site community improvements;
- Landowners support the potential development through submission of candidate site expressions;
- Preliminary investigations suggest that there is sufficient infrastructure capacity to serve the site (water, sewerage, energy);
- Site not within the flood plain;
- Potential impact on St Margaret's Church;
- No designated wildlife status, however potential presence of protected species;
- Potential development of agricultural land of grades 2 and 3a.
- Site is considered financially viable and deliverable;

Key factors in considering the **St Asaph** site:

- Site not considered suitable for residential use due to:
 - the amount of housing not being sufficient to support the development of even a small shop;
 - physically difficult to link the site with the existing settlement of St Asaph leading to car dependency for small trips;
 - landscape impact from the site being raised above the A55.
 - Capacity issues at sewage treatment works;
 - No designated wildlife status, however potential presence of protected species;
- Complex network of utility services within the site i.e. overhead power cables, sewers etc.
- Potential development of agricultural land of grades 2 and 3a

The broad conclusions of the Strategic Masterplan Study (2009) were that the site at Rhyl was not currently viable due to the need to provide a link road that could not be funded by the development. The site at St Asaph should be for employment use only as the amount of residential development would be insufficient to support any community facility making the community unsustainable. That the site at Bodelwyddan offered the best potential for delivery during the Plan period due to its strategic location alongside the A55, and that the site could be developed with less capital funding than the Rhyl site and with no need for public subsidy.

The Council has considered the value of agricultural land in line with National policy. The Rhyl site contains a significant parcel of grade 2 land and large swathes of 3a land totalling 124 hectares, these areas are also largely free from other constraints such as flood risk which would make the need to use them for built development more likely. The Bodelwyddan site contains areas of grade 3a (45 hectares) and 3b land. The equivalent amount of grade 2 land (45 hectares) could potentially be lost at Rhyl as grade 3a land at Bodelwyddan. In addition there are 80 hectares of grade 3a land at Rhyl that could be affected by development. It is recognised that the grade 3a land is still considered to be 'best and most versatile'. The grade 3a land lies in pockets and forms a much smaller area than on the Rhyl site. The Bodelwyddan site is also not subject to other constraints such as flood risk which may limit the developable area. It is considered that the impact on best and most versatile agricultural land would be less significant at Bodelwyddan (45 hectares) than at Rhyl (124 hectares) due to the amount of land involved and the relative amounts of grade 2 and 3a land.

Table 7.5: Summary of Key Strategic Site Assessments

SITE		SA Score			Scale of impact	Level of uncertainty	Comments
		So	Ec	En			
Bodelwyddan	Option 1	+/-	++/--	-/++	M/L-T	L	<p>Delivering Op1 & 2 would offer a variety of new house types to address the need of the local community. Positive health benefits by providing a service within the settlement, which currently does not exist.</p> <p>Developing the site would, in the L-T bring access to open countryside, cycle routes and woodland currently unavailable. Potential negative impacts on community cohesion.</p> <p>Site is currently used for agricultural cropping and grazing (greenfield). Development on Greenfield sites attracts a negative SA assessment score. However, economically the site is located within walking distance to a very successful St Asaph Business Park.</p> <p>Landscape impact cannot be avoided with development of the site, however mitigation could reduce the impact and retain views across from the Castles of Bodelwyddan and Rhuddlan and the Marble Church. Increase on the water resource and risk to pollution of water courses from the increase of impermeable surfaces. Potential increase of air pollution levels at already busy Junctions 25 & 27. The existing Greenfield site could grow energy crops for local use. However, the development site offers the best potential for renewable energy technology to link source and demand.</p>
	Option 2	++/-	++/--	-/++	M/L-T	L	
	Business as Usual	---/+	+/-	+/-	S-T	M	

Rhyl	Option 1	+/-	-	-	M-T	L	<p>High level of multi deprivation in Rhyl wards. Development of this site could offer specialist facilities to address specific health issues. The masterplanned approach to delivering Options 2 & 3 would bring the community onboard to shape the development and help create a sense of place and community cohesion in a town which struggles with crime figures.</p> <p>The Business as Usual and Option 1 would make no contribution to the economic prosperity of the town. Development of the Key Strategic Site would, however, further strengthen Rhyl's role as a regional centre. The site has a small percentage of Grade 2 agricultural land classification near the main access from the Sainsbury's roundabout.</p> <p>The Strategic Masterplan Study (2009) suggests the cost of the new link road surpasses any revenue from the sale of the residential development questioning the viability in the S-T</p> <p>Pressure from development and L-T recreation on the two existing Local Wildlife Sites and known populations of Great Crested Newts. No historic landscape designations but moderate visual and sensory (LANDMAP) classification due to the views out of the AONB. Option 2 & 3 would introduce significant increase on water and sewerage demand. The Strategic Masterplan Study (2009) highlighted that there treatment plant at Rhuddlan was at capacity and that waste from the proposed development would need to be pumped in new pipes across the river Clwyd to Kinmel Bay. This could have potentially significant environmental impacts. The most northern part of the site is liable to flooding.</p>
	Option 2	++/-	++/-	++/--	L-T	L	
	Option 3	++/-	++/-	++/--	L-T	L	
	Business as Usual	--	--/+	+/-0	M-T	M	

St Asaph	Option 1	-/+	+/-	-/+	L-T	L	<p>The findings of the Strategic Masterplan Study (2009) indicated that the level of housing proposed is insufficient to enable the development of dedicated community facilities such as a shop. The social aspects of Option 1 therefore scored negative. The Business as Usual equally scores negative as a mono-use employment development will provide very little community benefits.</p> <p>Neither option can improve the vitality and viability of St Asaph town centre.</p> <p>There are no major significant environmental impact that outweigh either options. Developing a larger amount of land (Option 1) could increase floodrisk and surface water run-off rates from the impenetrable surfaces which could create additional risks on the sensitive catchment area of St Asaph.</p>
	Business as Usual	--/+	--/0	++/-	M-T	L	

7.5 Conclusions and Recommendations

The conclusion to allocate Bodelyddan as the preferred Key Strategic Site was informed by both the findings of the SA which indicated that it performed well against the three aspects of sustainability and also the findings of other studies such as the Strategic Masterplan Study (2009), BE Group Employment Land Study (2004), and BE Group Major Mixed Development Areas Study (2007) which examined viability and deliverability of aspects such as housing and employment along with the ability to deliver infrastructure requirements. These assessments have informed the decision making process. It would be unrealistic to allocate a site that performed well against the SA framework but that was unviable and undeliverable and thus ultimately unsustainable.

The following recommendations are drawn from the SA assessment for the Bodelyddan options for further consideration at the masterplan stage.

Recommend 1: Consider the timing of the public transport improvements, installation of cycle to work routes and a local shop prior to the occupation of any residential dwellings as this could shape behaviour from the outset and help reduce car use for short trips.

Recommend 2: A study to consider the effect of development on the Welsh language and social community cohesion.

Recommend 3: Improved facilities for tourism at the Saint Margaret Church.

Recommend 4: Walking and cycling links between the existing village, new development and St Asaph Business Park to open up employment opportunities to those who don't have access to a car.

Recommend 5: Construction management strategy as part of the masterplan to restore or re-use the topsoil from the site.

Recommend 6: Undertake assessment of impact on SAC through the Habitats Regulation Act.

Recommend 7: Landscape impact study to mitigate the impact on the Historic Park at Bodelyddan Castle and the Marble Church.

Recommend 8: Tree planting across the site to reduce development impact on air quality

Recommend 9: Undertake Energy Strategy to get an understanding of the availability of energy source to help shape the most appropriate type of renewable energy technology.

Recommend 10: Waste management during site construction and life-time.

8. Compatibility of the Local Development Plan Vision and Objectives.

8.1 Introduction

The Denbighshire Local Development Plan Vision has been assessed against the SA Objectives. An assessment of the Vision was not undertaken for the initial SAR and this was an oversight. Comments received at the Pre-Deposit Consultation (member of the public (PDP 201) raised the need to consider the Welsh language and culture as part of the LDP Vision. This comment has been taken on board and the following assessment has been undertaken of the revised LDP Vision. The results of this assessment are presented in the following sections.

8.2 Recommendations from the Assessment.

The Vision has been assessed for its broad compatibility against the SA Objectives. The assessment identified that the Vision and SA Objectives were largely compatible. In terms of the assessment, the only area of uncertainty was how the Vision could address maintaining soil and air quality. It is considered that both topic considerations can be covered under the wording 'sustainable development'. The Denbighshire Local Development Plan Vision has been reviewed in line with comments received at the Pre-Deposit Consultation.

THE VISION for the LDP

Denbighshire by 2021

That Denbighshire, through sustainable development, will have a vibrant urban coast, with thriving market towns and rural areas. The housing and employment needs of the County will be met, the high quality environment protected and enhanced and a high quality of life maintained for all communities with full recognition that we have a strong Welsh language and culture that should be maintained and protected throughout the County.

8.3 Sustainability Recommendations.

The Vision commits to sustainable development first and foremost which positively fulfils many of the SA Objectives relating to public transport, walking and cycling; protecting the integrity of the international, national and locally designated nature conservation sites; protect and improve water quantity and quality; preventing development in flood risk; reduce the energy consumption and promote renewable energy; protect mineral resources and encourage best practice in waste management (SA Obj 5, 9, 11, 13, 14, 16, 17, 18).

The Vision's focus on maintaining a high quality of life for all communities positively fulfils the social SA Objectives namely; health, well-being, safe neighborhoods, fear of crime, access to services and enhanced recreation opportunities (SA Obj 1, 2, 3, 4). Now that reference is made to Welsh language the recognition that Denbighshire has a 'sense of place' and inclusive communities is addressed (SA Obj 6).

The County has a large number of small rural communities which largely depend on the market town for local supplies. Reference to thriving towns and rural areas connects

positively to the need to support economic development, regeneration and rural diversification opportunities (SA Obj 7, 8).

There is no clear link to the need to protect and improve air quality and safeguard soil quality and function (SA Obj 10, 15). However the term sustainable development is all encompassing and it is considered that the SA Objectives themselves will give rise to any potential conflict.

Landscape, biodiversity, heritage assets, nature processes, all environmental goods and services are linked with the term 'environment' and the Vision aims to protect and enhance the above aspects (SA Obj 6, 12).

The only recommendations would be that the Vision considers the delivery of the plan and the need to continually consider the long-term effects of a changing climate. Including the role of partnership working would emphasize that achieving the Vision is dependant upon the work of others and requires active involvement.

8.4 Compatibility of the SA Objectives and the LDP Objectives

In the initial SA Report, the draft LDP Objectives was tested against the SA Objectives to determine their compatibility. The recommendation from this assessment are summarised below. Following the receipt of the consultation responses the draft LDP Objectives were reviewed and a final set of LDP Objectives developed for inclusion in the Deposit version of the LDP.

Table 8.1 provides a compatibility matrix to identify to what extent the LDP objectives are compatible.

8.5 Sustainability recommendations from the Initial SA Report.

Potential conflicts were identified through the compatibility assessment matrix in the initial SA Report. However, some areas of uncertainty were noted, as it was unknown how the LDP Objectives would be translated into policies.

The following recommendations were highlighted as a precaution to the areas of potential conflict:

LDP Objective 1: The LDP should aim to meet projected housing needs in terms of total number, type and size of dwellings, including providing affordable housing. Potential conflict between the meeting projected needs and contributing to a reduction in greenhouse gas emissions.

LDP Objective 11: The LDP will ensure that Denbighshire makes a significant contribution to reducing greenhouse gases through both supporting the principle of large wind farm development within identified zones and other renewable energy technologies; and ensuring all new developments are built to minimise their carbon footprint. Potential conflict between addressing the need to rely less on unsustainable sources of energy and protecting the landscape quality, particularly the view into and out of the AONB and adjoining Snowdonia National Park.

LDP Objective 15: The LDP will seek to enhance and sustain tourism in the rural and coastal areas of the county. Potential conflict between the aim of enhancing and

sustaining tourism rural and coastal areas with the negative impacts such as reduced air quality because of congestion.

8.6 The Final LDP Objectives and the Results of the Assessment

The Final LDP Objectives presented in the Deposit LDP and the results of the compatibility assessment are presented in Table 8.1. An additional LDP Objective was added following the Pre-Deposit consultation comments from a statutory body. Please note the additional LDP Objective 16.

Whilst no significant conflicts were identified, some potential conflicts and areas of uncertainty were noted, as the effects of the LDP Objectives would depend upon the specific wording of policies used to implement them. However, as later stages of this report demonstrate, (Chapter 9), the wording of many of the policies is suitably stringent such that many of the areas of uncertainty, in reality would not exist. Furthermore, the suite of LDP Objectives is inter-related and should not really be read in isolation, as another LDP Objective could actually help to mitigate any risks posed by some of the other objectives in isolation.

8.7 Sustainability Recommendations.

The following recommendations were highlighted as a precaution to the areas of potential conflict:

LDP Objective 1 (SA Obj 9): Although use of brownfield land is a priority the amount of land available is limited which will result in the majority of new housing allocations in communities being sited on greenfield land. **Recommend:** Limiting development on greenfield land outside the existing development boundaries in areas with higher level of brownfield land.

LDP Objective 2 (SA Obj 9): Although use of brownfield land is a priority the amount of land available is limited which will result in the majority of new employment allocations in lower growth towns being sited on greenfield land. **Recommend:** Limiting development on greenfield land outside the existing development boundaries in areas with higher level of brownfield land.

LDP Objective 3 (SA Obj 12, 16): Having the flexibility of local employment opportunities could prove difficult when trying to maintain and enhance areas of high landscape quality (AONB) and in areas under threat from flooding.

LDP Objective 6 (SA Obj 6, 9, 14 & 15): There are three environmental issues regarding the main transport routes through the County. The A55 corridor is predominantly rural in nature and the north Wales coastal railway line runs through areas of high flood risk and thirdly the air quality impacts. Therefore, concentrating growth, in line with the north east Wales Spatial Plan, could potentially conflict with making use of brownfield land, outside of the flood risk area. A55 is also largely car dependant.

LDP Objective 15 (SA Obj 6): Developing this objective to promote tourism may lead to reduced air quality hotspots around the A55.

LDP Objective 16 (SA Obj 6): Developing a major site close to the A55 may lead to increased road traffic. **Recommend:** Ensuring adequate public transport service can be supplied.

LDP Objective 9 (SA Obj 10): Potential conflict between safeguarding an area for sand & gravel extraction to meet regional needs which could fall on high grade agricultural land. **Recommend:** When choosing sites or search areas consider avoiding the AONB, higher grade agricultural land and heritage assets.

LDP Objective 11 (SA Obj 12): Potential conflict between the value attached to landscape quality and the need to accommodate renewable energy technology. There is limited scope for visual mitigation on the subject of large scale wind farm developments. **Recommend:** Encouragement, where appropriate, of the County's natural resources (wood from Clocaenog Forest as biomass, flow of water in rivers and streams for hydro, solar technology) for small scale renewable energy generating schemes to serve local needs for energy.

LDP Objective 13 (SA Obj 13): This potential issue was raised at the Pre-Deposit stage of assessing the three Key Strategic Sites. **Recommend:** Further investigation will be required with the relevant water company to ensure the water quality and quantity is not compromised by the location of these mixed use sites.

SA Objectives	
1.	Ensure the housing needs of the community are met
2.	Promote community health and well-being
3.	Promote safer neighbourhoods and contribute to a reduction in the fear of crime
4.	Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment
5.	Improve accessibility to education, employment, health, homes and community services for all sectors of the community through modes of transport other than the private car
6.	Protect and enhance the Welsh Language and culture, including the County's heritage assets.
7.	Support County economic development and regeneration, including the provision of opportunities for rural diversification.
8.	Maintain and enhance the vitality and viability of town and rural centres
9.	Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes
10.	Safeguard soil quality and function and maintain long term productivity of agricultural land
11.	Protect and enhance all international, national and locally designated nature conservation sites, protected species and geo-diversity sites and avoid their damage or fragmentation. Protect, enhance and create appropriate wildlife habitats in urban and rural areas thus enhancing biodiversity
12.	Preserve and enhance landscape character across the County, particularly the AONB
13.	Protect and improve the water quantity and quality of inland and coastal waters
14.	Minimise the vulnerability to flooding and ensure new development does not increase flood risk
15.	Protect and improve air quality
16.	Contribute to a reduction in greenhouse gas emissions (especially CO ₂) by increasing energy conservation and efficiency in development and support increased provision and use of renewable energy
17.	Protect mineral resources from development that would preclude extraction
18.	Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency

LDP Objectives		SA/SEA Objectives																	
		Social						Economic				Environment							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	The LDP should aim to meet projected housing needs in terms of total number, type and size of dwellings, including providing affordable housing.	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	?	✓	✓	?	✓	✓
2	The LDP should ensure the County has economically viable (i.e. deliverable) and well planned strategic employment sites in the areas of greatest demand.		✓	✓		✓	✓	✓	✓	X	✓	✓	✓	?	✓	✓	?	✓	✓
3	The LDP should also allow sufficient flexibility to provide for local employment opportunities, particularly in rural areas.		✓	✓	✓	✓	✓	✓	✓	✓	✓	?	?	✓	✓	?	✓	✓	
4	The LDP will aim to re-establish Rhyl as one of the sub-region's most attractive shopping centres.		✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓			
5	The LDP will place great emphasis on integrating land uses (jobs, homes, transport nodes etc) with a view to reducing the need to travel.	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	?	✓	✓	✓		✓
6	The LDP will make the best use of the County's two existing key transport corridors – the A55 corridor and the North Wales Coast Railway Line.	✓	✓			✓	✓	✓	✓	X	✓	✓	?	?	✓	X	X		✓
7	The LDP will ensure that the impact of new development on the Welsh language and culture will be assessed in parts of the County where the language is widely used.	?	✓	✓	✓		✓	✓	✓			✓	✓						
8	The LDP will seek to protect existing public open space and ensure that new developments make an adequate contribution to public open space	✓	✓	✓	✓	✓				?	✓	✓	✓	✓	✓	✓	✓		
9	The LDP will seek to meet its local and regional mineral needs in the most sustainable manner.		✓		✓			✓	✓		X	?	✓	✓		?	✓	✓	✓
10	The LDP will ensure that Denbighshire has adequate land available for the development of waste facilities to meet the local authority's needs and contribute towards the needs of the region.		✓					✓	✓	✓	✓	✓	✓		?	✓	✓	✓	
11	The LDP will ensure that Denbighshire makes a significant contribution to reducing greenhouse gases through both supporting the principle of large wind farm development within identified zones and other renewable energy technologies; and ensuring all new developments are built to minimise their carbon footprint.		✓		✓	✓		✓	?	✓		✓	X	✓	✓	✓	✓	✓	✓
12	The LDP will ensure an adequate and planned level of physical and community infrastructure e.g. roads, community facilities, libraries, schools etc must be provided alongside new developments.	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
13	The LDP will ensure that mixed use development sites are brought forward in key locations, in order to ensure better delivery of infrastructure and to deliver well integrated communities.	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓		?	✓	✓	✓		✓
14	The LDP will ensure that new developments will exhibit a high standard of sustainable and good quality design.	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓		✓
15	The LDP will seek to enhance and sustain tourism in the rural and coastal areas of the county.		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
16	The LDP will seek to protect and enhance the natural heritage of the County including aspects such as landscape, biodiversity, geo-diversity, designated sites and protected species. Environmental services and goods will additionally be enhanced and developed.		✓		?	?	✓	✓		✓	✓	✓	✓	✓	✓	✓			✓
		✓	Broadly compatible			X	Potential conflict				Not relevant			?	Dependent on nature of implementation measures				

Table 8.1: Compatibility Matrix, LDP Objectives and SA Objectives.

9 Assessment of the LDP Policies

9.1 Introduction

The LDP consists of a series of spatial policies which reflect local character in order to guide the decision maker at a planning application stage. The LDP policies are divided into the following themes:

- Respecting Distinctiveness;
- Building Sustainable Communities;
- Promoting Sustainable Economy;
- Valuing our Environment;
- Achieving Sustainable Accessibility.

The themes relate to the Wales Spatial Plan (WSP) themes as the LDP must conform to the WSP in its strategy.

A number of 'Key Policies' were proposed at the Pre-Deposit consultation stage. These key policies have merged with the more detailed Deposit policies in order to make the LDP an easier and more comprehensive document to use.

Each of the individual policies has been assessed against the SA Objectives using the method described in Chapter 2.

9.2 Initial SA Review of the Spatial Policies

A limited number of comments were received on the initial Sustainability Report, these have been addressed and the relevant responses can be found in the Consultation Report that accompanies the main LDP document.

Initial drafts of policies, including the identification of the preferred Key Strategic Site (see Chapter 7), were developed in consultation with the Elected Members Working Group, Key Stakeholder Group and the Welsh Assembly Government. Prior to undertaking the review of the policies against each SA Objective in the matrix format (i.e. using the format defined in Chapter 2) the policies were given a preliminary review in March 2009. A number of potentially sustainability issues were identified. The main recommendations provided are outlined in Table 9.1 below.

Table 9.1: Key Sustainability Recommendations of the initial review (March 2009)

Policy	Recommendation
NEW Policy	Policy VOE 6 Obj 13 Recommendation: Suggest including a policy on Water Management in Deposit LDP.
Conversions	Policy PSE 4 Obj 12 Recommendation: Include reference to conversions making a positive contribution to the landscape.
HMO Policy	Policy BSC 7 Obj 1, 2, 3 Recommendation: that the policy be extended to cover small self contained flats which provide sub-standard living accommodation and contribute to lower levels of community health and well being and community safety.

Employment Land	Policy PSE 3 Obj 4,7 Recommendation: include protection of existing employment sites as well as new allocations in policy to safeguard existing sites within urban areas subject to pressure for change of use to residential.
Caravan and Chalet Sites	Policy PSE 12, Obj 12 Recommendation: include specific reference to proximity to the AONB to strengthen the policy.

9.3 Result of the Assessment of the LDP Policies

Following amendment of the initial draft LDP policies, and during scrutiny of the new policies by the Members Working Group, each policy was subject to a more detailed assessment against the SA Objectives using the methodology described in Chapter 5 of this SA Report. The detailed matrices are presented in Appendix 4 and summarised in Section 9.6 – 9.10 below.

9.4 The ‘Business as Usual’ Assessment

The Business as Usual scenario has been assessed and placed here, prior to presenting the results of the policy assessments, as it provides a benchmark against which the performance of the LDP can be compared. The ‘Business as Usual’ assessment assumes a continuation of the existing Denbighshire Unitary Development Plan (UDP) (1996-2002).

The continuation of the UDP would see international and national level policy being implemented. However there would be no opportunity for local enhancement of the policies. There is a danger that as time progresses the UDP may become increasingly out of step with National policy as this develops and changes.

The UDP policy of incremental growth spread across the County is also unlikely to address housing needs in those areas of greatest demand i.e. the coast and A55 corridor. Smaller single use sites are unlikely to deliver serviced employment sites and other community benefits that are needed. The levels of growth in the UDP are also likely to further contribute to the historical under supply of housing which is likely to lead to ever increasing need for affordable housing as house prices rise due to limited supply.

Throughout the life of the UDP the policies on water quality and quantity have been given greater priority through the Water Framework Directive (EU). It is considered that the current UDP policies are insufficient in their reference to the need to meet the aim of this objective. The same applies to flood risk. The UDP has green field employment land allocations in areas of flood risk contrary to new national guidance which came into force in 2004 (TAN 15).

A key environment area which weakens the favouring of the Business as Usual scenario is related to energy efficiency of buildings and their sustainable design. This may have negative impacts on the environment through carbon emissions, contributing to climate change. Issues like adaptation to climate change would not be addressed and there could be localised deterioration in the connectivity of biodiversity resources.

The UDP policy on affordable housing was and is still successfully securing homes to satisfy need. However, the definition of and presumption against development in

rural areas (everywhere outside designated towns and villages) is deemed to be too restrictive and inflexible. Not addressing the local housing needs of the more rural communities (small cluster settlements) has led to further frustration, adverse community spirit and cohesion issues.

The UDP is not providing sufficient housing opportunities to encourage and enable many young people to remain within their local rural communities. This indirectly may link to the decline of Welsh culture and use of the Welsh language.

The current UDP policy on the provision of open space in new developments places rural areas at a disadvantage. The UDP policy stipulates that contributions would only be sought where 10 dwellings or more are proposed, which is unlikely in rural areas as most developments are smaller in scale. Inadequate provision of recreation and open space could lead to increased pressure on the natural environment leading to over exposure of sensitive habitats. This is predicted to occur in the long term.

The UDP has been successful in delivering employment opportunities in areas of high demand, such as St Asaph Business Park and Lon Parcwr, Ruthin. Without further allocation of land there is likely to be a long term decline in business start up rates and investment opportunities. The UDP however, has not been successful in delivering serviced employment land in areas of low market demand. To deliver this would ease local and/or other private investment in areas of greatest need, namely rural areas. Most rural employment allocations in the UDP remain green field sites and are not addressing the need to reduce reliance on the private car as a means of travel to work further a field.

Limiting land availability for development, as is reflected in the now latter years of the UDP, would result in development not having had the benefit of a plan-lead approach and the scrutiny of alternative sites. In the long term the cumulative effects of the above impacts could potentially result in deterioration in quality of life and health and well-being for residents in the County and cross border.

9.5 Policies of the Local Development Plan Strategy

Tables 9.3 – 9.7 overleaf present the results of the policy assessments for each of the Deposit draft policies of the LDP. Table 9.2, below presents the key used for the summary tables only. It should be noted that these tables are intended as a summary only of each of the policy themes. For further details about whether effects are likely to occur in the short, medium or long-term, please refer to Appendix 4.

Following the tables, a summary of the key strengths, weaknesses and further recommendations is included.

Table 9.2. Notation used in the Summary Tables.

Impact	Description	Symbol
Greatly positive	This policy contributes greatly to the achievement of the objective	+
Slightly positive	This policy contributes slightly to the achievement of the objective	+
No link	There is no clear link between the policy and the SA Objective	0
Slightly negative	This policy contributes slightly to the achievement of the objective	-

Greatly negative	This policy contributes slightly to the achievement of the objective	-
Positive and Negative	This policy has a combination of effects on the SA Objective	+/-
Uncertain impacts	It is not possible to determine the impacts, depending on implementation	?

9.6 Summary of the Respecting Distinctiveness Theme

Table 9.3 presents the results of the policy assessments

Key Strengths

RD 1 – Sustainable and good standard design. This is a vitally important policy from a local environmental protection perspective and is one that will be used in cross reference in a number of development decisions. It essentially establishes, through a series of clauses a criteria that will have to be fulfilled before any development will be permitted in the County. This policy is likely to have a positive effect on local social impacts; by indirectly improving access to recreation/open space/natural environment through design considerations; and, designing local highway network improvements.

RD 2 – Green barriers. This policy is also important from an environmental protection perspective. The safeguarding of greenfield land between settlements under pressure has health and well-being benefits to residents who will enjoy formal and informal access to the green space for dog walking, football etc. In addition the land acts are a biodiversity corridor to the urban core. There are benefits to historical character of settlements by not allowing integration.

RD 3 – Extensions, alterations and replacement of existing dwellings. Key words within this policy reflect the importance of considering the visual amenity of a development proposal. This protects local landscape quality and features of distinctiveness. There will also be consideration of the historic landscape.

RD 4 – Welsh language and social and cultural fabric of communities. This policy directly addresses the aim of the SA Objective and is a key policy within the theme. The policy will make positive contributions towards cultural and heritage assets which indirectly are likely to contribute to the well-being of communities. There are economic advantages to be had, in the form of tourism, from a wealth of local history.

Key Weaknesses

RD 2 – Green barriers. This policy restricts the organic growth of settlements which in historic times would have been allowed as economic prosperity brought people into the area for work.

RD 3 – Extensions, alterations and replacement of existing dwellings. Recommendations are made to strengthen the biodiversity considerations within design.

Recommendations –

RD 1 – SA OBJ 3 Recommendation: *Insert additional criteria to ensure development directly considers how it can make a positive contribution to meeting this objective.*

RD 1 – SA OBJ 6 Recommend: *that reference is made to enhancing the historic environment.*

RD 3 – SA OBJ 6 Recommendation: *to consider the historical importance of a dwelling prior to its demolition.*

RD 3 – SA OBJ 11 Recommendation: *that the policy justification makes links between this policy and Policy RD 1, which covers biodiversity within design.*

9.7 Summary of the Building Sustainable Communities Theme

Table 9.4 presents the results of the policy assessments

Key Strengths

The social perspective is a critical part of the LDP. The Community Strategy and County Vision 2025 identify a range of social aims to achieve, the majority of which have land use connotations. Policies BSC 1, 3, 4 and 5 make positive contributions to addressing SA Objective 1 ensuring the housing needs of communities are addressed. Having insufficient quality and affordable housing to meet the needs of the population would strain well-being within the County and regionally. This has links with making direct improvements to accessible health care facilities by locating new development near existing settlements and securing developer funding to help deliver key facilities.

A holistic plan-led approach to concentrating development can bring far more opportunities for positive delivery of the SA Objectives.

Key Weaknesses

Balance has to be weighed between the environmental effects of the green field land take associated with new development in Denbighshire and the need to meet demand for housing. It is highlighted through the Plan that the County has limited resources of brownfield or previously developed land. It is therefore inevitable that growth will involve the take up of greenfield land. This puts strain on environmental resources such as air and water quality, the release of CO₂ from soil and building use and the flood risk issues associated with run-off. The assessment of BSC 5 (KKS – Bodelwyddan) identifies the loss of 100ha of arable agricultural land of grade 3b. It is however considered that that need to make housing and employment land provision to meet the needs of the community outweighs the loss of this agricultural land.

A number of policies scored slightly negative on SA OBJ 13 (water quality and quantity). The comments note that a number of rural communities do not have the benefit of a sewerage network. It may be considered unwise to make major allocations in settlements which could lead to a potential negative environmental impact such as pollution of a water course.

Policy *BSC 10 - Gypsy and Traveller Sites* the effects on the environment are not explicitly addressed in the policy and hence there is potential for negative effects when a site is identified. An environmental effect of particular concern would be water quality.

Recommendations

Policy BSC 1 – SA OBJ 6 Recommendation: *ensure that the Welsh language and culture policy requires impact assessments.*

Policy BSC 1 – SA OBJ 11 Recommendation: *General design policy to include reference to respecting and enhancing natural environment. All levels of nature conservation sites to be considered in site assessment criteria.*

Policy BSC 1 – SA OBJ 12 Recommendation: *site selection criteria to include landscape in general and the AONB in particular as a constraint which should prevent inappropriate sites being selected.*

Policy BSC 1 – SA OBJ 14 Recommendation: *Existing green field allocations within the C1 flood plain should be de-allocated ie Cefndy, Rhyl employment site.*

Policy BSC 1 – SA OBJ 16 Recommendation: *Ensure that the principles of renewable energy are written into the development brief for the Bodelwyddan Key Strategic Site.*

Policy BSC 1 – SA OBJ 17 Recommendation: delete any sites within mineral reserve or buffer zones.

Policy BSC 1 – SA OBJ 18 Recommendation: include policies identifying sites and establishing criteria for waste management facilities.

Policy BSC 2 – SA OBJ 12 Recommendation: Reference to biodiversity consideration should be made in the justification for this policy.

Policy BSC 2 – SA OBJ 14 Recommendation: Reference to flood risk consideration should be made in the justification for this policy.

Policy BSC 3 – SA OBJ 1 Recommendation: link policy justification to the County Council list of priority as they reflect current issues rather than trying to list all potential contributions..

Policy BSC 5 – SA OBJ 6 Recommendation: study to be carried out to consider how best to mitigate any negative impact on the Welsh language use of the community. Improvements to parking at Marble Church and traffic through the conservation area need to be considered but opportunity for positive improvements.

Policy BSC 5 – SA OBJ 10 Recommendation: Construction management is considered when developing the site to restore and re-use topsoil.

Policy BSC 5 – SA OBJ 11 Recommendation: Further investigation into the environmental diversity of the site.

Policy BSC 5 – SA OBJ 14 Recommendation: Maintain green field land run-off rate from site. Highlight the need to use SUDs or similar in the design.

Policy BSC 5 – SA OBJ 15 Recommendation: Public transport arrangements should be secured for the development. Tree and vegetation planting helps to refresh and cool the air and removes dust and metal particles.

Policy BSC 5 – SA OBJ 18 Recommendation: Assessment is undertaken of the potential waste reduction, re-use, recycling and recovery from development.

Consider avoiding allocating land where there may be negative environmental issues that arise from the lack of public sewer or sewerage capacity issues, especially so if there is a nearby water course.

Table 9.4 – Summary Assessment Results for Building Sustainable Communities.

SA Objectives	
1.	Ensure the housing needs of the community are met
2.	Promote community health and well-being
3.	Promote safer neighbourhoods and contribute to a reduction in the fear of crime
4.	Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment
5.	Improve accessibility to education, employment, health, homes and community services for all sectors of the community through modes of transport other than the private car
6.	Protect and enhance the Welsh Language and culture, including the County's heritage assets.
7.	Support County economic development and regeneration, including the provision of opportunities for rural diversification.
8.	Maintain and enhance the vitality and viability of town and rural centres
9.	Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes
10.	Safeguard soil quality and function and maintain long term productivity of agricultural land
11.	Protect and enhance all international, national and locally designated nature conservation sites, protected species and geo-diversity sites and avoid their damage or fragmentation. Protect, enhance and create appropriate wildlife habitats in urban and rural areas thus enhancing biodiversity
12.	Preserve and enhance landscape character across the County, particularly the AONB
13.	Protect and improve the water quantity and quality of inland and coastal waters
14.	Minimise the vulnerability to flooding and ensure new development does not increase flood risk
15.	Protect and improve air quality
16.	Contribute to a reduction in greenhouse gas emissions (especially CO ₂) by increasing energy conservation and efficiency in development and support increased provision and use of renewable energy
17.	Protect mineral resources from development that would preclude extraction
18.	Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency

LDP Policies	SA Objectives																	
	SOCIAL						ECONOMIC				ENVIRONMENTAL							
Theme: Building Sustainable Communities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
BSC 1 – Growth Strategy for Denbighshire.	+	+/-	+	+	+	+/-	+	+	+/-	-	-	-	+/-	+/-	+	+/-	+	+/-
BSC 2 – Brownfield development priority.	+/-	+	+	0	+	0	-	+	+	+	+/-	0	0	+/-	0	0	0	0
BSC 3 – Securing infrastructure in new development.	+	+	+	+	+	0	+	0	0	+	0	0	+	+	+	+	0	0
BSC 4 – Affordable Housing.	+	+	+	+	+	+/-	+	+	0	-	+/-	+/-	0	0	0	+	0	0
BSC 5 – Key Strategic Site – Bodelwyddan.	+	-/+	+	+	+	-/+ ?	+	+	-	-	-/+	-/+	-/+	-/+	-/+	+	+	+/-
BSC 6 – Local connections affordable housing in hamlets.	+	+	+	+	-/+	+	+	+	0	-	-/+	-	0	0	0	0	0	0
BSC 7 – Houses in Multiple Occupation & Self Contained Flats.	+	+	+	0	0	+	+	+	+	0	0	0	0	0	0	+	0	0
BSC 8 – Rural exception sites.	+	+	+	+	-/+	+	+	+	0	-	-/+	-	0	0	0	0	0	0
BSC 9 – Local connections affordable housing within small groups.	+	0	+	0	0	+	0	0	0	-	-/+	?	0	-	+	+	?	-
BSC 10 – Gypsy & Traveller sites.	+	+	?	+/-	+	0	0	?	+	?	?	+	0	0	0	?	0	0
BSC 11 – Recreation and Open Space.	0	+	+	+	+	0	0	0	0	0	+	+	0	+	+	+	0	0
BSC 12 – Community Facilities.	0	+	+	+	+	+	0	+	0	0	0	+/-	-	-	+	0	0	0

9.8 Summary of the Promoting Sustainable Economy Theme

Table 9.5 presents the results of the policy assessments

Key Strengths

The rural economy presents a number of opportunities and also potential impacts. *PSE 5: Rural economy* is a policy change from the UDP and is now more favourable to new build in the open countryside to support rural diversification. This, however, weakens the environmental credential of the policy as new build development could lead to impacts such as; wildlife fragmentation; light and noise pollution; water management issues; increased traffic and/or landscape impact. Conversely, agricultural diversification may lead to a reduction in the intensity of certain agricultural practices which can benefit the environment and improve income to landholders. Each application will need to be considered on a case-by-case basis.

Providing access to appropriate retail facilities is important to the cohesion of sustainable communities (well-being and reduced fear of crime). Furthermore, ensuring that residents have access to basic retail facilities can help reduce travel distances and frequency which in turn can have environmental benefits. It is also likely to provide employment opportunities.

Whilst tourism and recreation development in Denbighshire generates significant revenue to the local economy, it is essential that increasing the provision recreational pursuits and accommodation does not adversely affect the character and landscape quality of the County. Policy *PSE 12: Chalet, static and touring caravans and camping sites* has been strengthened and states that no new static or chalet development will be permitted; this will help protect landscape character. The focus of the policy is now on touring sites and camp sites.

Key weaknesses

A weakness of policy *PSE 12: Chalet, static and touring caravans and camping sites* is that insufficient consideration is given to the impacts on the AONB.

Prior to new tourism and recreational development being granted in the coastal tourism zone it would be of benefit to the local distinctiveness of the area if the cultural fabric of the coast and the historical context of the towns are considered. This relates to policies *PSE 11 and 13*.

A particular weakness to policy *PSE 5: Rural Economy* and *PSE 14: Outdoor activity tourism* is the potential threat to soil resources as a result of a granting of permission for change of use or the implementation of this policy. The Best and most versatile soils are valuable in their own right performing a range of functions and supporting a range of ecosystems. The cumulative loss of valuable soil resources is not sustainable.

Policy PSE 17: Future Mineral Extraction provides local resource, local employment and income. It also provides local building material for the benefits of respecting distinctness. However, the small scale working it permits could potentially lead to localised landscape and visual impacts and could adversely affect tranquillity. There could also be land-take, disturbance, fragmentation and disruption to soil ecosystems.

Recommendations

Policy PSE 1 – SA OBJ 6 Recommendation: Policy or policy justification to reference the aims of RD 4.

Policy PSE 1 – SA OBJ 11 Recommendation: Policy or policy justification to reference the aims of VOE 5.

Policy PSE 1 – SA OBJ 13 Recommendation: Policy or policy justification to reference the aims of VOE 6.

Policy PSE 1 – SA OBJ 14 Recommendation: Policy or policy justification to reference the aims of VOE 1 & VOE 6.

Policy PSE 2 – SA OBJ 2 & 7 Recommendation: that phasing of the Key Strategic site at Bodelwyddan is included in the site development brief.

Policy PSE 2 – SA OBJ 5 Recommendation: There is a need to ensure that public transport links as well as walking and cycling routes are improved to link the major employment allocations along the A55 corridor to the coastal areas and the south of the County.

Policy PSE 2 – SA OBJ 11 Recommendation: General design policy to include reference to respecting and enhancing natural environment.

All levels of nature conservation sites to be considered in site assessment criteria.

Policy PSE 2 – SA OBJ 12 Recommendation: site selection criteria to include landscape in general and the AONB in particular as a constraint which should prevent inappropriate sites being selected.

Policy PSE 2 – SA OBJ 13 Recommendation: include a policy on Water Management to require water conservation measures and statements.

Policy PSE 2 – SA OBJ 14 Recommendation: Existing green field allocations within the C1 flood plain should be de-allocated at the Deposit stage ie Cefndy, Rhyl employment site.

Policy PSE 2 – SA OBJ 16 Recommendation: include a policy encouraging use of renewable energy technologies.

Policy PSE 3 – SA OBJ 5 Recommendation: There is a need to ensure that public transport links as well as walking and cycling routes are improved to link the existing employment allocations along the A55 corridor to the coastal areas and the south of the County.

Policy PSE 3 – SA OBJ 12 Recommendation: site selection criteria to include landscape in general and the AONB in particular as a constraint which should prevent inappropriate sites being selected.

Policy PSE 3 – SA OBJ 16 Recommendation: make reference in the policy justification to renewable energy policy, encouraging new buildings to make use of renewable energy technologies.

Policy PSE 4 – SA OBJ 9 Recommendation: Caveat to be attached to the policy seeking buildings to be in a sustainable location in terms of travelling to work and services by sustainable transport modes.

Policy PSE 4 – SA OBJ 11 Recommendation: That a caveat is attached to the policy or justification wording which highlight the need to consider Policy VOE 5.

Policy PSE 5 – SA OBJ 4 Recommendation: also include reference to AOB in policy to reflect the landscape quality of the area and aspiration for inclusion within extended AONB. Also include reference to Pontcysyllte WHS and buffer zone

Policy PSE 5 – SA OBJ 5 Recommendation: ensure policy contains criteria relating to the need to sustain local economy and communities.

Policy PSE 5 – SA OBJ 9 Recommendation: policy should state that conversion and re-use of rural buildings must be considered before any new build is allowed to ensure use of PDL is maximised.

Policy PSE 5 – SA OBJ 16 Recommendation: LDP should include policies to encourage a reduction in greenhouse gas emissions through improved energy

efficiency, seeking new development to provide a proportion of energy requirements from renewable sources and through encouraging alternatives to the car.

Policy PSE 6, 7 & 8 – SA OBJ 14 Recommend: *Consider the findings of the SFCA*

Policy PSE 9 - SA OBJ 14 Recommend: *Flood Consequence Assessment is undertaken as set out in the TAN 15 guidance.*

Policy PSE 11 – SA OBJ 16 Recommendation: *LDP deposit policies should encourage a reduction in greenhouse gas emissions through improved energy efficiency, seeking new development to provide a proportion of energy requirements from renewable sources and through encouraging alternatives to the car.*

Policy PSE 12 – SA OBJ 12 Recommendation: *that the policy makes specific reference to the AONB in terms of potential landscape impacts as a major consideration.*

Policy PSE 13 – SA OBJ 6 Recommend: *Policy or policy justification to reference the aims of RD 4.*

Policy PSE 17 – SA OBJ 2 Recommend *that the policy gives a clear indication as to the type of mineral likely to be extracted over the plan period, in addition to existing quarries.*

Policy PSE 17 – SA OBJ 2 Recommendation: *that the area for sand and gravel extraction is reduced (initial proposals included 2 areas of search) in order to reduce uncertainty for local communities and increase certainty for the industry concerned.*

Policy PSE 17 - SA OBJ 6 Recommendation: *that an ASIDOHL¹ assessment is undertaken, should one be required as part of a planning application.*

Policy PSE 17 – SA OBJ 10 Recommendation: *In order to reduce the impact of mineral extraction on soil quality, recommend that the preferred area for mineral extraction is identified on lower grade agricultural land. It is considered possible to restore land to grade 3; however, it is questionable whether land can be restored to grade 1 or 2 without significant investment. Therefore, mineral extraction should be directed towards grade 3 or lower. Mineral extraction should also not be permitted in the flood plain to ensure that water bodies are not created, and therefore agricultural land lost.*

Policy PSE 17 – SA OBJ 11 Recommendation: *The methodology to determine the preferred area of search for mineral extraction has avoided areas that are designated for their nature conservation value.*

Policy PSE 17 – SA OBJ 12 Recommendation: *Supplementary Guidance Notes state that an appropriate after use is identified for the site to ensure that landscape impacts are temporary.*

Policy PSE 17 – SA OBJ 13 Recommendation: *Supplementary Guidance Notes states that sand and gravel extraction is directed away from water bodies to reduce any potential impacts on water quality and water quantity.*

Policy PSE 17 – SA OBJ 15 Recommendation: *Supplementary Guidance Notes states that in order to reduce the impacts on air qualities recommend a requirement to measures to reduce the impact of dust, smoke and fumes to be implemented.*

¹ ASIDOHL – Assessment of the Significant Impact of Development on the Historical Landscape

9.9 Summary of Valuing our Environment Theme

Table 9.6 presents the results of the policy assessments

Key Strengths

The recent listing of the World Heritage Site near Llangollen requires partnership working between the Local Authorities of Denbighshire, Wrexham and Oswestry. This policy has been written in conjunction with the partnership. Policy *VOE 3: Pontcysyllte Aqueduct World Heritage Site* strengthens the protection of the area and development proposals will have to further consider the enhancement of such a culturally important heritage asset.

Additionally, Policy *VOE 4: Enabling development* is a new method of resolving the status of heritage assets 'at risk'. It is a valuable tool with the aim of enhancing and securing the future of the County's heritage assets (SA OBJ 6).

Policy *VOE 7: Locations for waste management*, and *VOE 8: Waste management outside development boundaries* permits such developments providing that there are no adverse environmental impacts. The policies, therefore, perform well against the SA Objectives addressing environmental issues and also against the *SA Objective 18: Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency*.

Locations for waste management facilities have been selected using the site assessment criteria (see Chapter 10) with the majority proposed are on brownfield land. Links are also made between policy *VOE 7* and *RD 1: Sustainable and good standard design* as some local waste recycling plants have in the past been attracting antisocial behaviour.

Policies *VOE 9, 10 & 11* relate to wind turbine and wind farm developments as a source of renewable energy. National guidance contained in TAN 8 has identified Clocaenog Forest (owned and managed by the WAG and Forestry Commission) as a Strategic Search Area for large wind farms. Each policy makes specific reference to considering the environmental management and enhancement of habitats near proposals.

Policy *VOE 12: Renewable energy* makes a clear commitment to maximising the use of renewable energy sources in the County where appropriate. There are a few uncertainties with this policy because of the general nature of a criteria based policy, however all development proposal would have to address any negative impacts at the time of application. There are significantly positive benefits when evaluating energy from waste.

Key Weaknesses

Policy *VOE 1: Key areas of protection* offers the 'safeguarding' of topics listed but not 'improvements or enhancements' this is considered a weakness of the policy. In addition, the policy does not specify what *inappropriate* means and when a decision is sought how much weight will be attached to environmental issues over social issues, such as providing affordable housing.

Similarly, to policy *VOE 1* policy *VOE 2: Area of Outstanding Natural Beauty and Area of Outstanding Beauty* has potential areas of conflict when it comes to decision making. The potential conflict would be between maintaining the character and appearance of the landscape and promoting rural diversification, tourism economy and renewable energy technology, particularly community based wind turbines.

There is a degree of uncertainty surrounding policy VOE 9 as the TAN 8 renewable energy targets only go to year 2010 (next year) and the Wales Energy Route Map (2008) suggested that the targets are only likely to increase. In addition the three wind turbine policies (VOE 9, 10 and 11) have been assessed as negative with regard to landscape impact (view into and out of the AONB and Snowdonia National Park) and quality of recreational enjoyment of the countryside.

Recommendations

Policy VOE 5 – SA OBJ 6 Recommendation: *that the policy not only protects but enhances and restores as a means of adapting and mitigating climate change.*

Policy VOE 5 – SA OBJ 7 Recommendation: *That the Supplementary Planning Guidance provides examples of adaptation and mitigation.*

Policy VOE 5 – SA OBJ 9 Recommendation: *That the SPG provides examples of mitigation.*

Policy VOE 6 – SA OBJ 9 Recommendation: *Water Management Statement rather than Conservation Statement.*

Policy VOE 9, 10, 11 – SA OBJ 2 Recommendation: *In order to reduce any potential health impacts on the residents of local communities it is recommended that developers submit a health impact assessment.*

9.10 Summary of Achieving Sustainable Accessibility Theme

Table 9.7 presents the results of the policy assessments

Key Strengths

Any attempts to get people away from using their private cars for taking short trips or for leisure purposes is a step ahead to tackle rising CO₂ emissions and promoting healthy lifestyles. All three policies score positively on objectives such as SA Obj 3 (health and well-being), SA Obj 16 (reducing CO₂) and SA Obj 15 (air quality).

The strengths of policy *ASA 1: New Transport Infrastructure* is that it promotes equality. Creating new transport infrastructure, justified through the Regional Transport Plan or other social/economic need, will positively improve communities' access to goods and services (education, health, training and skills, clubs, wildlife and recreation). An additional strength within this policy is that cultural heritage assets and the environment are sighted. This is considered a weakness in policy *ASA 3: Parking Standards*.

Key Weaknesses

Policy *ASA 1: New Transport Infrastructure* is considered weak because it only 'supports' the promotion of new sustainable transport routes. 'Actively' promoting new sustainable transport routes, particularly walking and cycling, would strengthen the policy especially as the County has limited off road cycling routes.

Policy *ASA 2: Provision of sustainable transport facilities*. There is a potential conflict between this policy and the biodiversity SA objective. Without full scrutiny of impacts some scheme proposals could indirectly lead to easier access being made to some of Denbighshire's most sensitive landscape/habitats.

In addition, any new road or public transport scheme needs to consider, at the outset, the local surface run-off flow and flood risk as an embankment or raised surface would act as a barrier to natural land drainage. It is recommended that this weakness is overcome by linking policies ASA with *RD 1: Sustainable and good standard design*.

Policy *ASA 3: Parking Standards*. Open space in the urban environment, particularly car parks, attract crime related behaviour. Leaving valuables in cars is often the reason. There is also the fear of crime in and around open spaces or areas with poor natural surveillance. Recommend that the policy is strengthened by inserting additional criteria of siting new car parks in populated areas.

Recommendations

Policy ASA 2 - SA OBJ 13 Recommendation: *Secure contributions to the "provision and maintenance of infrastructure".*

Policy ASA 3 - SA OBJ 3, SA OBJ 4 and SA OBJ 8 Recommendation: *A criteria is added to guide any necessary parking areas to populated area.*

10. Assessment of the LDP Housing and Employment Allocations.

10.1 Introduction

The LDP includes housing and employment land allocations in the majority of settlements. The LDP Manual states “*the SA report should cover a strategic assessment of sites on any site register identifying where feasible those that perform well against the SA Framework....*” (Section 6.5, p. 72 of the LDP Manual).

The SA Report, therefore, includes the methodology used to review the site allocations for the housing and employment.

10.2 Key Strategic Site

Details of the strategic options which lead to the inclusion of Strategic Sites in the Pre-Deposit LDP document is found in the initial SA Report. Chapter 7 (Strategic Options) of this SA Report further reviewed the assessments of Key Strategic Site options (Rhyl, Bodelwyddan, St Asaph) in preparation for the LDP Working Group meetings to decide the content of the Deposit LDP. As a result of the SA assessments and the finding on deliverability of a Strategic Masterplan Study (2009) the site at Bodelwyddan was allocated in the Deposit LDP.

The early options for a Strategic Site were guided in part by the content of a spatial study on the principle of Major Mixed Development in 2005/2007. Due to the scale and nature of the sites the study consultants reviewed planning constraints (which include an array of environmental and physical development constraints) prior to seeking informal preliminary discussion with landholders regarding deliverability.

10.3 LDP Allocations

The LDP Strategy sets out the broad approach taken to address the County’s development needs in a sustainable manner. The spatial strategy for the Plan sets out how development will be focused into small number of large sites in the north of the County (Key Strategic Site), with smaller scale new development being supported in other County settlements which have the capacity to increase. The settlements strategy therefore, sets out how the existing settlement hierarchy places the settlements into a five tier classification system for growth distribution.

Tier 1: Key Strategic Site – Bodelwyddan (see section 9.2 and Chapter 6)

Tier 2: Lower Growth Towns – Rhyl, Prestatyn, St Asaph, Denbigh, Ruthin and Corwen. These towns function as regional and/or local centres. Allocations identified.

Tier 3: Villages. Development in the 33 villages will primarily meet local needs for homes and employment. Allocations identified.

Tier 4: Hamlets: 26 hamlets defined as having a community facility will accommodate houses to meet local needs. Areas of search are shown of proposals map.

Tier 5: Open Countryside. All other areas where development will be strictly controlled.

A number of sites have been allocated in settlements within the County for a combination of open market and affordable housing for local needs and employment land in towns; open market and affordable housing for local needs in villages; and affordable housing for local needs search areas in hamlets. A quota for development is set for hamlets. Details about the locations of these sites can be found in the Proposals Maps for the Deposit Local Development Plan.

Each of the housing and employment allocation sites has been subject to a high-level review of their performance against a Site Assessment Criteria to identify any potential sustainability issues. Details of the Criteria can be found below.

10.4 Site Assessment Criteria

The total number of Candidate Sites submitted to the LDP team between 2005 and 2009 is in the region of 530. A 'Site Assessment Criteria' was drawn up to reflect the planning constraints and the SA Objectives. This 'Criteria' has been assessed for compatibility with the SA Objectives. Table 10.1 can be viewed overleaf.

Key recommendations arising from the Site Assessment Criteria compatibility were:

- Avoid development in the World Heritage Site which could reduce the sustainability of the area. Sensitive development, on a case by case basis may be acceptable.
- Living in an area of flood risk can have a negative impact on your health and well-being. Avoid developing in areas of flood risk. Consider the need to undertake a Flood Consequences Assessment. Ask if the site is within the Strategic Flood Consequence Assessment.
- Proximity to services and choice of means of transport is essential for community health and well-being.
- Avoid development in the AONB/AOB will have a positive (+) impact on protecting the physical built environment but a negative (–) impact on social/economic aspects.
- Avoid development on Best and Most Versatile (BMV) Land will have a positive (+) impact on safeguarding soil quality and function.
- Consider the Cultural and Heritage Assets (proximity to L.B's CA's, SAM's, Historic Landscape).
- Consider the existing water supply for hamlets and the capacity of sewerage network. This is done in consultation with the water suppliers in the area (mainly Dŵr Cymru/Welsh Water and Dee Valley Waters) and the updated AMP (Asset Management Plans).
- Assessment of the site topography considers the potential orientation of homes for maximum benefits in sustainable design terms.
- Considering the accessibility of 'a' development proposal in the rural areas could score as negative on SA Obj 16 "achieving energy efficiency/quality design" because of the limited bus service to hamlets and villages.

In addition to the scrutiny of sites through the Criteria a 'Village Exercise' study was undertaken in order to reflect local community aspirations. Letters and maps were sent to each Town & Community Council outlining the site constraints for every candidate site surrounding the village/hamlet. The LDP Team then asked each local community to score their preference for a site and an approximate figure for growth (this usually reflected the local rural affordable housing requirement).

The Candidate Site Assessment Report can be viewed as an Appendix to the main Deposit Local Development Plan.

10.5 Generic Site Mitigation Measures

The following generic mitigation measures should be taken into consideration when all the allocated sites are brought forward for development. These issues were raised from reading the Deposit LDP Candidate Site Assessment Report.

Mitigation	How is this issue dealt with in the Deposit LDP?
Encourage use of Sustainable Drainage Systems (SuDS) to mitigate surface run-off.	Policy RD 1: <i>Sustainable and good standard design</i> , criteria xi provides a link to the promotion of SuDS as a preferred alternative to conventional drainage. Policy VOE 6: <i>Water Management</i> is applicable to all development.
Undertake a Flood Consequence Assessment (FCA) for any sites that are being brought forward for development in a floodplain.	Proposed hamlet status for Lliidiart y Parc, near Carrog in the Dee Valley. Local opinion is to address the affordable housing need in the settlement. However, there are no sites outside of the TAN 15 C2 floodrisk zone which adjoins the existing hamlet cluster. Consider undertaking FCA to support the community wishes and review hamlet status following result.
Encourage sensitive design with respect to the built environment (townscape), character and distinctiveness and the historic landscape.	Policy RD1: <i>Sustainable and good standard design</i> , criterias i-iv provides adequate consideration to respect the built environment and historic landscape. Policy VOE 1: <i>Key areas of protection</i> diverts inappropriate sites from being selected for future development. The policy does not explicit list all historic and landscape designations, particularly non-statutory the Local Planning Authority constraints maps contain this information.
An appropriate mix of affordable housing for local needs and open market homes should be provided on all towns and village housing allocations.	Policy RD 1 or BSC 4: <i>Affordable Housing</i> make direct reference to this design issue, however there is scope to outline this mitigation in any associated Supplementary Planning Guidance.
Careful hard and soft landscaping of all housing and employment sites to retain soil functions; reduce the total loss of permeable surfaces; and encourage wildlife diversity.	Policy RD 1: <i>Sustainable and good design standard</i> makes reference to landscaping in criteria xiii.
Promote the use of 'community safety by design' on all sites.	Policy RD 1: <i>Sustainable and good design standard</i> makes reference to personal and community safety issues in design.
Encourage development proposals to look at alternatives to the private car. Contributions to improving walking or cycling routes could be made in the rural areas.	Again, Policy RD 1: <i>Sustainable and good design standard</i> makes reference to accessibility. In addition, Policy ASA 2: Provision of sustainable transport facilities highlight the need to consider capacity improvements to walking and cycling routes.

10.6 Allocation of Additional Sites

The Inspectors in their note of findings (EXAM0111Q) have indicated that currently the Denbighshire LDP is likely to under-provide for housing needs across the County by around 1,000 houses. The Council identified additional housing sites to make up this shortfall from the submitted candidate sites or the alternative sites stage. Individual SA assessments were carried out on each proposed sites as the boundaries had been altered to accommodate the approximate number of homes required. The information can be found in EXAM0125. Limited responses to the SA assessments followed consultation. Main points related to the sustainability of the strategic site.

11. Predicting the Effects of the Denbighshire Deposit LDP.

11.1 Introduction

The purpose of this task is to predict the social, economic and environmental effects of the Deposit LDP document as a whole. Table 11.1 appraises the likely impact of the Denbighshire Deposit LDP as a whole, against each of the 18 SA Objectives.

The impacts predicted are however dependent on the proper implementation of the Policies. The Annual Monitoring Report will assess how well this is being achieved. Details of how monitoring will be carried out can be found in Chapter 13.

Table 11.1: Predicting the Effects of the Denbighshire Deposit LDP.

SA Objective	Effects over Time	Comments
SOCIAL		
1. Ensure the housing needs of the community are met	++	The Plan for housing growth aims to meet the predicted level of household growth over the LDP period; this will contribute significantly to meeting local housing needs. The preferred growth option for housing will also make a significant contribution to meeting the local affordable housing needs of the County by ensuring that all residential developments make a contribution to affordable housing. This prediction will take place through a suite of strong Plan policies.
2. Promote community health and well-being	++	The Plan will improve health and well being by providing more affordable housing, creating local employment opportunities and encouraging the development of and safeguarding the existing community facilities through the Key Strategic Site or policies.
3. Promote safer neighbourhoods and contribute to a reduction in the fear of crime	+	The Plan promotes reducing crime through good design. Other initiatives are also promoted through the Plan such as the Strategic Regeneration Area which is likely to have a positive effect on regeneration of deprived areas within the Plan timescale. Bringing the community onboard in Bodelwyddan through a masterplan will help create a balanced mix of homes, employment and environmental benefits.
4. Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment	+	The strategy relating to planning contributions and open space will improve the provision and enhancement of open space across the County. Additional information is being collated with regard to statistics on the proximity of access to green spaces within the County. The master planned nature of the key strategic site will allow for significant open space provision tailored to the benefits of the local community and possibly wider.
5. Improve accessibility to education, employment, health, homes and community services for all sectors of the community through modes of transport other than the private car	+/-	The Plan makes policy reference to the provision of a range of services and facilities including affordable housing, employment land and community facilities. The approach of using a strategic site for major new developments will help to make facilities and services more accessible to the Communities within the WSP hub area. As far as possible in a predominantly rural authority the Plan ensures that new developments is link well with existing developed areas and polices promote public transport, walking & cycling considerations. Difficult to predict whether the impacts will be positive or negative.

SA Objective	Effects over Time	Comments
6. Protect and enhance the Welsh language and culture, including the County's heritage assets	+/-	The Plan requires language and socio cultural impact statements on a wide range of developments. The actual potential impacts of developments can be difficult to predict as much may depend on the end user of the site. The higher growth may impact on the Welsh language but this will also allow increased provision of affordable housing which may help to strengthen local communities. No major development proposals are recommended near cultural heritage assets.
ECONOMIC		
7. Support County economic development and regeneration, including the provision of opportunities for rural diversification	++	The Plan will promote the take up of employment land by providing serviced employment land in the Key Strategic Site. Other options that contribute to this objective include promoting sustainable tourism, strengthening the retail centres and allowing appropriate employment development in rural areas.
8. Maintain and enhance the vitality and viability of town and rural centres	++	Higher levels of housing growth, improved employment land provision and the redevelopment scheme for Rhyl Town Centre through Townscape Heritage Initiative and the Strategic Regeneration Area.
9. Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes	-	The nature of the County's historic past means that seeking to utilise PDL is difficult and limited. The need to allocate the Key Strategic Site greenfield land to meet the need for additional housing and bring forward employment land and infrastructure improvements undoubtedly have a negative impact on this objective.
10. Safeguard soil quality and function and maintain long term productivity of agricultural land	+/-	The Plan minimises the loss of BMV agricultural land. The level of housing and employment growth will however potentially have negative impacts on soil particularly in the Key Strategic Site area.
ENVIRONMENTAL		
11. Protect and enhance all international, national and locally designated nature conservation sites, protected species and geo-diversity sites and avoid their damage or fragmentation. Protect, enhance and create appropriate wildlife habitats in urban and rural areas thus enhancing biodiversity.	+/-	The Plan seeks to protect and enhance areas of high biodiversity value. The level of housing and employment growth will potentially have negative impacts on biodiversity, however, with high quality design and wildlife consideration, the outcomes could be positive. There are policies in the Plan to assist biodiversity in its adaptation to climate change.
12. Preserve and enhance landscape character across the County, particularly the AONB	++/-	The Plan seeks to protect and enhance areas of high quality landscape. The level of housing and employment growth will however potentially have negative impacts on landscape. No significant sites are proposed within the AONB or AOB, where minerals developments will also be constrained. Improved approach to design will also help to improve the quality of development thus protecting landscape character.
13. Protect and improve the water quantity and quality of inland and coastal waters	+	The location of development has been chosen in consultation with the water utilities, who have assured sufficient capacity. The design policies, in addition to water management policy will ensure steps re taken now to limit the negative impact of development on land use.
14. Minimise the vulnerability to flooding and ensure new development does not increase flood risk	+/-	Substantial parts of Denbighshire are subject to risk of flooding. The Plan steers all development away from areas of flood risk. New development can increase the risk of flooding by creating more impermeable surfaces and thus run-off. This issue is dealt with under design.

SA Objective	Effects over Time	Comments
15. Maintain and improve air quality	+/-	Air quality within Denbighshire is currently good. The Plan hopes to maintain this status by concentration the residential development within walking and cycling distances to one another.
16 Contribute to a reduction in greenhouse gas emissions (especially CO ₂) by increasing energy conservation and efficiency in development and supporting increased provision and use of renewable energy	++/-	National Standards have been set to address this SA Objective. The Plan is complimentary to these national standards requiring all new developments to achieve high standards of sustainable design, construction and resource management. The loss of green field land to development for residential and employment growth may have some negative effects. Developments will be encouraged to include small scale renewable energy technologies within to make a positive contribution to this objective. The Key Strategic Site at Bodelwyddan has potential to make a significant contribution to eco development in the region. Larger scale renewable energy schemes within the Clocaenog Forest SSA will be supported making a significant contribution to renewable energy targets.
17. Protect mineral resources from development that would preclude extraction	++	The Plan ensures that mineral resources will not be prejudiced by development. It also allows for mineral extraction to supply local demand.
18. Encourage waste reduction, reuse and recovery and regional self-sufficiency	+/-	Waste aims of the Plan are to ensure provision of facilities, and to promote the reduction, re-use, recycling and recovery of waste. New developments may impact on waste generation and disposal but that will be mitigated. Sites for waste management facilities are identified and give statutory bodies and local communities certainty that the issues are being addressed.

12. Predicting, Evaluating and Mitigating the Effects of the Deposit Local Development Plan.

12.1 Introduction

The purpose of this Chapter is to predict the effects of the Plan as a whole. Having identified and described the likely effects of the LDP, it is necessary to carry out an evaluation of their significance. This includes assessing the probability, duration, frequency and reversibility of the effects, including secondary, cumulative¹ and synergistic² effects. In response to any negative effects the SA Report must include measure to prevent, reduce or offset significant adverse effects of implementing the Plan. This includes mitigation measures, proactive avoidance and actions to be taken should effects become apparent.

The identification and assessment of effects is usually undertaken adopting a receptor-based approach. This essentially means considering the impacts on a topic by topic basis, e.g. biodiversity, landscape, air etc. rather than defining impacts as per SA Objective. Table 12.1 presents the potential effects that could be realised as a result of the implementation of the Plan by receptor topic. The receptor topics include the SEA Directive topics but also cover wider social and economic topic areas relevant to the Plan. An indication is given of the predicted effect on the receptor.

¹ Cumulative effects can occur when several developments have insignificant effects but when combined together they result in a significant effect, or several individual effects of the plan (e.g. air, noise pollution) have a combined effect.

² Synergistic effects occur when effects interact to produce a total effect greater than the sum of the individual effects.

Table 12.1: Predicting the effects of the LDP over time.

Receptor Topic: BIODIVERSITY (flora & fauna)				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/-	<p>The LDP seeks to protect and enhance areas of high biodiversity value. However, the population growth and the housing numbers required to meet the needs will potentially have negative impacts on this receptor.</p> <p>Whilst protection of designated sites at the international, national and local level is very important, it is essential that the LDP recognises the value of non-designated resources that are critical to the connectivity and stability of the key designated sites.</p> <p>The negative effect could be through disturbance at some distance away.</p>	<p>New developments directed to allocated land which is on greenfield land.</p> <p>Development of brownfield land within the development boundaries can also have an impact on the receptor.</p> <p>Each planning application is expected to include a statement on biodiversity aspects of their development.</p>	<p>Long-term effects and poor development are unlikely to be reversible in habitat terms</p> <p>Initial disturbance to any species or habitat may be off-set by longer term improvements to habitat management. Fauna and bird species are more reversible than flora.</p>	<p>Likely to be positive cumulative effects on the receptor as a result of a number of policies within the LDP both to protect and enhance the natural environment of the County. There is potential for multiple developments in a town or village to result in cumulative loss of biodiversity.</p>
Links to other receptors: Population, human health, water resource, air quality, landscape, climatic factors, geology and soils, material assets, cultural heritage, economy and housing.				
Mitigation: Policy VOE 5 states that all new development must submit a biodiversity statement to consider the effects. Other policies similarly have clauses included to protect the natural environment. It is recommended that the Supplementary Planning guidance note guides biodiversity considerations beyond the proposed development site boundary.				

Receptor Topic: AIR QUALITY				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/-	<p>Locating development in close proximity to sustainable transport modes reduces the need to travel by private car. Locating employment near to homes reduces the travelling distances.</p>	<p>The LDP has no powers over public transport or the development of the road networks (only safeguarding routes should may be required through the Transport Plan).</p>	<p>Overcoming issues relating to air quality and congestion on roads are likely to require long-term action. This is something the LDP has only limited control over and required the support of a</p>	<p>The LDP has no powers to influence the decision of a neighbouring local authority who may wish to grant planning permission for an air polluting proposal.</p>

	Air quality has no regard to local authority boundaries.		number of stakeholders.	
Links to other receptors: Biodiversity, human health, population, economy, housing.				
Mitigation: Many LDP policies highlight the need for new development to be accessible by means other than the private car. Ensure cumulative effects are avoided.				

Receptor Topic: CLIMATIC FACTORS

Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/-	The LDP promotes the shift of development away from flood risk areas. However, there could be an increase in the total amount of impermeable surface areas as a result of development. In addition, the LDP promotes the use of renewable source of fuel/energy for heating and electricity supply.	The probability and frequency of flood risk is on the increase. Technological advances in energy efficiency and harnessing renewable energy have been around for some time. However, with stronger national policies the frequency of use will increase.	Threat could be to existing open space required for flood mitigation management.	The percentage of new development is relatively small in comparison to the existing developed stock. Surfacing a driveway with impermeable material is still allowed without planning permission.

Links to other receptors: Biodiversity, Population, human health, water resource, air quality, landscape, geology and soils, material assets, cultural heritage, economy and housing.

Mitigation: Policy VOE 6 includes a criteria to avoid surface run-off rate from new development to be greater than that of the existing site.

Receptor Topic: WATER RESOURCES

Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/-	The growth strategy for the LDP will increase the pressure on water resource and the treatment of waste water. This can all be planed into the utility company asses management plan and avoid development where there are resources issues. There is	High probability of flood incidents. The probability of allocating land for development in an are of water shortage is unlikely as discussions are ongoing between the LDP	Rectifying the effects of a water pollution incident on the environment takes a long time.	Couples with the need to adapt to climate change water availability may become scarcer in some of our urban areas. The effects f sea level rise and increase in precipitation in winter

¹ Denbighshire Local Development Plan – Habitats Regulation Report (2009) – the document considered the water resource impact on European protected sites.

	clear focus to direct development from flood risk areas. Water resource and pollution issues can have a negative impact on biodiversity. Please see Denbighshire LDP HRA ¹ . There are no proposed polluting development in the LDP	Team and Dŵr Cymru (Water Resource Plan).		could lead to regular overtopping of coastal defences.
Links to other receptors: Biodiversity, population, human health, soils, economy and housing.				
Mitigation: The number of new developments is small in comparison to the number of existing development. The LDP has no control over mitigating flood risk to those existing development.				

Receptor Topic: GEOLOGY and SOILS

Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/--	The Plan minimises the loss of BMV agricultural land to development. The level of housing and employment growth will however potentially have negative impacts on soil particularly in the Key Strategic Site area. The nature of the County's historic past means that seeking to utilise PDL is difficult and limited. .	Loss of land will occur as the Plan matures into implementation stage.	The process of developing the Key Strategic Site will take over 10 years. The phasing will allow agricultural practices to continue on the site over this time.	Poor soil management on a site can lead to the waste of valuable resource. In addition it can lead to a negative impact on biodiversity and natural processes (biodegrading manure and leaves by worms) and soil run off into watercourses leading to sedimentation and poor water quality.
Links to other receptors: Human health, water resource, air quality, landscape, climatic factors, material assets, cultural heritage.				
Mitigation: Mitigation against the loss of soil is limited. Good practice control in contractor management is possible through the granting of planning permission.				

Receptor Topic: MATERIAL ASSETS (including waste and natural resources)

Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+	Increased waste generation as a result of new development. Protection of mineral reserves	The increased level of housing and employment will lead to increased amount of waste being generated. Denbighshire has no land fill	Waste that goes to land fill will be there permanently and longer than the Plan period by a hundred fold.	As Denbighshire has no waste management capacity waste is transported out of the County. This increases the traffic levels and will have

		capacity and all waste is exported for processing out of County. The current permitted mineral reserve (limestone) is more than sufficient to meet the anticipated demand. There is a need to boost the local sand & gravel reserves and it is unlikely that this will lead to any more than 1 planning application.	Mineral extraction could take years, however the anticipated amount required is small and therefore the predicted duration of mining would be approx a year. The restoration details would be discussed at the time of seeking permission and can lead to positive environmental benefits such as creating a wildlife reserve.	a negative impact on air quality and CO2 levels. Mineral workings are likely to have negative impacts on landscape, biodiversity, soils, geodiversity and water quality. Employment opportunities including supply chain can be created. The intention is to use the material locally which reduces the carbon footprint of development.
Links to other receptors: Human health, water resource, air quality, landscape, climatic factors, geology and soils, economy, biodiversity.				
Mitigation: Measures to address this waste management issue is found in the LDP through Policies VOE 7& 8.				

Receptor Topic: POPULATION and HUMAN HEALTH				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+	Clear commitment in the LDP to provide for the population in terms of land uses. Development of high quality homes to those who can and cannot afford one, employment opportunities within reach by a number of transport modes and improved services and facilities.	Implementation of both the strategic site and local sites is likely in the medium term as the housing market is healthy in the County.	The provision of homes is non-reversible whilst employment land can be easily redeveloped.	The secondary impacts of providing 500 homes a year is the increase demand on health facilities. It will also help to avoid out-migration of young residents. Health is affected by a range of factors and so there should be long term cumulative benefits upon this receptor. The quality of the built and natural environment affects the quality of life.
Links to other receptors: : Population, human health, water resource, air quality, landscape, climatic factors, geology and soils, material assets, cultural heritage, economy and housing, biodiversity, deprivation and living quality.				
Mitigation: The policies contained within section BSC, PSE and RD of the Plan show a commitment to addressing the housing and employment needs of the communities whilst policy BSC 3 secures infrastructure in new development (such as open space and health facilities).				

Receptor Topic: CULTURAL HERITAGE (including architecture and archaeological heritage and the Welsh language/culture)				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/-	<p>New development brings new residents to local communities. This is one of many contributing factors to the deterioration of language. In contrast it can lead to learning a new language to integrate into community life.</p> <p>New development, is located and designed poorly could have a negative impact on local architectural character and/or archaeological heritage.</p>	<p>The probability of language deterioration by virtue of new development is addressed in policy RD 4 of the Plan which requires all development to consider the impacts.</p> <p>Measures within the Plan to guide the positive contribution design of new development can have on the surrounding landscape.</p>	<p>The scale of new development in language sensitive areas (rural Denbighshire) is relatively small throughout the plan period and therefore not considered to have a direct impact on language in the long term. The impact of the KSS is likely to be significant and would need long-term mitigation.</p> <p>There is scope within policy RD 3 to improve the appearance of a house should it be deemed of detriment to the local character. There is no control over when application is made and no survey of which homes are currently detrimental.</p>	<p>The provision of affordable housing for local people to stay within their communities may help to sustain the use of the language. This may turn the impact from negative to positive in terms of community health and well-being. A vibrant community may also be a tourism asset and assist in maintaining the County's heritage assets as well as improving economic development.</p> <p>Development could pay for Welsh language classes or the Local Authority may want to have a Welsh medium school.</p>
Links to other receptors: Human health, landscape, material assets, cultural heritage, economy and housing, education and skills.				
Mitigation: Policies contained within the LDP to mitigate any negative impacts. LDP need to continue to work in partnership to deliver successful mitigation.				

Receptor Topic: LANDSCAPE and TOWNSCAPE				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/-	<p>The LDP seeks to protect and enhance the natural environment process that shapes landscape and the built environment which shapes townscape quality. However, the population growth and the housing numbers required to</p>	<p>The landscape character of the areas around the Key Strategic Site is likely to be affected the most although the site is outside the AONB. There is potential to improve</p>	<p>Once development has taken place its effects are very difficult to reverse. New development forms a long term landscape and/or townscape feature which is</p>	<p>The LDP policy on green barriers (RD 2) seeks to protect landscape and townscape and separate towns from coalescence. High quality landscape and</p>

	meet the needs will potentially have negative impacts on the receptor.	the character of the town or landscape by the removal of any ugly buildings or structures.	difficult to reverse. Over time structural screening may soften the impact of new development.	townscape helps to attract economic investors to the area, but equally attracts retired people who contribute to the ageing population figures.
Links to other receptors: Human health, water resource, air quality, climatic factors, geology and soils, material assets, cultural heritage, economy and housing, biodiversity.				
Mitigation: Policies contained in theme Valuing our Environment protect the key landscapes (AONB/AOB) and historic landscapes and townscapes.				

Receptor Topic: ECONOMY				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+	New employment land allocation is made in the LDP in locations considered to be sustainable in their accessibility. The LDP also allows rural diversification providing it will not have a negative impact on the tranquillity of enjoyment of the open countryside.	Key allocations of new employment land are to be located in areas of known demand in the north of the County. Tourism and recreation provide a number of seasonal job opportunities.	Appropriate use of redundant rural buildings is also encouraged for employment purposes.	Improved economic growth can have a positive effect on sustaining town and village retail centres. By locating residential growth in close proximity to employment sites it is hoped to reduce the need to travel. If local employees cannot be found then growth may result in an increase in car borne commuting with a detrimental effect on air quality and community cohesion.
Links to other receptors: Population, water resource, air quality, landscape, climatic factors, geology and soils, cultural heritage, education and skills, deprivation and living environment, townscape and housing.				
Mitigation: Policies in the LDP to protect the existing employment and tourism allocations from residential development pressure in town centre locations.				

Receptor Topic: HOUSING				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+/-	The LDP assesses the need to provide a variety of house types and location and affordability. This coupled with a good standard of design and energy	The current economic climate has taken a down turn however in the next 5 years it is predicted to raise	The predicted phasing of delivery of houses is outlined in the LDP. Approximately 250 every year in the first 5	The affordable housing needs of the County is not going to be addressed through the life time of the

	and water efficiency is likely to deliver higher quality homes than ever seen before. New development can have a negative impact on landscape and biodiversity.	again. The Plan is scheduled for adoption in 2011.	years, then 650 per year for the following two blocks of 5 years.	LDP, cumulative with the weak economic market at the moment the affordability issue is likely to rise as incomes fall. The higher than average build rates will draw on building resources and the need to adapt building styles to improve energy efficiency and renewable energy creation.
Links to other receptors: Population, human health, water resource, air quality, landscape, climatic factors, geology and soils, material assets, cultural heritage, economy and housing, education and skills.				
Mitigation: A suite of LDP Policies are found to cover the topic. Need to consider the education and training skills available in the County. The Key Strategic Site will have a detailed design brief prepared requiring protection and enhancement of parcels of open space and seek sustainable construction and use of renewable energy along with making provision for travel by means other than the private car.				

Receptor Topic: DEPRIVATION and LIVING ENVIRONMENT.				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+	The focus of the LDP is on meeting the needs of the population living in the County, whilst protecting the natural environment and resources for future generations. Together there are positive benefits to the quality of life. There is serious deprivation in some wards which the LDP, in partnership with initiatives address.	Tackling deprivation in Rhyl has already begun through the SRA and Rhyl Going Forward initiatives.	Through public investment there is a strategy to reverse the decline of Rhyl. Improving the living environment is the planning role of reducing poverty and deprivation.	Through the improvements made in Rhyl care must be taken to ensure that simple displacement of poverty does not occur. Moving the HMO issue from Rhyl to other areas in the County or outside of the County would not be correct practice in dealing with poverty. Poorly designed development with high levels of crime can deter economic investment. Links between renewable energy and adult / child poverty.
Links to other receptors: Population, human health, material assets, cultural heritage, economy and housing.				
Mitigation: Policy BSC 7 and PSE 1 deal directly with the issue of deprivation in Rhyl.				

Receptor Topic: EDUCATION and QUALIFICATION				
Predicted effect over time	Comments	Probability / Frequency	Duration / Reversibility	Secondary / Cumulative or Synergistic effects
+	Education provision and upskilling is not within the remit of the LDP but there will be a positive direct effect on education facilities within the Key Strategic Site. Linkages will also be made through masterplanning the Key Strategic Site between the employment land and the training provided in the local collages.	Medium term benefits are likely.	There is no reversibility of a building but the course/training provision could alter.	Better employment opportunities and small start up business premises may help with education and training attainment and young people attainment. There is a small risk that new housing could lead to increase short term pressure on educational facilities in some settlements, conversely it could also help to prevent some schools from closing.
Links to other receptors: Population, human health, material assets, cultural heritage, economy, deprivation and living environment.				
Mitigation: No specific mitigation measures required above that content of the Plan policies.				

13. Monitoring Framework

13.1 Introduction

This chapter provides an outline monitoring framework and advice for monitoring the significant effects of implementation the LDP. Monitoring is a fundamental activity that will enable Denbighshire County Council to assess:

- the implementation of the LDP objectives and targets;
- the performance of mitigation measures;
- the undesirable sustainability effects;
- whether sustainability predictions were accurate.

The activities relevant to monitoring that are stipulated in the SEA Directive are:

Member States shall monitor the significant environmental effects of the implementation of plans and programmes... in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action' Article 10.1

The Environmental Report should provide information on a 'description of the measures envisaged concerning monitoring' (Annex I (i)).

13.2 Approach to Monitoring

The monitoring framework will assist in the measure of impacts of implementing the LDP using indicators that are appropriate to the scope and potential impacts of the plan. A large number of beneficial effects have been predicted through the SA process and very few negative effects. Table 13.1 presents the monitoring framework and explains the effects that will be monitored and why.

In addition to monitoring the SA, annual monitoring will be undertaken for the LDP itself and the results published in an Annual Monitoring Report. The LDP monitoring determines whether the policies are achieving their intended objectives or whether there are unexpected trends or significant changes that could lead to the need for an early or partial review.

The LDP will run until 2021 and this is significant period of time over which the LDP will need to be monitored. Over this period it is expected that new more appropriate monitoring indicators will be identified and this may lead to updating of the monitoring framework.

It is currently anticipated that remedial action will not be needed through the SAR as there are no significant adverse effects anticipated as a result of the LDP proposals. The effectiveness of the proposed mitigation is, however, just as important.

Table 13.1 Proposed SA Monitoring Framework

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
SOCIAL				
1. Ensure the housing needs of the community are met.	The LDP includes a number of policies promoting new housing which should positively contribute to housing needs.	No. of affordable homes permitted and completed per annum and the % of eligible residential planning permissions where affordable housing has been negotiated	To follow guidance on provision of affordable housing in the interim North East Wales Housing Market Assessment.	Material assets, Population and Human Health
		% of vacant housing.	100%	
		Households on the Housing register	Year on year reduction in the number of households on the housing register	
		% of unfit housing against the Welsh Housing Quality Standard	To reduce the percentage of unfit homes	
		Average property price compared against average earnings	To reduce the ratio of property price and earnings Source: www.landreg.gov.uk/ Wealth of the Nation, 2004	
2. Promote community health and well-being	The policies in the LDP should collectively by protecting and enhancing the health and well being of the communities. The LDP does not have direct control over this health or well-being of a community however there are links with access to the enjoyment of the natural environment, services and a home without fuel poverty.	Life expectancy	To maintain/increase life expectancy Source: www.statistics.gov.uk	Population and Human Health
		Death rate per 100,000 by Chronic Heart Disease	To reduce heart disease, stroke and related illnesses amongst people under 75 by at least 40 % by 2010 Source: UK Sustainable Development Quality of Life Indicators	
		Death rate per 100,000 by cancer	To reduce cancer amongst people under 75 by at least 20% by 2010 Source: UK Sustainable Development Quality of Life Indicators	
		Death rate per 100,000 by suicide	To reduce suicide and undetermined injury by at least 20% by 2010 Source: UK Sustainable Development Quality of Life Indicators	

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
SOCIAL				
		Death rate per 100,000 by accidents	To reduce accidents by at least 20% by 2010 Source: UK Sustainable Development Quality of Life Indicators	
		No. of planning applications incorporating Health Impact Assessment (HIA)	100% for major developments	
		Community Satisfaction / perceptions surveys – Housing Estate Surveys	To decrease % of people who describe their health as poor	
		Indices of deprivation	To decrease % of population living in most deprived areas	
		Proportion of households not living within 400m of their nearest natural green space.	0% Source: CCW Accessible Green space Standards	
		Proportion of households within 800m walking distance of key health services	100%	
3. Promote safer neighbourhoods and contribute to a reduction in the fear of crime	As above, the LDP has reference to safety and crime in policies that consider design.	Overall crime rates by type	To reduce crime rates year on year	Population and Human Health
		Fear of crime per Denbighshire ward during the day and at night	To reduce fear of crime year on year	
		Average crime rate in Denbighshire per 1000 population	To reduce the number of crimes committed per 1,000 population	
4. Enhance existing and promote the development of high quality recreation, leisure and open space and provide opportunities for people to experience and respect the value of the natural environment	Policies in the LDP seek to protect open space and so the effect are predicted to be positive.	Accessibility / availability of community facilities	To increase % of residents using authority and/or private sports and leisure facilities at least once a week	Population and Human Health
		Hectares of accessible countryside and local green space	To increase (use the Green Space Toolkit)	
		Number and % residents using parks, open spaces and nature reserves annually	Increase numbers year on year	
5. Improve accessibility to education, employment, health, homes and	It will be important to monitor the accessibility of the opportunities.	Accessibility /availability of community facilities (schools, health and social facilities, nurseries, further education	Distances from residents properties to community facilities as listed in the indicator to comply with the	Population and Human Health

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
SOCIAL				
community services for all sectors of the community through modes of transport other than the private car		establishments, community halls, churches, libraries, residential homes for the elderly, cemeteries, open space, sports facilities, supported accommodation, theatres and cinemas)	Welsh Index of Multiple Deprivation.	
		% of rural residential population within walking distance of key services	Maintain and improve the proportion	
		Travel to work data/modal split	Reduce the distance of travel to work and reduce the % of people who travel by means of private car. Increase % of people travelling by sustainable modes of transport (walking/cycling/public transport)	
		Traffic volumes	To reduce traffic growth rates	
		Proportion of new developments (housing/ economic/ retail) located within 500m of public transport, cycle ways and footpaths	To increase % of new developments within 500m	
		Frequency/reliability of public transport	Ensure frequency is maintained and improved.	
		Length of bus network	Ensure frequency is maintained and improved.	
		No. of settlements served by bus	Ensure frequency is maintained and improved.	
		No. or settlements served by rail	Ensure frequency is maintained.	
6. Protect and enhance the Welsh Language and culture, including the County's heritage assets.	LDP Policy RD 4 as well as the LDP objective to retain young people in the County through the provision of affordable housing.	Proportion of Welsh speakers in the County and their distribution	Maintain and improve the proportion	Population and Cultural Heritage
		Proportion of people with skills in the Welsh Language	Maintain and improve the proportion	
		Welsh medium schools and pre-schools as a proportion of all schools	Maintain and improve the proportion	
		Bi-lingual published material	Maintain and improve the proportion	
		% quality of SAMs, Historic Parks and Gardens, Conservation Areas, Historic Landscapes	No reduction in quality	
		Number of listed buildings on the	Reduction	

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
SOCIAL				
		'Buildings at Risk Register'		
		% of SAMs subject to positive actions undertaken by DCC as a result of plan proposals	Increase	
		% of demolition in Conservation Areas	0%	
		% of Conservation Areas with an up-to-date character appraisal	50% up to date.	
		Number of Conservation Areas adversely affected by plan proposals	0%	

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
ECONOMY				
7. Support County economic development and regeneration, including the provision of opportunities for rural diversification.	New employment land will be permitted in the County and it will be important to monitor the land take. In addition the SRA will be developing regeneration schemes which will have an impact on the levels of deprivation in the north of the County. The number and type of rural diversification will be monitored for trends and impacts.	GVA per capita	To increase GVA per capita	Population
		GVA per worker	To increase GVA per worker	
		Proportion of economic activity by sector	To increase the number of sectors, especially rural trends.	
		% changes in the number of VAT registered enterprises	To increase the overall number of VAT registered enterprises	
		Employment / unemployment rates	Reduction in unemployment rate	
		Unemployment claimant count with proportion of residents of working age population	To decrease the proportion of people claiming unemployment benefit	
		Take up of allocated employment land	To increase the take up of employment land	
8. Maintain and enhance the vitality and viability of town and rural centres	The LDP protects the retail core of town centres from inappropriate change of use and so a positive effect should be monitored.	Vacancy rates in town centres	To decrease the amount of vacant floorspace	Population
		Quality of town centres (perception surveys)	Maintain and improve the quality	
		% changes in total number of VAT registered enterprises in town and rural centres	Increase in the number of VAT registered businesses	

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
ECONOMY				
		% change in total number of shops, pubs and post offices in rural centres	To resist the loss of village shops, pubs and post offices in rural areas where appropriate	
9. Make the best use of previously developed land and existing buildings in locations served by sustainable transport modes	The new development promoted through the LDP could lead to the remediation of brownfield land.	% of dwellings built on previously developed land	% of new dwellings to be built on previously developed land same comment as below	Soil, Biodiversity, Landscape, Material Assets
		Number of developments meeting densities of between 30-50 dph and higher % in town centres and areas with high public transport accessibility	All developments to have a higher density than 30 dph	
		Amount of derelict land	Reduce year on year	
		No of empty properties	Reduce year on year	
10. Safeguard soil quality and function and maintain long term productivity of agricultural land.	The new development promoted through the LDP will lead to the removal of soil from the land.	Total area of contaminated land	To reduce the area of contamination year on year.	Biodiversity, Human Health, Soil, Water
		Total area remediated as part of new development	To remediate all areas of contamination to a satisfactory standard when required by new development	
		Soil management methodology.	Positive mitigation of and reuse/replacement of soil.	

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
ENVIRONMENT				
11. Protect and enhance all international, national and locally designated nature conservation sites, protected species and geo-diversity sites and avoid their damage or fragmentation. Protect, enhance and create appropriate wildlife habitats	There are policies in the LDP to protect the biodiversity in the County and so the effects are predicted to be positive. However, information should be collected in relation to condition and enhancement of the sites to monitor the effectiveness of the LDP	Area and condition of statutory / non-statutory nature conservation sites	85% of SSSI features in favourable condition by 2013 <i>Source: Welsh Assembly Government</i>	Biodiversity, Flora and Fauna, Soil
		% of designated sites improved by the LA.	To improve condition of all designated sites	
		Number of proposals/policies resulting in the loss or damage to designated sites	No loss or damage to designated sites at all levels	

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
ENVIRONMENT				
in urban and rural areas thus enhancing biodiversity	policies.	Achievement in the Biodiversity Action Plan targets.	Annual LBAP reports	
		No. of Regionally Important Geological and Geomorphological Sites (RIGS)	No decrease in number	
		Area of land actively managed for nature conservation	Increase in the area of land managed under Environmental Stewardship Schemes e.g. Tir Gofal	
		Number of development schemes which include design in ecological features	Increase proportion of ecological design in new developments.	
		Maintenance regimes in place for new habitats	100%	
12. Preserve and enhance landscape character across the County, particularly the AONB	The LDP seeks to protect the local landscape. It will be important to monitor whether new developments positively contribute to the design quality of settlements.	% of county designated for landscape	No decrease.	Landscape
		% of county designated as high or outstanding landscape quality (LANDMAP studies)	No decrease.	
		Changes in the LANDMAP evaluation and extent of that change as a result of development	No changes	
13. Protect and improve the water quantity and quality of inland and coastal waters	The LDP seeks to protect the quality of surface and groundwater resources. The availability of water resource falls within the remit of Dŵr Cymru which is responsible for managing water supply and demand across Wales, although it is recognised that this will be affected by the levels of growth within each settlement. Indicators have been proposed to monitor water quality and the potential effects of new development. The LDP also promotes sustainable design	% of watercourse classified as good biological and chemical quality	91% of rivers length in the UK should be of good quality by 2010. DCC will work towards achieving this target. Source: Environment Agency	Water, Biodiversity, Flora and Fauna, Population
		Compliance with Bathing Water Directive, European Blue Flag and UK Seaside awards	100% compliance	
		Groundwater quality	To maintain and improve groundwater quality	
		Distribution of aquifers and their vulnerabilities	To maintain and improve groundwater quality	
		Number of incidents of major and significant water pollution	0%	
		Surface water and groundwater abstractions (licensed and private)		

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
ENVIRONMENT				
	and construction and so it will be beneficial to monitor water use in the LDP, although this is also affected by individual actions.	% of planning permissions with water saving devices/ grey water recycling required as part of conditions Estimated household water consumption (litres per head per day).	To reduce overall water consumption Long term decrease.	
14. Minimise the vulnerability to flooding and ensure new development does not increase flood risk	There is a number of policies to direct new development away from areas of floodrisk and so effects should be positive. The extent to which the need for permeable surfaces and the use of SuDS is promoted in new development	% of planning applications with SuDS required as part of conditions No. of new vulnerable development granted planning permission in C1 and/or C2 floodplain area contrary to advice from the Environment Agency	All new development applications to show that sustainable drainage has been considered and implemented if appropriate Source: Environment Agency 0%	Water, Climate Factors
15. Protect and improve air quality	It is not predicted that the LDP will result in adverse effects on air quality. However, some contextual monitoring could be undertaken to support other monitoring.	Levels of main pollutants No. of days when air pollution is moderate or high for NO2, SO2, O3, CO or PM10	To meet National Air Quality Standards	Biodiversity, Flora and Fauna, Air, Human Health
16. Contribute to a reduction in greenhouse gas emissions (especially CO ₂) by increasing energy conservation and efficiency in development and support increased provision and use of renewable energy	Monitor the success of the MIPPS 01/2009 requirement for new development.	Annual greenhouse gas emissions by sector Number of new developments built to achieve carbon neutrality No. of Code for Sustainable Homes assessments accompanying new developments % of energy produced in the County generated from renewable sources	To reduce CO2 emissions by 20% by 2010 and by 60% by 2050 from a 1990 baseline figure (national target) Source: UK Climate Change Programme 2000 100% 100% of new dwellings to meet Code Level 3 Standards from 2010. 100% of new commercial buildings to meet BREEAM Very Good Standard 10% renewable energy target by 2010 (national target) and 60% by	Biodiversity, Human Health, Climate Factors, Material Assets, Air Quality, Population

SA Objective	Effect to be Monitored	Indicator	Target and Data Source	SEA Topic
ENVIRONMENT				
			2050 Source: UK Climate Change Programme	
		No. of buildings incorporating renewable energy production (solar panels, wind turbines, photovoltaic's, ground-source heat)	Increase number year on year	
		Construction projects incorporating on-site recycling	All major development projects to incorporate on-site recycling	
17. Protect mineral resources from development that would preclude extraction	There is a need to consider the mineral deposit which may be found underneath a development proposal.	Amount of mineral reserves	To sustainably manage existing reserves	Soil, Material Assets
		Reuse of aggregates in construction	100%	
		Number of planning applications approved resulting in the sterilisation of mineral reserves	0%	
18. Encourage waste reduction, reuse, recycling and recovery and regional self-sufficiency	New development in the County will need to consider how it can minimise the impact on the environment. Policies VOE 7 & 8 permits new local waste management sites / facilities and so those numbers should be monitored.	Household, construction and demolition and industrial waste production (tonnage)	Reduction in waste to at least 10% of 1998 figure by 2010 By 2020 waste arising per person should be less than 300 kg per annum Source: Municipal Waste Management Strategy for Denbighshire County Council, February 2005	Biodiversity, Human Health, Soil, Air, Climate Factors, Material Assets, Landscape
		% of household, construction and demolition and industrial waste recycled	By 2009/10 achieve at least 40% recycling/composting, with a minimum of 15% composting and 15% recycling Source: Municipal Waste Management Strategy for Denbighshire County Council, February 2005	

14. Addendum Reports

Following the publication of the Deposit Local Development Plan and accompanying documents the Council proposed some minor changes to the text. These changes are called Focus Changes to the Plan. These proposed changes were screening through the SA assessment prior to their finalisation and approval by Councillors for submission to Welsh Government. A copy of the SA/SEA Assessment of Denbighshire Local Development Plan Focussed Changes (May 2011) can be found at Addendum 1.

Additional amendments have been made to the Denbighshire Local Development Plan during the LDP Hearing Sessions (2011-2013) and in the Inspectors binding findings of Denbighshire LDP Examination (April 2013). These amendments are called Matter Arising Changes and have been screened through the SA assessment. A copy of SA/SEA Assessment of The Planning Inspectors binding recommendations and Schedule of Matter Arising Changes (May 2013) can be found at Addendum 2.