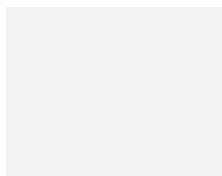


Flintshire Local Development Plan - Preferred Strategy

Integrated Impact Assessment (Incorporating Sustainability
Appraisal / Strategic Environmental Assessment)
Interim Report

OCTOBER 2017

CONTACTS



HANNE LARSSON
Senior Environmental Consultant

Arcadis.
5th Floor,
401 Faraday Street
Birchwood Park
Warrington
WA3 6GA

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Non-Technical Summary

Introduction

As a Local Planning Authority, Flintshire County Council (CC) has a duty to prepare a Local Development Plan (LDP) that sets its strategy for development within its area and the policies that will be used to direct development and determine applications for planning permission across the entire County. The LDP which will cover the time period between 2015 and 2030, will provide the framework to facilitate the sustainable delivery of growth and development.

When preparing the LDP Preferred Strategy, it is a legal requirement to undertake a Sustainability Appraisal (SA) to ensure that it is developed within the principles of sustainable development. The term Integrated Impact Assessment (IIA) can be used to describe the process of covering more than one type of impact assessment into a single process. Integrating different types of impact assessment into a single process can improve efficiencies in both the assessment itself, as many of the issues covered in the different forms of assessment overlap, as well as simplifying outcomes and recommendations for policy makers. Where more detail on certain issues is required or necessary, this can be undertaken and included within the IIA. This approach has been adopted across Wales, where an integrated approach to assessing the impacts of the strategies, incorporating the requirements of Strategic Environmental Assessment (SEA), SA, Health Impact Assessment (HIA), and Equalities Impact Assessment (EqIA) has been undertaken.

This IIA draws together the following impact assessments:

- SA and SEA (including HIA and EqIA); and
- Habitats Regulations Assessment (Screening will be undertaken as a parallel process, the findings of which will be integrated into the IIA as appropriate).

Independent consultants, Arcadis Consulting (UK) Ltd., have undertaken the IIA of Flintshire's LDP Preferred Strategy. This Non-Technical Summary provides a high-level summary of the findings of the IIA.

Integrated Impact Assessment Strands

Strategic Environmental Assessment and Sustainability Appraisal

SA is a process for assessing the social, economic and environmental impacts of a Plan as it develops and it aims to ensure that sustainable development is at the heart of the plan-making process. It is a legal requirement under planning law. The law states that the SA must comply with requirements of the European SEA Directive.

Good practice guidance proposes a number of prescribed stages in the SA process, each of which links with stages of the plan-making process. It is important that the SA is able to feed into the plan-making process. This involves the ongoing appraisal of the plan and makes recommendations to help steer its direction to avoid potentially adverse consequences. This is particularly important when considering alternative strategy options. Consultation with statutory bodies (Cadw and Natural Resources Wales (NRW)) and the public is also required at key stages.

Health Impact Assessment

Although a HIA is not a statutory assessment for planners working in Wales, the Welsh Government (WG) increasingly regards it as best practice. It can be a useful tool where there are expected to be significant impacts. As part of the rescoping exercise, we have considered how health concerns and objectives can be incorporated within the updated SA framework.

Equalities Impact Assessment

The Equality Act 2010 includes a public-sector equality duty which requires public organisations and those delivering public functions to show due regard to the need to:

- Eliminate unlawful discrimination, harassment, victimisation;

- Advance equality of opportunity; and
- Foster good relations between communities.

Consequently, we are undertaking a high-level assessment of the possible equalities impacts of the Local Plan. This has been integrated into the IIA process. As part of the rescoping exercise, we have considered how equality concerns and objectives can be incorporated within the updated SA framework, especially in light of the Well-being for Future Generations (Wales) Act 2015.

Well-being of Future Generations (Wales) Act

In March 2015, the National Assembly for Wales approved the Well-being of Future Generations (Wales) Act 2015, helping place Wales on a more sustainable path towards achieving well-being. The Act is about improving the social, economic, environmental and cultural well-being of Wales developed around the principle of sustainable development. It gives a legally-binding common purpose – the seven well-being goals – for national government, local government, local health boards and other specified public bodies. It details with the ways in which specified public bodies must work, and work together to improve the well-being of Wales. The re-scoping exercise undertaken in August 2017 revisited the IIA Framework in light of this change in legislation.

Habitats Regulations Assessment

It is a legal requirement that any plan or programme likely to have a significant impact upon a European site protected for nature conservation, which is not directly concerned with the management of the site for nature conservation, must be subject to an Appropriate Assessment. The overarching process is referred to as Habitats Regulations Assessment (HRA). A HRA screening exercise has been undertaken to determine if they (either in isolation and/or in combination with other plans or projects) would generate an adverse impact upon the integrity of a European protected site, in terms of its conservation objectives and qualifying interests. This process will be documented in a Screening Report that will be submitted to NRW for approval. This is a parallel process to the IIA process and will be reported separately.

Scope of the Appraisal

The scope of the IIA was determined through collecting information on the environmental, social and economic characteristics of the area. This enabled key issues, opportunities and trends to be identified. A review of other relevant environmental protection objectives and policies was also undertaken. The review of these documents focussed upon identifying key environmental and sustainability objectives that would need to be considered in the IIA and the LDP. Following the adoption of the Well-being of Future Generations (Wales) Act 2015, the sustainability objectives were re-evaluated in order to ensure consistency with this new Act as well as other assessments that Flintshire CC is undertaking. An updated SA Framework (now an IIA Framework) was submitted to Cadw and NRW for consultation in August 2017 and this amended IIA Framework has been used for the following assessments.

Individual components of the LDP Preferred Strategy have been assessed to determine their sustainability performance and to provide recommendations for sustainability improvements. The following elements have been assessed:

- The LDP's Spatial vision; and
- The LDP's Strategic Policies.

The IIA process is iterative, with regular feedback occurring between the plan-makers and the IIA team as plan options and policies are developed.

Key Sustainability Issues and Opportunities

To ensure that a robust assessment of the emerging LDP is undertaken, it is necessary to understand the existing conditions and characteristics of the Flintshire area, for example, population dynamics, levels of deprivation, health, employment patterns and the condition of housing stock and its affordability. These are

detailed in the IIA Report. The list below identifies the sustainability topics covered in the IIA. Details of the identified issues and opportunities are provided in the IIA Report.

- Population: pressure on health services, residential housing, services for the older generation, the fall in the numbers of young people resulting in less care for the elderly.
- Education and qualifications: number of Lower Super Output Areas (LSOAs - a geographic area to better report on small area statistics in the UK) in the bottom 10% as a percentage of working residents with National Qualifications Framework (NQF) level 4 or above.
- Biodiversity: impacts on national and international sites from development, effects on species from increasing populations, variation across the County of residents able to access green space.
- Landscape and townscape: vulnerability of the valuable townscapes / landscape character of County to, for example, new developments.
- Soil and geology: Mining, in its various guises, as well as heavy industry, has left a legacy of land contamination and residual contaminated land and the need for remediation. **The geology of the County results in there being considerable mineral resources.**
- Water: increased threat from surface water flooding, coastal flooding and flooding and the mobilisation of contaminants linked to contaminated land. Potential consequences for the River Dee and the Dee Estuary associated with water supply and abstraction for new developments, should problems like drought be stimulated.
- Air quality and climate change: climate change could lead to increased flood and or drought events. New development in areas such as Deeside could impact on the Dee Estuary.
- Cultural Heritage: risks associated with climate change, including extreme weather events posing problems for managing and conserving cultural heritage. Also there is potential for undiscovered archaeological remains to exist.
- Minerals and Waste: Depletion of valuable finite mineral resources. Opportunities should be sought to safeguard mineral assets for future generations, this would also be supported through the sustainable extraction of minerals.
- Human health: varying levels of deprivation occur across the County with the coastal strip particularly affected. There are pressures associated with an increasingly ageing population, associated health service and care needs. There are opportunities for health improvements, quality of life and the economy through the provision of healthcare and key services.
- Local economy: There are pockets of deprivation along the coastal strip, with income and employment levels comparatively low compared to the more rural parts of the County. There is an increased number of Job Seekers Allowance (JSA – benefit paid to those seeking work) claimants. There are currently two Flintshire LSOAs in the bottom 10% for employment deprivation. There has also been a fall in the proportion of Flintshire residents economically active which may lead to a labour shortfall.
- Housing: high percentage of LSOAs in the bottom 10% of housing deprivation, shortage in the amount of affordable housing, the rising number of Houses in Multiple Occupation (HMOs).
- Deprivation and Living Environment: high levels of deprivation and potential for improvements. Crime: deprivation in relation to crime levels and potential opportunities for design measures.
- Transportation: accessibility and connectivity; congestion; opportunities for more sustainable modes of transport and improved connectivity, increasing commuter distances. Accessibility is a particular issue in rural areas.

IIA Framework for Assessment

The IIA Framework underpins the assessment methodology and comprises a series of sustainability objectives (covering social, economic and environmental issues) that are used to test the performance of the plan being assessed. The IIA Objectives have been developed using the review of other relevant plans, programmes and environmental objectives, the baseline data and the key issue and opportunities. The IIA Framework was amended following receipt of the Scoping Report consultation responses from statutory consultees in 2015. The following IIA Objectives form the basis of the IIA Framework. These are supported by a series of sub-objectives, indicators and targets, which can be found in the IIA Report (Table 3-5):

- 1 To reduce crime, disorder and fear of crime

- 2 To improve levels of educational attainment for all age groups and all sectors of society
- 3 To improve physical and mental health and wellbeing for all and reduce health inequalities
- 4 To provide access to good quality, affordable housing that meets the needs and requirements of the community
- 5 To improve sustainable access to basic goods, services and amenities for all groups
- 6 To build strong and cohesive communities
- 7 To promote a sustainable economy, business development and investment
- 8 To provide employment opportunities across the County and promote economic inclusion
- 9 To maintain and improve the quality of life in rural areas
- 10 To protect and enhance biodiversity and geodiversity
- 11 To conserve and enhance the County's landscape and townscape character and quality
- 12 To protect and enhance the cultural heritage assets
- 13 To protect and enhance the quality of water features and resources
- 14 To reduce the risk of flooding
- 15 To protect and improve air quality and limit greenhouse gas emissions
- 16 To increase energy efficiency, require the use of renewable energy and sustainable building design
- 17 To ensure sustainable use of natural resources
- 18 To encourage the protection and promotion of the Welsh Language

Developing and Refining Options and Assessing Effects:

Spatial Options

Government guidance advises that only reasonable alternatives should be considered and they should be sufficiently distinct to enable a meaningful comparison of their different environmental effects.

The LDP Spatial Options and growth scenarios were assessed and reported on in October 2016.

Spatial Vision and Objectives

Good practice guidance recommends that the key aims and principles of the plan should be assessed against the IIA Objectives, in order to test their compatibility and to determine whether they accord with broad sustainability principles.

The Spatial vision for Flintshire has been reviewed against the IIA Objectives, and a summary of the key strengths, weaknesses and recommendations are presented in the IIA Report. The assessment of the Spatial Vision has been undertaken during the IIA using a simple matrix based approach. Chapter 5 of the IIA Report presents the complete compatibility of the LDP Objectives against the IIA Objectives.

Appraisal of Local Development Plan Policies

The LDP policies were assessed against the IIA Objectives using a matrix-based approach and was first begun in the LDP Options Appraisal that was assessed in October 2016. This matrix allowed the identification of positive and negative impacts, as well as the potential for cumulative effects to occur. Mitigation measures and recommendations were suggested to offset or alleviate any predicted adverse impacts, or to enhance any opportunities that were identified. This iterative process has been continued into the LDP Preferred Strategy and to which this report relates.

A summary of the assessment of these preferred policies is provided in Chapter 6 of the IIA Report. The complete results of the assessment are presented in Appendix D.

In summary, the majority of predicted effects were positive against the social, economic and environmental objectives. The assessment of the LDP led to the prediction of major positive effects against all of IIA objectives, and the strategic policies currently being proposed will clearly set the tone for Flintshire's detailed policies that will be developed. The strategic policies around the scale and location of development (STR1

and STR2) were assessed together in order to ensure that any synergies between the two policies was captured, and most relevantly seen on housing, employment and economy objectives. STR3 provides 2 strategic sites (Northern Gateway and Warren Hall) that will form the bulk of new housing stock within Flintshire, as well as providing new employment spaces. The clear identification of these sites will help meet a variety of IIA objectives in terms of housing, economy as well as environmental objectives, though it is expected that more detail will ensure that mitigation can be appropriate. STR4, STR5 and STR6 provide the strategic direction for how design, transport, services should be considered within Flintshire and all seek to ensure the tenets of sustainable development are met.

The remaining policies (STR7-STR16) provide greater detail on particular issues of concern for the Council – ranging from climate change to tourism to environmental protection and ensuring minerals for the county, to name a few. These policies seek to ensure that, within their respective direction, Flintshire's preference for strong economic growth will be balanced against its social and environmental obligations. Although Flintshire has taken the strategic approach to ensure its economic recovery and plan for sustained future economic success, the policies still manage to ensure that other aspects of sustainable development such as social and environmental concerns, can be mitigated for. Some policies can be strengthened further and a series of recommendations for changes has been made within this report.

The IIA carried out and reported on within this report should help clarify the detailed Policies and site allocations that will be developed as the LDP progresses and provide greater focus what those policies will mean for specific areas within Flintshire.

Next Steps

This IIA Report has now been issued for consultation alongside the LDP Preferred Strategy to all key stakeholders (including statutory consultees and the public) for comment. The Preferred Strategy along with this accompanying IIA Report and associated appendices will be consulted on. Following the close of the consultation period, Flintshire CC will review the feedback and incorporate it into the Deposit LDP.

If you would like to comment on this IIA Report, please send comments to:

developmentplans@flintshire.gov.uk
or

Andrew Farrow
Chief Officer (Planning and Environment)
Flintshire County Council
County Hall
Mold
Flintshire
CH7 6NF

Abbreviations

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
CIL	Community Infrastructure Levy
CC	County Council
cSAC	Candidate Special Area of Conservation
DECC	Department of Energy and Climate Change
EqIA	Equalities Impact Assessment
HER	Historic Environment Record
HIA	Health Impact Assessment
HRA	Habitats Regulations Assessment
HMO	Houses in Multiple Occupation
IIA	Integrated Impact Assessment
JSA	Job Seekers Allowance
LDP	Local Development Plan
LNR	Local Nature Reserves
LSOA	Lower Super Output Area
NNR	National Nature Reserves
NVQ	National Vocational Qualification
ONS	Office for National Statistics
OPDM	The Office of the Deputy Prime Minister's
pSPA	Potential Special Protection Areas
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SM	Scheduled Monument
SEA	Strategic Environmental Assessment
SHMA	Strategic Housing Market Assessment
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Systems
TAN	Technical Advice Note
WAG	Welsh Government
WCED	World Commission on Environment and Development

1 Introduction

1.1 Purpose of the Integrated Impact Assessment (IIA) Report

Flintshire County Council (CC) is currently preparing its new Local Development Plan (LDP) and, following a review of strategic options is now proposing a Preferred Strategy. This report has been prepared by Arcadis Consulting UK Ltd. (formerly Hyder Consulting (UK) Ltd.) on behalf of Flintshire CC, as part of the combined Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the LDP Preferred Strategy. It also incorporates the requirements of the Well-being for the Future Generations (Wales) Act 2015 and is, therefore, now called an Integrated Impact Assessment (IIA). Habitats Regulations Assessment (HRA) Screening will also be undertaken as a parallel process, the findings of which will be integrated into the IIA as appropriate.

As a Planning Authority, Flintshire CC has a duty to prepare a LDP that sets its strategy for development within its area and the policies that will be used to direct development and determine applications for planning permission across the entire County.

The process commenced with an SA Scoping consultation in April and May 2015. The SEA Directive requires the authority preparing the plan to consult the Consultation Bodies on the scope and level of detail of the Environmental Report (in this case an IIA Report, which will ultimately document the findings of the IIA). In addition to the Consultation Bodies, a public consultation was undertaken. The preparation of a Scoping Report provides the most effective means of undertaking this consultation by providing the consultees with a document upon which they can make comments.

In October 2016, an SA was undertaken of Flintshire's five strategic options in order to help identify the preferred strategy for development within the County.

Following the Welsh Government's adoption of the Well-being of Future Generations (Wales) Act in 2015, the IIA Framework was re-scoped in August 2017 to ensure that its tenets and the links with health, equality, cohesive communities and the Welsh language are incorporated more fully within this appraisal tool and reporting.

This IIA Report is intended to document the assessment of the LDP Preferred Strategy, which sets out preferred policy direction for the County.

1.2 The Local Development Plan

The Flintshire LDP provides the sustainable framework for land use planning in the County up to the year 2030, and a platform for development thereafter. It will shape Flintshire's future physically and environmentally, and influence it economically and socially. It will respond to the needs of a growing population and regionally important economy, in making provision for new jobs, homes, infrastructure and community facilities, but it must do this in a way that ensures the well-being of its communities is maintained, and the impacts of the development and use of land are managed and mitigated sustainably. In addition, through its provisions, the LDP will also seek to ensure enhancement opportunities such as environmental enhancements are realised.

The context is set by national legislation and planning guidance which requires local authorities in Wales to prepare and maintain a development plan that deals with the land use aspects of the challenges above, and does so in line with the sustainable development duty embodied by the Well-being of Future Generations Act (Wales) 2015.

The LDP which will cover the time period between 2015 and 2030, providing the framework to facilitate the sustainable delivery of growth and development.

The LDP embodies a positive and responsible approach to development in Flintshire and aims to create more high quality sustainable places at all levels, and in both urban and rural settings. A sustainable place is one that has sufficient social, economic and environmental infrastructure to meet the needs of its people, but is also resilient and adaptable in the face of future challenges.

Once adopted the LDP will replace the existing Flintshire Unitary Development Plan (UDP), and will become the framework against which decisions on planning applications are taken. The LDP will be prepared in accordance with the procedures set out in the Town and Country Planning (Local Development Plan) Wales Regulations 2005.

1.3 The Local Development Plan Preferred Strategy

The Preferred Strategy is the first part of the LDP and is important in setting out how land use in Flintshire is expected to evolve over the period to 2030. It represents the completion of a period of pre-deposit plan preparation and engagement, the outcome of which has had a clear influence over the selection of the Preferred Strategy (Figure 1-1).

The Preferred Strategy provides the strategic context for the preparation of more detailed land use policies, proposals and development allocations that will subsequently be included in the Deposit LDP, which will be prepared in due course.

The Preferred Strategy sets out the Council's vision, strategic objectives and broad Spatial Strategy to guide the chosen level of future development and growth in Flintshire, defined through a set of strategic policies that deal with the main priorities for the Plan. Its aim is to guide not only the needs and aspirations of the County, but also other key service providers and stakeholders, as well as developers, whose collective response will be essential to the successful implementation of the Plan. In addition, the Preferred Strategy will be reflective of Planning Policy Wales. Figure 1-2 overleaf outlines the Flintshire boundary.

Figure 1-1 How the Preferred Strategy was prepared

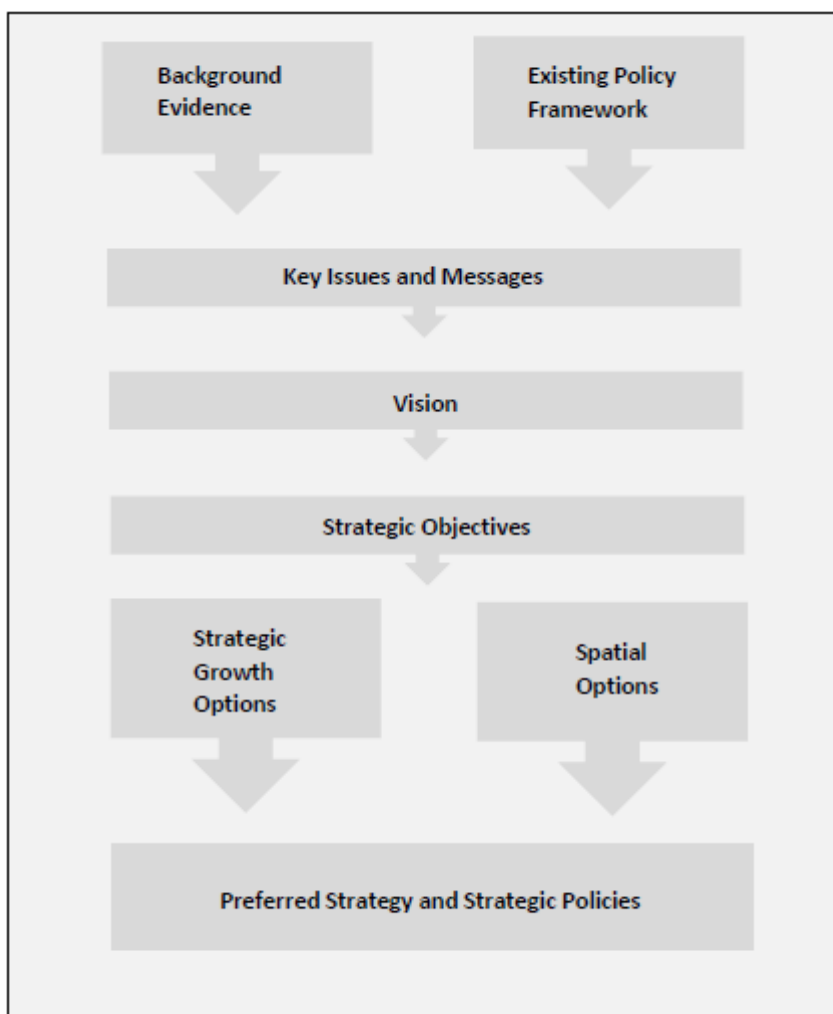


Figure 1-2 Flintshire Boundary



Source: Google Maps, 2017

1.4 Sustainable Development

The concept of sustainable development is central to the planning system. The term 'sustainable development' has been used since 1987 following the publication of the World Commission on Environment and Development (WCED) report 'Our Common Future' (The Brundtland Report). It called for a strategic direction that united development and the environment, and defined 'sustainable development' as:

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

One Wales: One Planet – the Sustainable Development Scheme for Wales (2009) Priority areas for immediate action are outlined as:

- Sustainable consumption and production;
- Climate change and energy;
- Natural resource protection and environmental enhancement; and
- Sustainable communities.

To achieve forms of development that are more sustainable than previous development, proposals must strike an acceptable balance between maximising resource and energy efficiency; minimising environmental impacts; delivering social benefits; and supporting a healthy economy.

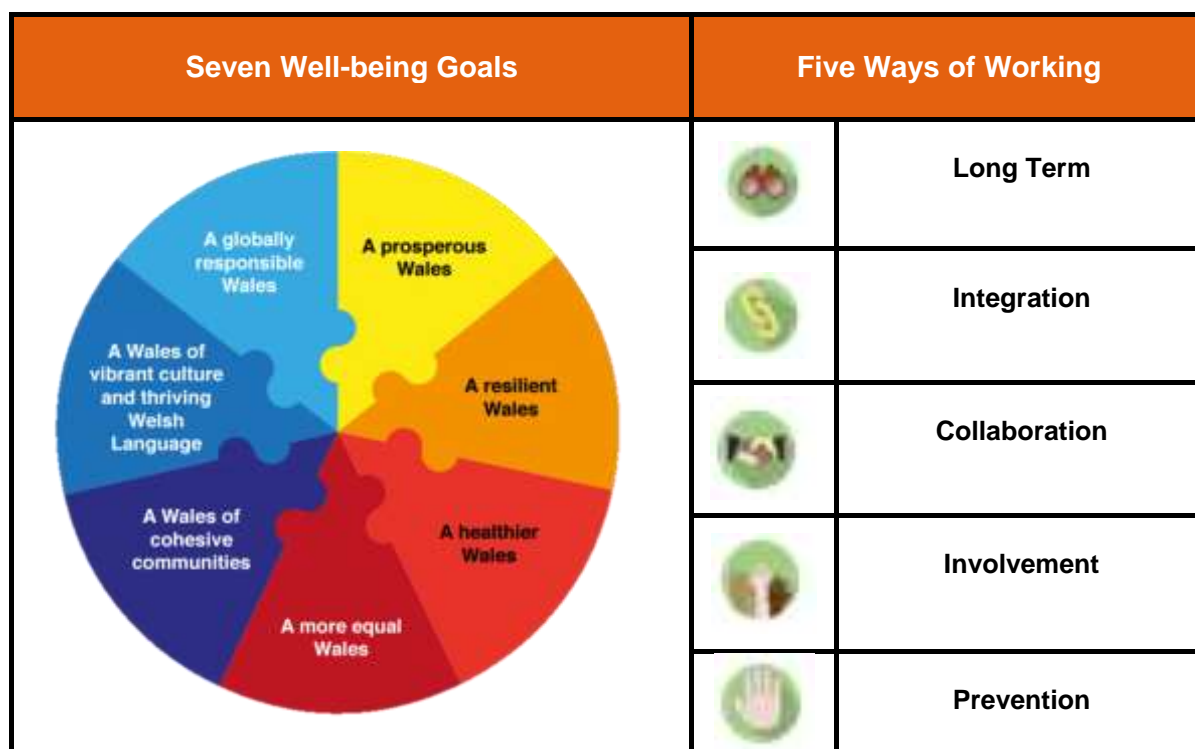
Relevant national, Welsh and Flintshire based guidance has been considered and adhered to as part of this IIA. Where relevant, this has been referenced and reflected in the review of plans, programmes and environmental protection objectives (PPPs) and the IIA Framework in Chapter 3.

1.5 Well-being of Future Generations Act (Wales) 2015

In March 2015, the National Assembly for Wales approved the Well-being of Future Generations (Wales) Act 2015, helping place Wales on a more sustainable path towards achieving well-being. The Act is about improving the social, economic, environmental and cultural well-being of Wales developed around the principle of sustainable development. It gives a legally-binding common purpose – the seven well-being goals – for national government, local government, local health boards and other specified public bodies. It details with the ways in which specified public bodies must work, and work together to improve the well-being of Wales.

The Act provided for better decision-making by ensuring that those public bodies take account of the long term, help to prevent problems occurring or getting worse, take an integrated and collaborative approach, and considers and involves people of all ages. Together, the seven well-being goals and five ways of working provided by the Act (Figure 1-3) are designed to support and deliver a public service that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Figure 1-3 Well-being goals & 5 Ways of Working



Each of these goals is described in detail within the legislation. The LDP will have an important role in contributing to the achievement of well-being goals over the 20-year period, and the approach to appraisal will help us understand where the LDP can maximise that contribution.

1.6 Integrated Impact Assessment

The term Integrated Impact Assessment can be used to describe the process of covering more than one type of impact assessment into a single process. Integrating different types of impact assessment into a single process can improve efficiencies in both the assessment itself, as many of the issues covered in the different forms of assessment overlap, as well as simplifying outcomes and recommendations for policy makers. Where more detail on certain issues is required or necessary, this can be undertaken and included within the IIA. This approach has been adopted throughout Wales, taking an integrated approach to assessing the

impacts of these strategies, incorporating the requirements of SEA, SA, Health Impact Assessment (HIA), and Equality Impact Assessment (EqIA). The Welsh Language and Children's Rights assessments, as well as those goals considered within the Well-being of Future Generations Act have been reviewed against the IIA Framework to ensure such goals are captured. This IIA draws together the following impact assessments:

- Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA); and
- Habitats Regulations Assessment (HRA Screening will be undertaken as a parallel process, the findings of which will be integrated into the IIA as appropriate).
- Welsh Language, Equalities and Health Impact Assessments

Equalities Impact Assessment - Under the equality duty (set out in Section 149 of the Equality Act 2010), public authorities must have 'due regard' to the need to eliminate unlawful discrimination, harassment and victimisation as well as to advance equality of opportunity and foster good relations between people who share a protected characteristic and those who do not.

Welsh Language Impact Assessment - The Welsh Language (Wales) Measure 2011 and Standards require the following effects to be considered:

- what effect, if any, the LDP would have on the opportunities for other persons to use the Welsh language, or treating the Welsh language no less favourably than the English language;
- how the LDP could have positive effects or increased positive effects on opportunities for other persons to use the Welsh language, or treating the Welsh language no less favourably than the English language;
- how the LDP could be developed so that it doesn't have or reduces any adverse effects which the policy decision would have on opportunities for other persons to use the Welsh language, or treating the Welsh language no less favourably than the English language.

Health Impact Assessment (HIA) is not a statutory requirement in Wales but the Welsh Government increasingly regards it as best practice to consider health and well-being specifically in non-health domains.

It is a systematic, objective and yet flexible and practical way of assessing both the potential positive and negative impacts of a proposal on health and well-being and suggests ways in which opportunities for health gain can be maximized and risks to health minimised. Importantly, HIA highlights the uneven way in which health impacts may be distributed across a population and seeks to address existing health inequalities and inequities as well as avoid the creation of new ones.

1.7 An Integrated LDP Preparation Process

Planning Policy Wales stresses the presumption in favour of sustainable development and planning authorities should ensure that the plan and its proposals deliver sustainable development. Planning Policy Wales (PPW – Development Plan chapter) contains important information on the LDP preparation process which is fully integrated with the SA (see Figure 2.1), emphasising the need to demonstrate that the LDP is sound by ensuring that it reflects sustainable development objectives. This is echoed within the LDP manual by ensuring that the LDP system aims to prepare and monitor *'the LDP through a process that integrates Sustainability Appraisal... with plan making'*.

Sustainability appraisal, incorporating SEA, should be an integral element of every stage of plan preparation including evidence gathering, identifying issues, setting objectives, evaluating options and consultation.

1.8 Sustainability Appraisal and Strategic Environmental Assessment

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 LDPs are subject to SA, under Planning Policy Wales (edition 9), November 2016 and the Planning and Compulsory Purchase Act 2004 (Chapter 7). This Act stipulates that the SA must comply with the requirements of the SEA Directive which was transposed directly into UK law through the SEA Regulations.

SEA is a systemic process for evaluating the environmental consequences of plans and programmes to ensure that environmental issues are integrated and assessed at the earliest opportunity in the decision-making process. Article 1 of the SEA Directive states that the aim 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 and programmes with a view to promoting sustainable development.'

It is possible to combine the processes of SEA and SA, as they share a number of similarities. The IIA promotes a combined process (i.e. a process which assesses social, economic and environmental effects) and this is the approach that has been adopted here. Whilst there are formalised approaches for both SA and SEA, only SEA has a legal obligation to perform certain activities. These legal obligations have been and will continue to be adhered to throughout the IIA for the new LDP.

1.9 Habitats Regulations Assessment

European Council Directive 92/43/EEC on the Conservation of natural habitats and of wild flora and fauna (the 'Habitats Directive') requires that any plan or programme likely to have a significant impact upon a Natura 2000 site (Special Area of Conservation (SAC) and Special Protection Area (SPA), which is not directly concerned with the management of the site for nature conservation, must be subject to an Appropriate Assessment. The overarching process is referred to as Habitats Regulations Assessment (HRA). In addition it is a matter of law that candidate SACs (cSACs), Sites of Community Importance (SCI), Ramsar sites and potential SPAs (pSPAs) are also considered in this process.

A HRA screening exercise has been undertaken to determine if they (either in isolation and/or in combination with other plans or projects) would generate an adverse impact upon the integrity of a Natura 2000 site, in terms of its conservation objectives and qualifying interests. This process will be documented in a Screening Report that will be submitted to Natural Resources Wales for approval.

This is a parallel process to the IIA process and will be reported separately. However, its findings will be relevant to the IIA and *vice versa* so the two processes will need to interact. The PPW¹ states that, *'the HRA should be programmed to fit in with existing plan-making procedures, including the SEA, wherever possible, but the appraisal should be clearly identified and kept distinct from that of the SA/SEA.'* The findings of the HRA screening exercise have been considered in this IIA Report where relevant. The HRA screening exercise, in the form of a Report, is submitted alongside this IIA and LDP.

1.10 Consultation

1.10.1 SA Workshop

A scoping workshop was held in January 2015. The SA Objectives were developed using the review of other relevant plans, programmes and environmental objectives, the baseline data, key issue and opportunities and feedback from the workshop. The objectives have been assessed for their internal compatibility and no significant issues have been identified.

1.10.2 Formal Consultation

In accordance with regulation 12(5) of the SEA Regulations, the Scoping Report was consulted upon for a five-week period, commencing in September 2015. The statutory SEA bodies consulted were:

- Natural Resources Wales;
- Cadw; and,
- The Welsh Government.

1.10.3 Additional Consultation

The Council published two key documents during 2016 entitled:

¹ <http://gov.wales/docs/desh/publications/161117planning-policy-wales-edition-9-en.pdf>

- Key Messages Document – this identified the key messages emerging from an assessment of the relevant evidence and translated these into a draft vision and set of objectives. This document also presented options for reviewing the Sustainable Settlement Hierarchy;
- Draft LDP Strategic Options – this presented a range of options for how much development the Plan should make provision for, as well as options for different ways to distribute that growth around the County.

The representations received during consultation on these documents have been assessed, and have formed a consensus view that has shaped the selection of the Preferred Strategy. A summary of the representations received on the Key Messages document is available in the Key Messages section of the Council's website whilst the comments on the Strategic Options document is available in a separate Background Paper, as part of the consultation documents on the Preferred Strategy.

Prior to the IIA of the Preferred Strategy, the IIA Framework was revisited to ensure that it took into account recent changes as adopted by the Welsh Government, especially given the Scoping Report was written in 2015. The IIA Framework was amended to ensure that objectives around cohesive communities, the Welsh language, health and equality for Flintshire's population were included and this framework was sent to statutory consultees in August 2017.

This IIA Report presents the IIA process so far and documents the findings and recommendations of the assessment. It will be used as a consultation document and issued to statutory bodies and stakeholders for comments. It will also be made available to the public.

2 The IIA Process

2.1 Stages in the IIA Process

The Wales Local Development Plan Manual (2015) as well as the ODPM's *A Practical Guide to the SEA Directive* (2005) provides guidance on conducting an SA. This will be followed for the purposes of the IIA. The five main stages in conducting an IIA are defined as:

- Stage A - setting the context and objectives, establishing the baseline and deciding on the scope;
- Stage B - developing and refining options and assessing effects;
- Stage C - preparing the Sustainability Appraisal Report;
- Stage D - consulting on the preferred option of the development plan and SA Report; and
- Stage E - monitoring significant effects of implementing the development plan.

Table 2-1 presents the key stages in the SA process. This IIA Report documents the findings of Stages B up to the Preferred Strategy stage. The table also demonstrates how each of the SA (including SEA), HIA, EqlA and HRA assessment processes and stages are linked to each other, as well as to the preparation and development of the LDP Preferred Strategy.

Table 2-1 Stages in the IIA Process

LDP Stage	Sustainability Appraisal including Strategic Environmental Assessment		Habitats Regulation Assessment	Health Impact Assessment	Equalities Impact Assessment	Where covered in this IIA Report
Evidence Gathering and Objectives	A. Setting the context and objectives, establishing the baseline and deciding on the scope	Identify related plans/programmes		Identify health related plans/programmes (as part of IIA) linked into local Joint Strategic Needs Assessments	Review of relevant policies and strategies	Completed in 2015 and revisited as part of this report – Appendix A
		Identify environmental protection objectives		Derivation of health - related themes	Derivation of equality-related themes	Completed in 2015 and revisited as part of this report – Appendix A
		Baseline data and likely future trends	Identify all European sites within and up to 20km from the Flintshire area	Gather baseline data relating to health (as part of IIA)	Baseline data and likely future trends	Completed in 2015 and revisited as part of this report – Appendix B
		Identify sustainability issues and opportunities	Contact Natural Resources Wales for details of all European sites (including conservation objectives) and consultation purposes	Identify health specific issues and relevant health determinants (as part of IIA)	Identify equalities specific issues	Completed in 2015 and revisited as part of this report – Appendix B
		Develop objectives, indicators and targets (Assessment Framework)	Liaise with IIA team to ensure the Assessment Framework covers European sites appropriately	Ensure inclusion of health specific objectives, indicators and targets in IIA Assessment Framework	Ensure inclusion of equalities specific objectives, indicators and targets in IIA Assessment Framework	Completed in 2015 and revisited as part of rescoping in August 2017
		Prepare IIA Scoping Report, incorporating HRA and HIA	HRA information incorporated in IIA Scoping Report	HIA information incorporated in IIA Scoping Report.	EqIA information incorporated in IIA Scoping Report.	Completed in 2015 and revisited as part of rescoping in August 2017

LDP Stage	Sustainability Appraisal including Strategic Environmental Assessment		Habitats Regulation Assessment	Health Impact Assessment	Equalities Impact Assessment	Where covered in this IIA Report
		Consult on the scope of the SA including HIA, EqIA and HRA (5 weeks)	<i>Consultation as part of IIA Scoping Report consultation including consultation with Natural Resources Wales</i>	<i>Consultation as part of IIA Scoping Report consultation.</i>	<i>Consultation as part of IIA Scoping Report consultation.</i>	Completed in 2015 and revisited as part of rescoping in August 2017
	Review of scoping consultation responses and preparation of Final Scoping Report to inform next stage.					Completed
Strategic Options and Preferred Strategy	B1/B2. Developing, refining and appraising strategic options, policy options and preferred policy options.	Assess objectives against the Assessment Framework		HIA effects evaluated through IIA Framework – including mitigation	EqIA effects evaluated through IIA Framework	Completed in October 2016
		Develop, refine and appraise strategic options	Consider HRA implications of the options.			Completed in October 2016
		Evaluate/select preferred policy options				Completed in October 2016
	Prepare Initial IIA Report on Strategic Options					Completed in October 2016
	Consultation on Initial IIA Report (non-statutory)					Completed in October 2016
	B3/B4. Assessing the effects of the Local Plan Preferred Strategy	Predict and assess effects of preferred options taken forward		HIA effects evaluated through IIA Framework – including mitigation	EqIA effects evaluated through IIA Framework	This report and Appendix D
		Proposed mitigation measures				This report and Appendix D
		Propose monitoring programme	Monitoring as part of IIA	Monitoring as part of IIA	Monitoring as part of IIA	This report – Chapter 8
	Prepare Further Interim IIA Report on Preferred Options					This Report
	B3/B4. Assessing the effects of the Deposit Local	Predict and assess effects of preferred options taken forward		HIA effects evaluated through IIA Framework – including mitigation	EqIA effects evaluated through IIA Framework	Stage to be completed

LDP Stage	Sustainability Appraisal including Strategic Environmental Assessment		Habitats Regulation Assessment	Health Impact Assessment	Equalities Impact Assessment	Where covered in this IIA Report
	Plan including detailed policies and allocations	Proposed mitigation measures				Stage to be completed
		Propose monitoring programme	Monitoring as part of IIA	Monitoring as part of IIA	Monitoring as part of IIA	Stage to be completed
LDP Preparation and Deposit	C. Prepare IIA Report		HRA Screening of draft Local Plan. HRA Screening Report produced separately and <i>sent to Natural Resources Wales for agreement of findings.</i>	HIA documented in IIA Report, documented through appropriate IIA objectives	EqIA documented in IIA Report, documented through appropriate IIA objectives	Stage to be completed
	D. Consultation on the IIA Report		As above.	<i>HIA Consultation included in IIA Report consultation</i>	<i>EqIA Consultation included in IIA Report consultation</i>	Stage to be completed
	D. Prepare a supplementary or revised IIA Report if necessary	Assess significant changes	Prepare updated HRA Report following Natural Resources Wales comments (if necessary).	HIA assessment of significant changes undertaken as part of IIA and options around mitigation or reduction of effect identified	EqIA assessment of significant changes undertaken as part of IIA	Stage to be completed
		Prepare supplementary or revised IIA Report				Stage to be completed
	Submission Examination and Adoption	D. SA Statement				

3 Stage A: Setting the Context and Objectives, Establishing the Baseline and Deciding on the Scope

3.1 Introduction

Setting the context and objectives as well as establishing the baseline and scope was discussed as part of Stage A of the IIA Process. The following section describes Stage A, as documented in the Scoping Report. Consultation comments from the Scoping Report consultation in January 2015 have been reflected. The IIA Framework was amended in August 2017 to ensure that objectives around cohesive communities, the Welsh language, health and equality for Flintshire's population were included and this framework was sent to statutory consultees. Comments from those consultees have been incorporated

3.2 Spatial Scope

The proposed study area for the IIA of the Local Plan is shown in Figure 1-1 though the assessment will also take into account any transboundary impacts adjacent to Flintshire.

3.3 Aspects of the LDP to be assessed and how

The framework of policies and proposals contained within the LDP will seek to regulate and control the development and use of land and to provide the basis for consistent and transparent decision making on individual planning applications. As options emerge, each of its components will be assessed to determine sustainability performance and to provide recommendations for sustainability improvements. The LDP includes policies and proposals, grouped under the following headings, as per the LDP Preferred Strategy:

1. Creating Sustainable Places and Communities
 - a. STR1: Strategic Approach
 - b. STR2: The Location of Development
 - c. STR3: Strategic Sites
 - d. STR4: Principles of Sustainable Development and Design
 - e. STR5: Transport and Accessibility
 - f. STR6: Services, Facilities and Infrastructure
2. Supporting a Prosperous Economy
 - a. STR7: Economic Development, Enterprise and Employment
 - b. STR8: Employment Land Availability
 - c. STR9: Retail Centres and Development
 - d. STR10: Tourism, Culture and Leisure
3. Meeting Housing Needs
 - a. STR11: Provision of Sustainable Housing Sites
 - b. STR12: Provision for Gypsies and Travellers
4. Valuing the Environment
 - a. STR13: Natural and Built Environment, Green Networks and Infrastructure
 - b. STR14: Climate Change and Environmental Protection
 - c. STR15: Waste Management
 - d. STR16: Strategic Planning for Minerals

The intention has been, throughout the draft Preferred Strategy assessments, to ensure that the process is iterative while maintaining an independent assessment with regular feedback occurring between the plan-makers and the IIA team, as options are developed.

For the options appraisal, the methodology of assessing each element of the plan has remained the same. However, since the last report, the objectives and sub-objectives have changed.

A more detailed assessment of the preferred strategic policies has been undertaken using an assessment matrix.

3.4 Assessment of Alternatives

It is a requirement of the SEA Directive that 'reasonable alternatives' are assessed and, therefore, alternative options have been assessed using the IIA Framework. In accordance with the LDP manual that:

'the sustainability effects (both adverse and beneficial) of each alternative are identified and compared'

Alternatives must be realistic and are likely to emerge from the plan-making process. However, the SEA can encourage further thinking around alternatives, and highlight where environmentally preferable options exist. Alternatives have been a focus for several legal challenges within the UK, and so it is important to ensure reasonable alternatives are meaningfully considered. If there are genuinely no reasonable alternatives to a plan, alternatives should not be artificially generated.

Overarching strategic options were assessed ahead of the drafting of the Pre-Deposit Local Plan and reported on within the Sustainability of Strategic Options (002-UA008628-UE31-01-F). The purpose of the assessment was to determine the sustainability strengths and weaknesses of each option, such that this information would be used by the plan-makers to develop the plan's preferred strategic policies and identify detailed policies. A matrix was used for this assessment enabling the policies and options to be easily compared.

This report documents the second part of Stage B of the SEA process and represents Stage B of the SA Process.

3.5 Temporal Scope

The LDP will set out policies for the period to 2030. This has been used as the temporal scale for the IIA although effects that may last beyond this period will also be identified. This will help to identify whether effects are likely to be permanent (i.e. irreversible at least through the lifetime of the proposed measure/scheme) or temporary.

3.6 Technical Scope

3.6.1 SEA

The SEA Directive and the SEA Regulations require that the 'likely significant' effects on the environment are assessed, considering the following topics and interrelationship between them:

- Population;
- Biodiversity;
- Human health;
- Fauna and flora;
- Soil;
- Water;
- Air;
- Climatic factors;
- Material assets;
- Cultural heritage including architectural and archaeological heritage; and

- Landscape.

The above topics, therefore, form the technical scope of the SEA.

Appendix B contains the full baseline for Flintshire and includes the following headings:

- Population;
- Education;
- Biodiversity, Flora and Fauna;
- Landscape;
- Soils and Geology;
- Water;
- Air Quality and Climate Change;
- Cultural Heritage;
- Minerals and Waste;
- Human Health;
- Local Economy;
- Housing;
- Deprivation and the Living Environment;
- Transportation; and
- Welsh Language.

The SEA Directive requires 'material assets' to be considered within SA. Material assets refer to the stock of valuable assets within a study area and can include many things from valuable landscapes, natural and cultural heritage through to housing stock, schools, hospitals and quality agricultural land. It is considered that the material assets of the area are appropriately covered in the following baseline sections, and consequently will not be repeated as a separate section:

- Biodiversity, Flora and Fauna;
- Soils and Geology;
- Cultural Heritage;
- Landscape;
- Local Economy;
- Housing;
- Education;
- Transportation; and
- Welsh Language.

3.6.2 HIA

The HIA elements of the IIA will seek to assess the Local Plan in terms of its effects on the health of the local community, with wider effects being considered where relevant. This might include, but is not limited to, communities in the surrounding area, incoming residents and people coming in for work. This will encompass the determinants described above, where they relate to land use planning along with other determinants such as income and poverty, housing, employment, the environment, transport, education and access to

services². There will be work developed around mitigating issues that impact negatively on health – physical, mental and emotional.

Within the assessment process, the HIA has been integrated throughout the IIA Framework (see section 3), with health, and impact on health, being considered under all relevant objectives. Most notably, however, the ‘human health’ topic of SEA will be expanded upon, to ensure that relevant baseline data, key sustainability issues and opportunities, objectives and mitigation is identified. Table 2-1 provides further information on how the HIA process will integrate with the IIA process.

3.6.3 EqlA

The EqlA process is designed to ensure that projects, policies and practices do not discriminate or disadvantage people and also to enable consideration of how equality can be improved or promoted. The EqlA will consider the impact of a proposal on relevant groups who share characteristics which are protected under the Equality Act (age, disability, race, faith, gender (including gender reassignment), sexual orientation, pregnancy and maternity, marriage and civil partnership) as well as others considered to be vulnerable within society such as low income groups.

This Initial IIA Report, which integrates the requirements of EqlA, sets out the matters that have been identified as relevant for consideration in the EqlA. The EqlA seeks to identify those groups that may be affected by the proposals, to analyse what the equality impacts are, and what measures are to be applied to policy to minimise or eliminate the adverse impacts. Within the assessment process, the EqlA will be integrated throughout the IIA Framework (see section 3.7), with equalities issues being considered under all relevant objectives. **Table 2-1** provides further information on how the EqlA process will integrate with the IIA process.

3.6.4 HRA

Within Flintshire there are eight sites of international nature importance, listed in Table 3-1 and a further 15 sites within 20km of the County, listed in Table 3-2. A HRA screening exercise will be undertaken to determine if they (either in isolation and/or in combination with other plans or projects) would generate an adverse impact upon the integrity of a Natura 2000 site, in terms of its conservation objectives and qualifying interests. This process will be documented in a Screening Report that will be submitted to Natural Resources Wales for approval. This is a parallel process to the IIA process and will be reported separately.

Table 3-1 Statutory sites of international nature importance within Flintshire

Name of Site	Identification Number	Distance from district boundary (approximate km)
The Dee Estuary Ramsar site (England and Wales)	UK11082	Within the County boundary
Dee Estuary / Aber Dyfrdwy SAC	UK0030131	Within the County boundary
The Dee Estuary SPA (England and Wales)	UK9013011	Within the County boundary
Liverpool Bay / Bae Lerpwl (England and Wales) SPA	UK9020294	Within the County boundary
Deeside and Buckley Newt sites SAC	UK0030132	Within the County boundary
Alyn Valley Woods / Coedwigoedd Dyffryn Alun SAC	UK0030078	Within the County boundary

² Health Impact Assessment: A Practical Guide 2007 NSW Health

Name of Site	Identification Number	Distance from district boundary (approximate km)
Halkyn Mountain / Mynydd Helygain SAC	UK0030163	Within the County boundary
River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (England and Wales) SAC	UK0030252	Within the County boundary

Table 3-2 Statutory sites of international nature importance within 20km of Flintshire boundary

Name of Site	Identification Number	Distance from district boundary (approximate km)
Mersey Estuary Ramsar site	UK11041	9 km northeast
Mersey Estuary SPA	UK9005131	9 km northeast
Mersey Narrows & North Wirral Foreshore Ramsar site	UK11042	14 km northeast
Mersey Narrows & North Wirral Foreshore SPA	UK9020287	14 km northeast
Ribble & Alt Estuaries Ramsar Site	UK11057	20 km north
Ribble & Alt Estuaries SPA	UK9005103	20 km north
Midland Meres & Mosses Phase 2 Ramsar site	UK11080	5 km southeast
Midland Meres & Mosses - Phase 1 Ramsar site	UK11043	20 km southeast
Oak Mere SAC	UK0012970	18 km east
Sefton Coast SAC	UK0013076	19 km north
Coedwigoedd Dyffryn Elwy / Elwy Valley Woods	UK0030146	7 km west
Johnstown Newt Sites SAC	UK0030173	7 km south
Llwyn SAC	UK0030185	5 km west
Berwyn a Mynyddoedd De Clwyd / Berwyn and South Clwyd Mountains SAC	UK0012926	adjacent
Berwyn SPA	UK9013111	14 km southwest

3.7 Review of Relevant Plans, Programmes and Environmental Objectives

3.7.1 Introduction

The box below stipulates the SEA Directive requirements for this stage of the process.

Box 1: SEA Directive Requirements for the Review of Plans Programmes and Environmental Protection Objectives

'an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes' (Annex 1 (a)).

'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 1 (e))

A review of other plans and programmes that may affect the preparation of the Local Plan was undertaken in order to contribute to the development of both the IIA and the Local Plan. This included:

- Identification of any external social, environmental or economic objectives, indicators or targets that should be reflected in the IIA process.
- Identification of any baseline data relevant to the IIA.
- Identification of any external factors that might influence the preparation of the plan, for example sustainability issues.
- Identification of any external objectives or aims that would contribute positively to the development of the Local Plan.
- Determining whether there are clear potential conflicts or challenges between other identified plans, programmes or sustainability objectives and the Local Plan.

The review included documents prepared at international, national, regional and local scale. A brief summary of the documents reviewed and the main findings are summarised in Tables 3-2 and 3-3. Further details are presented in Appendix A.

Table 3-2 Review of Plans, Policies and Programmes

International and European Level	
The Johannesburg Declaration on Sustainable Development (2002)	
The Kyoto Protocol on Climate Change (1997)	
UN Framework Convention on Climate Change (1994)	
Convention on Biological Diversity (1992)	
Rio Declaration on Environment and Development, Statement of Principles for the Sustainable Management of Forests and Agenda 21 (1992)	
Aarhus Convention (1998)	
The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) (1979)	
Convention on the Agreement on the Conservation of African – Eurasian Migratory Waterbirds (1995) The Bonn Convention	
Public Sector Information Directive (PSI) 2003/98/EC on the Re-Use of Public Information (2003)	
Ramsar Convention on Wetlands (1971)	
Environmental Liability Directive 2004/35/EC	
European Spatial Development Perspective (97/150/EC) (1999)	
Ambient Air Quality and Cleaner Air for Europe Directive 2008/50/EC (2008)	

International and European Level

EU Habitats Directive (92/43/EEC)

EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC) (1992)

The Birds Directive 2009/147/EC (2009)

EU Landfill Directive (99/31/EC) (1999)

EU Water Framework Directive (00/60/EC) (2000)

2006/44/EC Fish Directive (codified version) (2006)

Environmental Liability Directive (Directive 2004/35/EC)

EU Flood Directive (2007/60/EC)

EU Biodiversity Strategy to 2020 (2011)

EU Seventh Environmental Action Plan (2013 - 2020)

EU Soil Framework Directive (2006)

European Landscape Convention ratified (2006)

Energy Performance in Buildings Directive 2002/91/EEC (2002)

European Nitrates Directive 91/676/EEC (1991)

EU Groundwater Daughter Directive 2006/118/EC

EU Directive 2009/31/EC amending Directive 85/337/EEC on Environmental Impact Assessment

Environmental Impact Assessment Directive 2014/52/EU amending Directive 2011/92/EU

EU Rural Development Policy 2007-2013

European Common Agricultural Policy (Reform 2003)

European Employment Strategy (2002)

World Summit on Sustainable Development (2002)

Renewable Energy Coalition (2002)

Intelligent Energy Europe 2007-2013

Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)

Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973)

Convention on the Protection of Underwater Cultural Heritage United Nations (1979)

Geneva Convention on Long Range Transboundary Air Pollution

UN convention on the Rights of the Child 1989

International and European Level

Basel Convention (1989)

The Rio Convention on Biodiversity(1992)

Stockholm Convention on Persistent Organic Pollutants (2001)

The Copenhagen Accord (2009)

Cancun Adaptation Framework (2010)

UN Paris Agreement (2016)

Committee on the Rights of the Child Recommendations report (2016)

Guidelines for Community Noise 1999

Children's Environment and Health Action Plan for Europe (2004)

Convention on the Conservation of European Wildlife and Natural Habitats - The Bern Convention (1981)

European Convention on the Protection of the Archaeological Heritage (1992)

The Urban Waste Water Directive 91/271/EEC (1991)

The Drinking Water Directive 98/83/EC (1998)

National Emissions Ceiling Directive 2001/81/EC (2001)

Mineral Waste Directive 2006/21/EC (2002)

Environmental Noise Directive (END) 2002/49/EC (2002)

EU Thematic Strategy on Air Quality (2005)

European Thematic Strategy on Soil Protection European Commission (2006)

The Bathing Waters Directive 2006/7/EC (2006)

Sustainable Development Strategy (2006)

Together for Health - A Strategic Approach for the EU 2008-2013 (2007)

The Integrated Climate and Energy Package (2007)

Air Quality Framework Fourth Daughter Directive 2004/107/EC

Waste Framework Directive 2008/98/EC (2008)

Environmental Quality Standards Directive 2008/105/EC (2008)

Marine Strategy Framework Directive 2008/56/EC (2008)

Review of the EU Sustainable Development Strategy European Commission (2009)

Renewable Energy Directive 2009/8/EC (2009)

International and European Level

Industrial Emissions Directive (integrated pollution prevention and control) 2010/75/EU (2010)

Europe 2020: A strategy for smart, sustainable and inclusive growth (2010)

Energy 2020 - A Strategy for Competitive, Sustainable and Secure Energy (2010)

A Roadmap for Moving to a Competitive Low Carbon Economy in 2050 (2011)

Roadmap to a Single European Transport Area (2011)

Energy Efficiency Directive (2012/27/EU) (2012)

Strategy on Adaptation to Climate Change (2013)

Towards Social Investment for Growth and Cohesion 2014-2020 (2013)

Seventh Environmental Action Programme to 2020 'Living well, within the limits of our planet' (2013)

2030 Policy Framework for Climate and Energy (2014)

SEA Directive (2001/42/EC) (2001)

Regional and National Level

Wales – A better Country – The Strategic agenda of WAG September 2003

UK Sustainable Development Strategy – 'Securing the Future' 2005

The Future of our Farming (Defra) – July 2009

Planning Policy Wales (Edition 9) – November 2016

A Living Wales – a new framework for our environment, our countryside and our seas Consultation – September 2010

Welsh Assembly Government Play Policy 2002 and Implementation Plan - February 2006

Welsh in Education Strategic Plan 2014-2017

Child Poverty Strategy for Wales (2015)

Getting On Together - a Community Cohesion Strategy for Wales – November 2009

Capturing the Potential: A Green Jobs Strategy for Wales – July 2009

Low Carbon Revolution – the Welsh Government Energy Policy Statement (2010)

A Climate Change Strategy for Wales – October 2010

UK National Energy Efficiency Action Plan (2014)

One Wales, One Planet, The Sustainable Development Scheme of the Welsh Assembly Government – May 2009

One Future, Different Paths – The UK's Shared framework for Sustainable Development (2005)

Regional and National Level

People, Places, Futures – The Wales Spatial Plan Update Consultation (2008)

A Winning Wales – The National Economic Strategy of the Welsh Assembly Government (2002)

Technical Advice Notes (TANs) – TAN1- Joint Housing Land Availability Studies (2015), TAN2 – Planning and Affordable Housing (2006), TAN3 – Simplified Planning Zones (1996), TAN4 - Retailing and Commercial Development (2016); TAN 5 Nature Conservation and Planning (2009), TAN6 – Planning for Sustainable Rural Communities (2010), TAN7 – Outdoor Advertisement Control (1996), TAN8 – Renewable Energy (2005), TAN10 – Tree Preservation Orders (1997), TAN11 – Noise (1997), TAN12 – Design (2016), TAN13 – Tourism (1997), TAN14 – Coastal Planning (1998), TAN15 – Development and Flood Risk (2004), TAN16 – Sport, Recreation and Open Space (2009), TAN18 – Transport (2007), TAN19 – Telecommunications (2002), TAN20 – Planning and the Welsh Language (2013), TAN21 – Waste (2014); TAN 23 Economic Development (2014); TAN24 – The Historic Environment (2017)

Minerals TAN 1 – Aggregates (2004)

Minerals TAN 2 – Coal (2009)

Mineral Planning Guidance Notes 2, 4, 5, 7, 8, 9, 10, 11, 12, 14

Regional Technical Statement 1st Review (2014)

North Wales Regional Aggregates Working Party Annual Monitoring Report (2015)

‘Improving Lives and Communities – Homes in Wales’ – April 2010

Living Well – Living Independent Lives (2009)

The Strategy for Older People in Wales 2013- 2023

Food for Wales, Food From Wales 2010:2020 (October 2010 Consultation) and Local Sourcing Action Plan (2009)

Conserving Biodiversity – The UK Approach - October 2007

UK Biodiversity Action Plan (1994)

Environment Agency, Water Resources Strategy for England and Wales - March 2009

Environment Agency, GP3 (Groundwater Protection Policy and Practice) (2013)

Cultural Tourism Strategy for Wales 2003 and Review (2007)

Wales Coastal Tourism Strategy (2008)

Partnership for Growth: The Welsh Government Strategy for Tourism 2013 – 2020 (2013)

Sustainable Tourism Framework (2007)

Countryside Rights of Way Act (2000)

Environment Strategy for Wales and Action Plans (2006)

Towards Zero Waste - the Overarching Waste Strategy Document for Wales (2010)

Regional and National Level

North Wales Waste Monitoring Report (2014/15)

Welsh Assembly Government - Strategic Policy Position Statement on Water (2011)

National Transport Plan – March 2010 and Prioritised National Transport Plan - December 2011

A Walking and Cycling Action Plan for Wales 2008-2013 – December 2008

Woodlands for Wales - March 2009 and Action Plan 2010-2015, March 2011

Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)

Vibrant and Viable Places New Regeneration Framework (2013)

North Wales Regional Transport Plan (2009)

North Wales Joint Local Transport Plan (2014)

North Wales Regional Employment Land Strategy (2014)

Well Being of Future Generations (Wales) Act(2015)

The Department for Business, Innovation and Skills (BIS) (2010) Local Growth: Realising Every Place's Potential (Local Growth White Paper)

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Our Seas – a Shared Resource: High Level Marine Objectives (2009)

Air Pollution: Action in a Changing Climate (2010)

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West Cheshire – North East Wales Sub Regional Spatial Strategy (2006)

Wales Transport Strategy (2008)

National Transport Finance Plan (2015)

Ozone-Depleting Substances Regulations (2015)

National Infrastructure Plan (2014)

Children's Commissions for Wales (2016) Annual Report 15-16

Committee on Climate Change (2017) UK Climate Change Risk Assessment 2017 Evidence Report, Summary for Wales

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Historic Environment (Wales) Act 2016

Regional and National Level

Public Health (Wales) Bill (2016)

Water Strategy Wales (2015) Welsh Government

Local Level

Flintshire Local Biodiversity Action Plan (2000)

Flintshire Local Flood Risk Management Strategy (2013)

Flintshire Rights of Way Improvement Plan 2008-2018

Flintshire Improvement Plan 2012-2017

Flintshire Waste Management Strategy 2009-2025

Flintshire Regeneration Strategy 2009-2020

Flintshire Local Housing Strategy 2012-2017

Flintshire Contaminated Land Inspection Strategy (2013)

Flint Strategy and Masterplan 2021 (2012)

Single Integrated Plan for Flintshire 2013-2017

Good Health, Good Care in Flintshire 2011-2014

Strategic Equality Plan 2016-2020

Flintshire Tourism Strategy 2008-2013

Flintshire Joint Housing Land Availability Study (2012)

Alyn Valley Woods SAC Management Plan (2008)

Berwyn and South Clwyd Mountains SAC Management Plan (2008)

Dee Estuary SAC Management Plan

Deeside and Buckley Newt Sites SAC Management Plan (2008)

Halkyn Mountains SAC Management Plan (2008)

River Dee and Bala Lake SAC Management Plan (2008)

Assessment of Local Well-being for Flintshire (2017)

The Deeside Plan (2017)

Annual Progress Report (2016) Air Quality in Flintshire

Welsh Water Water Resources Management Plan 2015 - 2040

Local Level

Dee Valley Water Resources Management Plan to 2034/35

3.7.2 Key Results from the Review

Environmental, social and economic objectives and issues identified in the review of plans, programmes and environmental protection objectives (PPPs) of relevance to the IIA were used to generate a series of common themes. Appendix B presents a summary of how the identification of common themes relates to each of the PPPs reviewed. How these themes relate to the relevant assessment processes is presented in Table 3-3. The results of this assessment have been used to inform the development of the draft IIA Framework. How the resulting draft Objectives relate to the identified themes is also shown in Table 3-3.

Table 3-3 Summary results of the review of Plans, Policies and Programmes

Common theme	Relevance to SEA, HIA, EqIA and HRA	Relevance to draft IIA Objective
Environmental		
Protect and enhance biodiversity, habitats and species which are internationally, nationally and locally important	HRA; SEA: Biodiversity, Flora, Fauna, Population, Material Assets, Climatic Factors, Soil, Water	10
Reduce air pollution and ensure improvements in air quality	SEA: Air, Climatic Factors, Human Health, Population, Material Assets; HIA, EqIA	15
Reduce the risk of flooding and/or coastal erosion by assessing developments against the precautionary principle, and promote protection of floodplains or areas of managed realignment from inappropriate development	SEA: Human Health, Population, Climatic Factors, Water, Material Assets; HIA; EqIA	12, 14
Encourage the use of more sustainable forms of transport and development locations, reducing the need to travel by car	SEA: Climatic Factors, Air, Material Assets, Population	5
Address the causes of climate change and promote the reduction of greenhouse gas emissions	SEA: Air, Climatic Factors, Human Health, Population, Material Assets; HIA, EqIA	15
Minimise waste generation and landfill, and increase levels of reuse and recycling to achieve more sustainable waste management	SEA: Material Assets, Population, Landscape	17
Increase energy efficiency and require the use of renewable energy resources	SEA: Air, Climatic Factors, Human Health, Population, Material Assets; HIA, EqIA	16
Ensure sustainable use of natural resources and promote sustainable design in new development	HRA; SEA: Biodiversity, Flora, Fauna, Population, Material Assets, Climatic Factors, Soil, Water	17
To conserve soil resources and maintain their quality	SEA: Material Assets, Population, Landscape	10, 17
Protect and enhance the local distinctiveness and the historic environment and its setting	SEA: Population, Human Health, Material Assets, heritage; HIA; EqIA	11, 12

Common theme	Relevance to SEA, HIA, EqlA and HRA	Relevance to draft IIA Objective
Social		
Improve accessibility and transport links to basic goods and services from residential areas	SEA: Population, Human Health, Material Assets, Air, Noise, Climatic Factors; HIA; EqlA	4, 5
Improve the health and wellbeing of the population and reduce health inequalities	SEA: Human Health, Population, Landscape; HIA; EqlA	3
Promote and protect the Welsh Language	Population, heritage	18
Raise educational attainment to help improve opportunities for life	SEA: Population, Human Health; HIA; EqlA	2
Improve access to good quality affordable housing to ensure that everyone has the opportunity to live in a decent affordable home	SEA: Population, Human Health, Material Assets; HIA; EqlA	4
Reduce levels of crime and fear of crime and promote safer neighbourhoods	SEA: Population, Human Health; HIA; EqlA	1
Create sustainable and balanced communities	SEA: Human Health, Population; HIA; EqlA	3, 4, 6, 7, 8, 9
Economic		
Promote quality employment opportunities	SEA: Population, Human Health, Material Assets; HIA; EqlA	8
Promote sustainable economic growth, diversity and business competitiveness	SEA: Population, Human Health, Material Assets; HIA; EqlA	7, 9
Establish a strong tourist economy, sensitively capitalising on environmental, heritage, and leisure assets and ensuring the benefits are experienced locally	SEA: Population, Human Health, Material Assets; HIA; EqlA	7, 11, 12
Improve the vitality and vibrancy of town centres	SEA: Population, Human Health, Material Assets; HIA; EqlA	7

3.8 The Sustainability Baseline and Key Sustainability Issues

3.8.1 Introduction

Box 2 defines the SEA Directive requirements for this element of the process.

‘the environmental characteristics of areas likely to be significantly affected’ (Annex 1 (c))

‘any existing environmental problems which are relevant to the plan or programme, including, in particular, those relating to any areas of particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EC’ (Annex 1 (d)).

3.8.2 Methodology

Characterising the environmental and sustainability baseline, issues and context is an essential part of developing the IIA Framework. It comprises the following key elements:

- Characterising the current state of the environment within Flintshire area including social and economic aspects; and
- Using this information to identify existing problems and opportunities that could be considered in the Local Development Plan.

The environmental, social and economic baseline was characterised through the following methods:

- Review of relevant local, regional and national plans, strategies and programmes;
- Data research based around a series of baseline indicators developed from the SEA Directive topics (biodiversity, population, human health, flora, fauna, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage and landscape), Flintshire Draft LDP Preferred Strategy, and the data available for Flintshire and Wales. This encompassed data relating to HRA. Data was also collated for additional socio-economic topic areas relating to HIA and EqIA including deprivation, housing and employment to ensure that a broad range of environmental, social and economic issues were considered; and
- The results of the scoping workshop with stakeholders in January 2015.

The collation of baseline data also enabled the identification of key sustainability issues and opportunities affecting the area. This baseline has been updated as part of the assessment of the Preferred Strategy where required.

Appendix B summarises the key baseline trends across the area. Each section is subdivided to present the following:

- The baseline indicators that have been used (some are also contextual indicators and may not actually form part of the IIA Framework).
- Descriptive text, graphs and statistics about the County.
- Key data gaps.

Appendix B also provides a summary of how the identified key sustainability issues and opportunities might be addressed in the LDP. Sustainability issues and opportunities identified from the baseline review are summarised in Table 3-3.

3.8.3 Key Sustainability Issues and Opportunities

Table 3-4 presents a summary of the key sustainability issues and opportunities for Flintshire.

Table 3-4 Key Sustainability Issues and Opportunities

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
Population	<ul style="list-style-type: none"> Pressures associated with an increasingly ageing population in Flintshire are likely to cause issues across the County, including: <ul style="list-style-type: none"> Pressure on health services to provide adequate care; Availability of residential homes to meet the needs of the whole population, including but not limited to, the elderly and adults with a learning disability; and Provision of appropriate services for an older generation (e.g. transport). The fall in the number of young people in Flintshire will bring a number of associated pressures. Principally will be shortages in an active workforce. With fewer younger people, schools may also find it difficult to fill all their places and remain viable. In addition, fewer young people combined with an increase in the older population will mean that there will be less people within the population to provide care, both formally and informally, for older people. Population concentrated along the coast and in NE part of County. Challenges surrounding deprived communities and individuals including unemployment and lack of economic opportunity. 	<ul style="list-style-type: none"> The provision of accessible services should meet local population growth needs. The provision of healthcare and key services to the elderly should be prioritised. Recent investment in new health centres in Buckley and Flint 	<p>SEA: Population, Human Health</p> <p>HIA EqIA</p>	All IIA objectives

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
Education	<ul style="list-style-type: none"> The number of Flintshire residents of working age with no qualifications has been steadily falling over the past decade and is now at a low of 8.2%. This is a trend which has been replicated across Wales and the whole of Great Britain; however the proportion of Flintshire residents is lower than those areas by 2.9% and 1.6% respectively from the latest figures. There is an increased number of LSOAs which in the bottom 10% for educational deprivation. The percentage of working age Flintshire residents with a NQF level 4 or above qualification is lower than that of the national average. 	<ul style="list-style-type: none"> Opportunities should be sought to raise the number of working age Flintshire residents with a level 4 or above NQF to, or above, the national average. The number of Flintshire LSOAs in the bottom 10% for Welsh educational deprivation should be reduced. Positive trends in the following should be encouraged: <ul style="list-style-type: none"> Reducing the number of residents without a qualification. Improving secondary school attendance rate. Improving core subject attainment levels. Opportunities should also be sought to specifically address educational disadvantage across the pockets of more deprived areas within the County. 	SEA: Population, Human Health, Material Assets HIA EqIA	2
Biodiversity, Flora and Fauna	<ul style="list-style-type: none"> The distribution of these designated sites can be seen on Figure 1 Ecological Designated Sites of Appendix C. The SACs are distributed across the County, with concentrations around Mold and Rhydymwyn. The Sites of Special Scientific Interest (SSSI) in the County are also reasonably evenly spread. The Estuary is subject to a number of international and national designations. Potential conflict between industrial uses along the coast, particularly the Deeside Industrial Estate and these designations. Fragmentation of habitats (e.g. Buckley Newts SAC). Potential conflict between designated sites and quarrying. 	<ul style="list-style-type: none"> The protection and safeguarding of designated sites and protected species such as Great Crested Newts should be prioritised. In combination effects of development, notably new housing provision should be taken into consideration as required with the HRA. Sites such as the Deeside and Buckley SAC and its protected Great Crested Newts should be protected from developmental impacts. Developers should make design or financial contributions in order to ensure that impacts to designations, species and habitats is minimised. Opportunities should be sought to develop accessible greenspaces. 	SEA: Biodiversity, Flora, Fauna, Population, Soil, Water, Air, Climatic Factors, Landscape HIA	10

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
	<ul style="list-style-type: none"> Gathering Grounds Woods Local Nature Reserve (LNR) is the only LNR within Flintshire. There is potential for impacts to protected species as a result of an increasing population and the resulting development required to meet population needs. There is also potential for indirect effects to species as a result of an increasing population and the resulting development required to meet population needs. There are variations across the County in the ability of residents to access green spaces. 	<ul style="list-style-type: none"> Opportunities should be sought to ensure that protected species have favourable conservation status and are thriving. Opportunities should be sought to promote habitat connectivity. Enhancement opportunities through restoration of quarries and brownfield sites. 		
Landscape	<ul style="list-style-type: none"> Vulnerability of the valuable townscapes / landscape character of County to, for example, new developments. The valuable townscapes/landscape character of the County, including the Clwydian Range and Dee Valley AONB which is of national landscape importance, should be protected from inappropriate development. 	<ul style="list-style-type: none"> Opportunities should be sought to continue the preservation of the special landscapes in Flintshire; Opportunities should be sought to maintain the important historic aspects of Flintshire; and Access and awareness of the unique aspects of the County should be improved. Part of the Clwydian Range and Dee Valley AONB is situated in the County which must be protected and enhanced where appropriate. 	SEA: Landscape, Material Assets, Cultural Heritage	11, 12
Soils and Geology	<ul style="list-style-type: none"> Flintshire is predominantly rural (80%) and the majority of land is used for agriculture. A number of sand, gravel and limestone quarries operate in the rural areas of Flintshire, including Halkyn Mountain, Cadole and Hendre. The bedrock geology of Flintshire consists of a mixture of bedrock geology types 	<ul style="list-style-type: none"> To protect the County's soils from contamination and continue to remediate areas which were impacted in the past. Brownfield sites should be redeveloped where possible in preference to greenfield sites. 	SEA: Soil, Biodiversity, Human Health, Water HIA	10, 17

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
	<p>predominantly Pennine Lower Coal, Dinantian Rocks (coal measures, carboniferous limestone, brick clay and fireclay) and Millstone Grit. Superficial geology is also of importance, particularly sand and gravel.</p> <ul style="list-style-type: none"> Carboniferous vein minerals: Lead and coal mining has left a legacy of land contamination which gives rise to number of development issues. There are several issues concerned with residual contaminated land. 	<ul style="list-style-type: none"> There is a need to preserve and enhance the RIGS within the County for the future and to enhance access for the public's enjoyment where possible. The Clwydian Range and Dee Valley AONB coincides with large areas underlain by high purity limestone and this offers opportunity for mineral extraction. 		
Water	<ul style="list-style-type: none"> There is an increased threat from surface water flooding due to increased precipitation rates generated by climate change. Fluvial flooding is also a risk within the County. There is a higher likelihood of coastal flooding as a result of rising sea levels due to climate change. There are risks associated with flooding and the mobilisation of contaminants linked to contaminated land within the County. Potential issues with capacity for water supply, abstraction and sewerage associated with bringing forth new development. 	<ul style="list-style-type: none"> Risks of surface and coastal flooding should be mitigated against through measures such as improved coastal defences and increased flood response/awareness. Development within floodplain should be avoided. The area's water quality – particularly in the County's major water region, the River Dee basin area should be improved. 	SEA: Water, Population, Human Health, Soil, Climatic Factors, Landscape HIA EqIA	13, 14
Air Quality	<ul style="list-style-type: none"> Climate change could lead to increased flood events or drought. 	<ul style="list-style-type: none"> Greenhouse gas emissions should be reduced at the rate required to meet local and national targets, helping to mitigate the impacts of climate change. 	SEA: Air, Climatic Factors, Material	15, 16, 17

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
	<ul style="list-style-type: none"> The Flintshire Air Quality Monitoring Report identifies that air quality exceedances have occurred in the past at various locations within the County. Air quality is therefore a matter which should be carefully considered. 	<ul style="list-style-type: none"> The reduction of energy use in Flintshire should be encouraged. The reduction in greenhouse gas emissions should be encouraged. 	Assets, Human Health HIA	
Cultural Heritage	<ul style="list-style-type: none"> Flintshire has a rich cultural heritage and contains many Listed Buildings, Scheduled Monuments, Conservation Areas, and Historic Parks and Gardens. There are risks to heritage assets arising from climate change. There is the potential for undiscovered archaeological remains to exist throughout the County. 133 buildings or structures (13% of all listed buildings within the County) were considered to be at some form of risk in 2011. 	<ul style="list-style-type: none"> Opportunities should be sought to safeguard and promote awareness of the important heritage assets within Flintshire. In addition to safeguarding statutory sites it is important to ensure that non-designated heritage and archaeological resources are also protected. Tourism opportunities: The rich cultural heritage within Flintshire attracts visitors to the area which has a direct economic benefit. 	SEA: Population, Material Assets, Cultural Heritage, Landscape	5, 12
Minerals and Waste	<ul style="list-style-type: none"> Flintshire is underlain by a wealth of important mineral resources. Past mining has left a legacy of instability and contamination. The distribution of important mineral limestone and sand and gravel resources coincides with other designations including the AONB, SAC/SSSIs etc. Flintshire is an important provider of aggregate for the region, particularly crushed rock. Depletion of valuable finite mineral resources. Although mineral extraction is a temporary use of the land it can have a significant impact on 	<ul style="list-style-type: none"> Opportunities should be sought to continue the reduction in waste being sent to landfill. Increase recycling, reuse and composting of waste which would otherwise be landfilled. Mineral assets in the County should be safeguarded for future generations. Parc Adfer is in the process of being constructed which would divert significant volumes of local authority collected waste from landfill across the region and provide a potential source of energy. There are a number of existing quarry sites in the County: The extension of existing sites would have a lesser impact on the environment compared to the 	SEA: Population, Human Health Material Assets, Soil, Air, Landscape, Climatic Factors HIA EqIA	17

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
	<p>surrounding communities, the landscape and the environment.</p> <ul style="list-style-type: none"> ○ 	<p>development of new sites. However, this could place an additional burden on nearby communities, exacerbating existing inequalities.</p>		
Human Health	<ul style="list-style-type: none"> • There are pockets of health deprivation in the County with chronic illness and hypertension and levels of unpaid carers of concern within Flintshire. Greenfield and Oakenholt are within the 10% most deprived LSOAs. • The infant mortality rate has fluctuated considerably since 1998-2010. • Diseases of the circulatory system, including coronary heart disease, remain the main cause of mortality in Flintshire, accounting for 41% of all deaths. • Over 65% of the adult population still do not meet the recommended guidelines for physical activity. • 44% of the population drink above the recommended guidelines and 19% of the adult population are smokers. 	<ul style="list-style-type: none"> • The rise of people who are in good health across the County and the continued reduction of those in poor health should be supported. • Healthcare opportunities should be sought in order to reduce the mortality rate within Flintshire. • Standardised mortality rates are falling and this trend should be continued. • Opportunities should be sought to improve the health of the population by encouraging healthy lifestyles. This could be achieved, for example, through well designed development that promotes physical activity, walking and cycling. • 	<p>SEA: Population, Human Health, Material Assets</p> <p>HIA</p> <p>EqIA</p>	3
Local Economy	<ul style="list-style-type: none"> • There is an increase in JSA Claimants. • There are currently two Flintshire LSOAs in the bottom 10% for employment deprivation as well as income deprivation. They are Hollywell Central and Shotton Higher. • There are also LSOAs around Connah's Quay (Connah's Quay Central 2, Sealand 2 and Connah's Quay Golftyn 4) which are in the bottom 20% for employment and income deprivation. These LSOAs are also in the 	<ul style="list-style-type: none"> • Opportunities should be sought to support the unemployed back into work. • The ageing population is linked to an ageing workforce within the County and training should be extended to the older population so that they can support the likely stretched labour force with an increasingly ageing population. 	<p>SEA: Population, Human Health, Material Assets</p> <p>HIA</p> <p>EqIA</p>	7, 8

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
	<p>bottom 20% for education deprivation therefore there may be barriers to employment linked to education and skills. There has been a fall in the proportion of Flintshire residents economically active which may lead to a labour shortfall.</p>	<ul style="list-style-type: none"> Opportunities should be sought to enhance the County's natural and built assets in order to benefit tourism and support the local economy. Opportunities should be sought to provide employment and business opportunities that meet the current and future needs of the local economy. 		
Housing	<ul style="list-style-type: none"> There is a high percentage of LSOAs in the bottom 10% of housing deprivation for Flintshire. There is a shortage in the amount of affordable housing provided and there is a continuing need for affordable housing in the County. The number of HMOs is rising in the area. 	<ul style="list-style-type: none"> Opportunities should be sought to provide housing that meets local needs including the provision of affordable housing. The Local Plan should seek to lift more LSOAs out of the bottom 10% for housing deprivation. Reliance on existing commitments limits the influence that the plan can have: i.e. Northern Gateway site has outline planning permission so the location of this quantum of housing and certain parameters are fixed. 	SEA: Population, Human Health HIA EqIA	4
Deprivation and Living Environment	<ul style="list-style-type: none"> There is a high percentage of LSOAs in the bottom 10% of physical environment deprivation for Flintshire. Sexual offences and burglary rates have both increased. There are declining town centres within the County e.g. within Flint. There are areas within the County with isolated or deprived communities. 23.9% of LSOAs are in the bottom 10% most deprived making Flintshire the second most 	<ul style="list-style-type: none"> Opportunities should be sought to lift more LSOAs out of the bottom 10% for physical environment deprivation. The fall in crime rates should be continued. This could be achieved by designing development to eliminate opportunities for crime and incorporating natural surveillance into design. There is a need to reduce fear of crime within the County. This could be supported by the continued reduction of crime rates and the incorporation of natural surveillance into development design. Opportunities should be sought to reduce causes or contributors to inequality within local communities 	SEA: Population, Human Health HIA EqIA	1, 5, 8, 9

Topic	Key Issue	Implications/Opportunities for the Local Plan	Relevance to SEA, HIA, EqIA and HRA	Relevant Draft IIA Objective
	deprived local authority for physical environment within the child index.	<ul style="list-style-type: none"> Opportunities should be sought to identify priority areas within the County for child deprivation in order to better facilitate improvements. 		
Transportation	<ul style="list-style-type: none"> There is an increased dependence on travel by car and increasing usage of cars/vans to get to work. There is concern in populated areas about transport, with congestion and journey times a key issue; and accessibility to key services including hospitals. Access to services is a particular issue in rural areas which affects certain groups (old, young, disabled) disproportionately. The use of sustainable transport methods to get to work in Flintshire is below the national average. There is an increasing distance people are travelling to get to work. There are a high number of deaths/serious injuries on Flintshire's roads compared to the national average. 	<ul style="list-style-type: none"> Opportunities should be sought to reduce car/van transport and increase the use of greener more sustainable modes of transport. Opportunities should be sought to develop road infrastructure that supports economic growth. Opportunities should be sought to reduce the distance people are travelling to work. Opportunities should be sought to improve road condition and safety within Flintshire. 	SEA: Population, Human Health, Air, Climatic Factors, Material Assets HIA EqIA	5
Welsh Language	<ul style="list-style-type: none"> Fluency in Welsh in Flintshire appears to be increasing, though the rate of rise in non-fluency is faster, suggesting an overall decline of Welsh speakers within the County. 	<ul style="list-style-type: none"> Opportunities to increase exposure to the Welsh language should be sought. 	Population, heritage	18

3.8.4 Cross-boundary considerations

The County has a number of connections and links with other areas, such as Merseyside and Chester and the other surrounding counties within Wales. There are good links into and out of the County which provide both opportunities for inward investment but also enable people in the County to have good access to job opportunities in other areas.

The '2013 Dee Region Cross-Border Economy: next steps' identifies that there is a strong cross-border functional economic region consisting of Wrexham, Chester, Deeside and Ellesmere Port. There is a fluid border in which trade occurs with little conscious consideration of the national boundary and similarly, travel patterns do not recognise the English/Welsh border, with 83% of all trips starting and finishing in the Dee sub-region. Large west - east commuter flows to the main employment centres in Deeside, Wrexham, Chester and Ellesmere Port exist. In practical terms, the cross border economic activity places considerable pressure on Flintshire's housing market; on infrastructure such as waste facilities; on natural resources, i.e. minerals (particularly limestone) and in terms of job creation (Flintshire is a net employer with a very low unemployment rate compared to national figures and to its neighbours).

Whilst the economy is performing well, it is recognised that the daily out-migration of people from the County for employment purposes could be inhibiting the level of economic growth and personal spending in the County. There are also flows of workers travelling into Flintshire but there is a net flow out of the County. Indeed, the lack of a major urban centre within the County results in many people travelling to Chester for retail purposes. The County has vast tourism potential owing to its high-quality environment and the amount of tourism spending is considered to be increasing. The in-migration of people into the rural parts of the County could continue to create housing affordability problems.

3.9 The IIA Framework

3.9.1 Background to the IIA Framework

The IIA Framework underpins the assessment methodology and comprises a series of Sustainability Objectives (covering social, economic and environmental issues) that are used to test the performance of the plan being assessed. Whilst the SEA Directive does not require the use of objectives, they are a recognised tool for undertaking the assessment and are aspirations/goals that an authority/organisation should work towards achieving.

The IIA Objectives are separate from the objectives of the LDP, although there may be some overlaps between them. To help measure the performance of the LDP's components against the IIA Objectives, it is beneficial if they are supported by a series of indicators. Baseline data should be collated to support each of the indicators, as this provides a means of determining current performance across the Flintshire area and gauging how much intervention or the extent of work needed to achieve the targets that have been identified. The following section provides further details about the development of the IIA Framework.

3.9.2 Development of the IIA Objectives

The IIA Framework has been developed using the IIA Framework from the Scoping Report (2015) as a base. This was analysed and refined, using the following:

- Comparison against the updated PPPs and identified key sustainability issues and opportunities;
- Comparison against the SAs developed for neighbouring Local Plans;
- Findings from the Scoping Workshop;
- Consultation Comments on the Scoping Report (2015) and the Options Appraisal (2016); and
- Consideration of the Well-being for Future Generations (Wales) Act 2015 and the Rescoping Exercise of the SA Framework carried out in August 2017.

Table 3-5 presents the IIA objectives that have been used in the assessment of the LDP. Each of the IIA Objectives is supported by a series of sub-objectives to add further clarity and to assist the assessment process. However, it is noted that the objectives are not mutually exclusive and the assessment framework should be considered in its entirety. As such, the IIA Objectives are not presented in any particular order, with all objectives being considered as having equal weighting. The IIA Objectives are included in Table 3-5 below.

Where possible, IIA Objectives are also supported by indicators. The indicators selected link to those used to describe the baseline conditions across the area, as an understanding of the existing conditions is needed to inform the assessment. Where baseline data is not currently available, indicators have been suggested as to the type of information that may be appropriate. Throughout the course of the IIA, quantified targets will be identified where possible to supplement this framework in liaison with Flintshire.

Table 3-5 IIA Framework

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
1. To reduce crime, disorder and fear of crime					
<ul style="list-style-type: none"> To reduce levels of crime To reduce the fear of crime To reduce levels of anti-social behaviour To reduce burglary rates To encourage safety by design 	<p>Crime rates per 1,000 of the population for key offences.</p> <p>Number and distribution of wards with LSOAs in the bottom 10% most deprived for crime deprivation.</p>	<p>Reduce crime rates below current level.</p> <p>To reassure the public, reduce the fear of crime and anti-social behaviour.</p> <p>Reduce the number of wards with LSOAs in the bottom 10% most deprived.</p>	Flintshire Improvement Plan 2014-2015	Health Equalities	<p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p>
2. To improve levels of educational attainment for all age groups and all sectors of society					
<ul style="list-style-type: none"> To increase levels of participation and attainment in education for all members of society To improve access to and involvement in lifelong learning opportunities To improve the provision of education and training facilities To improve qualification and skills for all parts of the community 	<p>Percentage of learners in local authority schools achieving five or more GCSEs at Grades A* - C or the vocational equivalent.</p> <p>Reduction of surplus places.</p> <p>Outcomes in Mathematics, English / Welsh 1st Language and Core Subject Indicator at all Key Stages</p> <p>Completion of 21st Century school milestones in line with target dates</p> <p>Percentage of people aged 16-74 achieving National</p>	<p>Improve skills in literacy and numeracy.</p> <p>Continuing the implementation of 21st Century Schools programme</p> <p>Improve the education, training and employment prospects for young people up to 25 years of age</p>	<p>Flintshire Improvement Plan 2014-2015</p> <p>A Single Integrated Plan for Flintshire 2013 - 2017</p>	Health Equalities	<p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p> <p>A Wales of vibrant culture and thriving Welsh Language</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
	<p>Vocational Qualification (NVQ) level 4/5.</p> <p>Percentage of resident population aged 16-74 with no qualifications.</p> <p>Number of educational establishments within the County.</p> <p>Percentage of people aged 16-74 who have attained either a Level 4 or Level 5 qualification.</p> <p>Percentage of people aged 16-74 who have attained NVQ Levels 1-4.</p>				
3. To improve physical and mental health and wellbeing for all and reduce health inequalities					
<ul style="list-style-type: none"> To improve access to health and social care services especially in isolated areas To reduce health inequalities amongst different groups in the community To promote healthy lifestyles Encourage the development of strong, cohesive communities 	<p>Number of wards in the bottom 10% for health deprivation and disability.</p> <p>Percentage resident population who consider themselves to be in good health.</p> <p>Life expectancy at birth for males and females.</p> <p>Standardised Mortality Ratio and infant mortality rates.</p> <p>Percentage of people classified as being in good or very good health.</p>	<p>Improve the accessibility of health information, services and advice.</p> <p>Reduce infant mortality rates.</p> <p>Improve accessibility of health and health promoting services especially for the hard to reach and vulnerable people which will also help to increase the percentage of people classified as being in</p>	<p>Good Health Good Care in Flintshire 2011-2014</p> <p>A Green Space Framework Strategy for Flintshire 2013</p>	<p>Health Equalities</p>	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
	<p>Percentage of people participating in regular sport or exercise (defined as taking part on at least 3 days a week in moderate intensity sport and active recreation for at least 30 minutes continuously in any one session).</p> <p>Conception rate of under-18 year olds (per 1,000 15-17 year olds).</p>	<p>either good or very good health.</p> <p>Reduce rate of teenage conception.</p> <p>Reduce the number of wards with LSOAs in the bottom 10% most deprived for health deprivation.</p> <p>Ensure that all communities have appropriate, available and accessible green space provision.</p>			
4. To provide access to good quality, affordable housing that meets the needs and requirements of the community					
<ul style="list-style-type: none"> ▪ Ensure that there is sufficient housing to meet identified needs in all areas, including rural housing ▪ Ensure that housing meets acceptable standards ▪ Increase the availability of affordable housing ▪ Increase availability of housing for independent living ▪ Reduce levels of homelessness 	<p>Average house prices compared to regional / national averages.</p> <p>Percentage of households living in type of accommodation.</p> <p>Number of houses in multiple occupation.</p> <p>Additional affordable housing provision.</p> <p>Proportion of housing vacant.</p>	<p>Improve housing conditions in deprived areas.</p> <p>Housing quality – Building for Life Assessments should achieve a score of 100%.</p> <p>Provide a range of housing including affordable housing.</p> <p>To reduce the number of LSOAs in the bottom 10% most deprived for</p>	<p>Flintshire Local Housing Strategy 2012-2017</p>	<p>Health Equalities</p>	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p> <p>A Wales of vibrant culture and thriving Welsh Language</p> <p>A globally responsible Wales</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
<ul style="list-style-type: none"> ▪ Reduce number of households in income poverty 		barriers to housing and services deprivation.			
5. To improve sustainable access to basic goods, services and amenities for all groups					
<ul style="list-style-type: none"> ▪ Ensure that public transport services meet all people's abilities and needs ▪ Ensure that highways infrastructure meets people's needs (including walking and cycling routes) ▪ Promote the use of sustainable travel modes and reduce dependence on the private car ▪ Improve access to cultural and recreational facilities, including Welsh culture and heritage ▪ Maintain and improve access to essential services and facilities, including in rural areas ▪ Improve access to open space ▪ Conserve and enhance opportunities for public access to the countryside and coast 	<p>Journey to work by mode.</p> <p>Distance travelled to work.</p> <p>Road condition.</p> <p>Number of wards in bottom 10% of most deprived in terms of barriers to and services provision.</p> <p>Percentage of residents finding it easy to access key local services within their neighbourhood.</p>	<p>Reduce the number of LSOAs in the bottom 10%.</p> <p>Increase access to isolated areas.</p> <p>Improve transport links to rural communities, particularly sustainable transport provision.</p>	<p>Flintshire Regeneration Strategy 2009-2020</p> <p>Draft North Wales Joint Local Transport Plan 2015- 2020</p> <p>Flintshire County Council Open Space Survey 2007</p> <p>Flint Strategy and Masterplan to 2021</p> <p>Buckley Town Action Plan 2009-2012</p>	<p>Health</p> <p>Equalities</p> <p>Welsh</p> <p>Language</p>	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p> <p>A Wales of vibrant culture and thriving Welsh Language</p> <p>A globally responsible Wales</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
6. To build strong and cohesive communities					
<ul style="list-style-type: none"> ▪ Improve social cohesion and equality opportunities ▪ Reduce gender/age/disability/ gender/race/religion inequalities ▪ Ensure children who have any kind of disability can lead full and independent lives ▪ Ensure children can live to a standard that is good enough to meet their physical and mental needs ▪ Ensure children can develop healthily, and have access to good quality health care, clean water, nutritious food and a clean environment 	<p>The number of reports of hate crime by protected characteristic.</p> <p>Percentage of people who feel that their local area is a place where people from different backgrounds can get on well together.</p> <p>Percentage of people who report that they feel they belong to their neighbourhood.</p>	<p>Reduce health inequalities.</p> <p>Reduced unequal outcomes in education to maximise individual potential.</p> <p>Reduce inequalities in employment.</p> <p>Reduce inequalities in personal safety.</p> <p>Reduce inequalities in access to information and services, buildings and the environment.</p> <p>Increase the percentage of people who feel that their local area is a place where people from different backgrounds can get on well together.</p> <p>Increase the percentage of people who report that they feel they belong to their neighbourhood.</p>	<p>Community Cohesion Strategy for Wales</p> <p>TAN 2</p>	<p>Equalities</p> <p>Health</p>	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p> <p>A Wales of vibrant culture and thriving Welsh Language</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
7. To promote a sustainable economy, business development and investment					
<ul style="list-style-type: none"> To encourage economic growth To diversify the economy and encourage new business formation and inward investment To encourage and promote sustainable tourism within the County. 	<p>Gross Value Added per head.</p> <p>Value Added Tax.</p> <p>Economic activity rate.</p>	<p>To increase economic activity rate.</p> <p>To increase new business start-ups.</p>	Flintshire Regeneration Strategy 2009-2020		<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A more equal Wales</p>
8. To provide employment opportunities across the County and promote economic inclusion					
<ul style="list-style-type: none"> To increase local employment opportunities across the County To improve access to jobs Maximise traineeship and apprenticeship opportunities To reduce levels of child and fuel poverty within the County 	<p>Number of LSOAs in bottom 10% employment deprived.</p> <p>Percentage working unemployed.</p> <p>Employment in different sectors.</p> <p>Employment in different occupation groups.</p> <p>Number of LSOAs in bottom 10% for income deprivation.</p>	<p>To reduce number of wards with LSOAs in the bottom 10% for employment deprivation.</p> <p>To reduce number of wards with LSOAs in the bottom 10% for income deprivation.</p> <p>Increase number of Flintshire residents assisted by Flintshire County Council to maximise their income.</p> <p>Increase the number of Council homes receiving</p>	<p>Flintshire Regeneration Strategy 2009-2020</p> <p>Flintshire Improvement Plan 2014-2015</p>	Equalities	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p>

I/A Objective and Sub-Objectives	Indicators	Targets	Source	Link to other I/A Strands	Relevance to Well-Being Goals
		<p>energy efficiency measures.</p> <p>Increase small – medium sized enterprise (SME) employment.</p> <p>Increase the number of individuals receiving support to access employment,</p>			
9. To maintain and improve the quality of life in rural areas					
<ul style="list-style-type: none"> To support rural diversification To encourage ICT / broadband links in rural areas 	<p>Number of diversification schemes.</p> <p>Number of farmers markets.</p>	<p>Increase the number of people benefiting from new rural services to support.</p> <p>Support schemes that will raise the standard of living and quality of life in rural communities</p>	Flintshire Regeneration Strategy 2009-2020		<p>A more resilient Wales</p> <p>A more equal Wales</p> <p>A prosperous Wales</p> <p>A Wales of cohesive communities</p>
10. To protect and enhance biodiversity and geodiversity					
<ul style="list-style-type: none"> To protect and enhance designated sites of nature conservation importance To protect the integrity of European, proposed European and listed Ramsar sites, or where not at a favourable conservation status, enhance their interest features 	<p>Number and distribution of designated sites including SACs, SPAs, Ramsar sites, SSSI, National Nature Reserves (NNR), Local Nature Reserves (LNR).</p> <p>Condition of SSSIs.</p> <p>Areas of woodland, including ancient woodland.</p>	<p>No net loss in the number of sites, extent and current features of interest.</p> <p>There are a number of targets specific to each habitat and species action plan - although these may be too detailed for the LDP.</p>	<p>Flintshire County Council</p> <p>NRW</p> <p>A Greenspace Framework Strategy for Flintshire 2013</p> <p>Flintshire County Council Open Space Survey 2007</p>	HRA	<p>A resilient Wales</p> <p>A healthier Wales</p> <p>A globally responsible Wales</p> <p>A Wales of cohesive communities</p> <p>A prosperous Wales</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
<ul style="list-style-type: none"> ▪ To protect and enhance wildlife especially rare and endangered species ▪ To protect and enhance habitats and wildlife corridors ▪ To conserve, enhance and create appropriate wildlife habitats and wider biodiversity in urban and rural areas ▪ To avoid damage or fragmentation of designated sites, habitats and protected species and encourage their enhancement and connection ▪ To provide opportunities for people to access wildlife and open green spaces ▪ To protect and enhance geodiversity 	<p>Key Biodiversity Action Plan (BAP) species and habitats present within the County.</p> <p>Number of development schemes which design in urban biodiversity areas.</p> <p>Number of habitats created and maintained in urban and rural areas.</p> <p>Loss of mineral to non-mineral development.</p>	<p>No net loss in the area or number of sites of ancient woodland.</p> <p>To enhance the value of Flintshire green spaces as wildlife habitats.</p> <p>To improve the connectivity between green spaces as a network of green corridors accessible to both people and wildlife.</p> <p>Creation of green link harnessing the Town's existing open/green space and Waterfront.</p> <p>Where appropriate provide additional habitats such as wetland/ponds or scrub to increase interest and biodiversity value on greenspace.</p> <p>No unnecessary sterilisation of mineral by non-mineral development.</p>	<p>Flint Strategy and Masterplan to 2021</p> <p>Buckley Town Action Plan 2009-2012</p> <p>Flintshire Coastal Park Green Infrastructure Action Plan 2011</p> <p>Aggregate Safeguarding Map of Wales, BGS (2012)</p>		
11. To conserve and enhance the County's landscape and townscape character and quality					

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
<ul style="list-style-type: none"> ▪ To protect and enhance areas of landscape character and quality ▪ To protect and enhance townscape character and quality ▪ To respect and enhance local distinctiveness and diversity ▪ To promote sensitive design in development ▪ To protect and enhance the enjoyment of geological resources 	<p>Landscape / townscape characterisation</p> <p>Landscapes of Historic Importance.</p> <p>Distribution and area of AONBs, National Parks and County landscape designations.</p>	<p>No development in open countryside contrary to policy.</p> <p>Conserve and enhance the Special Qualities and distinctive character of the AONB's landscape and associated features.</p> <p>Protect the tranquillity of the AONB and take steps where possible to reduce noise and light pollution.</p>	<p>Clwydian Range AONB Management Plan 2009-2014</p> <p>Flintshire Coastal Park Green Infrastructure Action Plan 2011</p>		<p>A resilient Wales</p> <p>A more equal Wales</p> <p>A Wales of vibrant culture and thriving Welsh Language</p> <p>A Wales of cohesive communities</p>
12. To protect and enhance the cultural heritage assets					
<ul style="list-style-type: none"> ▪ To protect and enhance heritage assets including Listed Buildings, Scheduled Monuments and Historic Landscapes ▪ To protect and enhance historic landscape value 	<p>Number and distribution of Listed Buildings, Scheduled Monuments, Conservation Areas, Historic Landscapes and Registered Parks and Gardens.</p> <p>Number of Listed Buildings, on the at risk register.</p> <p>Number of newly discovered HER sites/sites added to record.</p>	<p>No increase in the number of Listed Buildings on the at risk register.</p> <p>No loss or damage through development to designated sites and buildings.</p> <p>No loss of land within the register of historic landscape or within historic parklands.</p>	<p>Flintshire County Council</p> <p>Cadw</p>		<p>A prosperous Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p> <p>A Wales of vibrant culture and thriving Welsh Language</p> <p>A globally responsible Wales</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
		<p>Support opportunities for archaeological survey and investigation.</p> <p>Promote responsible management of archaeological sites including conservation, access interpretation and education initiatives.</p>			
13. To protect and enhance the quality of water features and resources					
<ul style="list-style-type: none"> ▪ To protect and enhance ground and surface water quality ▪ To protect and enhance coastal waters ▪ Encourage sustainable use of water resources 	<p>Water features.</p> <p>River quality water data.</p> <p>Presence of aquifers.</p> <p>Bathing water quality.</p>	<p>Prevent deterioration of the status of all surface water and groundwater bodies.</p> <p>Protect, enhance and restore all bodies of surface water and groundwater with the aim of achieving identified Water Framework Directive targets.</p> <p>To meet EU bathing water standards.</p> <p>Encourage the use of Sustainable Drainage Systems (SuDS) in development design layout, directing rainfall</p>	<p>Flintshire Coastal Park Green Infrastructure Action Plan 2011</p> <p>Dwr Cymru / Welsh Water</p> <p>Dee Valley Water NRW</p>	<p>Health</p>	<p>A resilient Wales</p> <p>A healthier Wales</p> <p>A globally responsible Wales</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
		away from the waste water system.			
14. To reduce the risk of flooding					
<ul style="list-style-type: none"> To encourage the inclusion of flood mitigation measures such as sustainable urban drainage systems To reduce and manage flooding 	<p>Flood risk.</p> <p>Distribution of areas at risk of coastal and fluvial flooding.</p> <p>Number of registered applications for development in flood risk areas.</p> <p>Percentage of development with SuDS.</p> <p>Households registered for flood warnings as a percentage of total number of households at risk of flooding.</p> <p>Number of applications permitted contrary to NRW advice on flooding.</p>	<p>Take a sustainable approach to flood risk management.</p> <p>Reduce the consequences for individuals, communities, businesses and the environment from flooding and coastal erosion.</p> <p>Raise awareness of and engage people in the response to flood and coastal erosion risk.</p> <p>No new development on land at risk of flooding for lifetime of development.</p>	<p>Flintshire Local Flood Risk Management Strategy 2013</p> <p>NRW</p> <p>Welsh Government</p>	<p>Health</p>	<p>A resilient Wales</p> <p>A healthier Wales</p> <p>A globally responsible Wales</p>
15. To protect and improve air quality and limit greenhouse gas emissions					
<ul style="list-style-type: none"> To protect and improve local air quality To reduce greenhouse gas emissions including in both existing and new development 	<p>Air quality mean concentrations for PM₁₀ and NO₂.</p> <p>Total CO₂ emissions.</p> <p>Percentage of electricity produced/used in Flintshire</p>	<p>No AQMAs currently designated or to be designated in the County.</p> <p>Reduce levels of pollution from transport.</p>	<p>UK Air Quality Strategy</p>	<p>Health</p>	<p>A resilient Wales</p> <p>A healthier Wales</p> <p>A globally responsible Wales</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
<ul style="list-style-type: none"> ▪ To reduce CO₂ emissions from the transport sector ▪ To encourage all new development to be climate change resilient ▪ To reduce negative effects of power generation, heavy industries and transport on local air quality ▪ To encourage cleaner technology for power regeneration, heavy industry and transport 	<p>generated from renewable sources.</p> <p>Proportion of alternative fuelled vehicles.</p>	<p>Achievement of UK Air Quality Strategy objectives for specific pollutants.</p>			
16. To increase energy efficiency, require the use of renewable energy and sustainable building design					
<ul style="list-style-type: none"> ▪ To reduce the demand for energy and increase energy efficiency ▪ To encourage sustainable building design ▪ To increase the use of renewable energy ▪ To increase the use of renewable energy ▪ To increase energy efficiency 	<p>Annual average domestic gas and electricity consumption per consumer.</p> <p>Number of renewable energy projects permitted in the County.</p>	<p>Increase the percentage of new buildings achieving high energy conservation ratings above current baseline.</p> <p>Increase number of new developments with sustainable building design.</p> <p>Achieve measurable change that enhances the environment or improves sustainability.</p>	<p>Flintshire Regeneration Strategy 2009-2020</p>	<p>Health</p>	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p> <p>A Wales of cohesive communities</p> <p>A globally responsible Wales</p>
17. To ensure sustainable use of natural resources					

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
<ul style="list-style-type: none"> ▪ Reduce the demand for raw materials ▪ Promote the use of recycled and secondary materials in construction ▪ Ensure that contaminated land will be guarded against ▪ Encourage development of brownfield land where appropriate ▪ Maintain and enhance soil quality ▪ Increase the proportion of waste recycling and re-use ▪ Reduce the production of waste ▪ Reduce the proportion of waste landfilled ▪ Protect mineral resources from unnecessary sterilisation. 	<p>Distribution of best and most versatile agricultural land.</p> <p>Soil types / classification.</p> <p>Percentage land stock contaminated.</p> <p>Total tonnage of municipal waste arisings. Percentage reused, recycled or composted.</p> <p>Total tonnage of municipal waste arisings, percentage landfilled.</p> <p>Mineral Reserves by type.</p>	<p>Protect the County's soils from contamination and continue to remediate areas which were impacted in the past.</p> <p>Significantly reduce waste and manage any waste that is produced in a way that makes the most of valuable resources by 2025.</p> <p>Maximise recycling, minimise the amount of residual waste produced and landfill as close to zero waste as possible.</p> <p>By 2050 as a minimum reduce the impact of waste in Wales to within environmental limits, approximately 65% less waste than current waste production.</p>	<p>Towards Zero Waste, One Wales: One Planet -The Overarching Waste Strategy Document for Wales 2010</p>	<p>Health</p>	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A Wales of cohesive communities</p> <p>A globally responsible Wales</p>
18. To encourage the protection and promotion of the Welsh Language					
<ul style="list-style-type: none"> ▪ Contribute to an increase in the number of Welsh language speakers across Flintshire 	<p>Number of Welsh medium school places</p> <p>Number of adults learning Welsh in the County.</p>	<p>Increase the number of Welsh medium school places</p>	<p>Welsh Language (Wales) Measure 2011; a million Welsh speakers by 2050</p>	<p>Welsh Language</p> <p>Health</p>	<p>A prosperous Wales</p> <p>A resilient Wales</p> <p>A healthier Wales</p> <p>A more equal Wales</p>

IIA Objective and Sub-Objectives	Indicators	Targets	Source	Link to other IIA Strands	Relevance to Well-Being Goals
<ul style="list-style-type: none"> ▪ Contribute to an increase in the proportion of Welsh language speakers who are fluent across Flintshire ▪ Contribute to an increase in the number of people who speak Welsh daily and who can speak more than just a few words of Welsh 	<p>CIL or S106 Agreement contributions from large developments in areas where there is a high percentage of Welsh speakers in the Ward – for lessons or community activities in Welsh or Education.</p> <p>Number of businesses displaying bilingual signs and providing bilingual promotional information</p>	<p>Increase in the number of adults learning Welsh.</p> <p>Increase in bilingual signage and information throughout the County.</p>			<p>A Wales of cohesive communities</p> <p>A Wales of vibrant culture and thriving Welsh Language</p>

3.10 Assessment Methodology

The appraisal will be presented in an appraisal matrix for each group of policies, clusters and allocations. The matrix is an established method for clearly analysing the performance of the policies or sites and helps meet the requirements of the SEA Regulations by ensuring that the following elements are considered. This will enable significant effects to be identified:

- Impact – whether the impact will be positive, negative or neutral when assessed against the SA Objectives.
- Temporal scale – whether the impact will be short-term (within 0-5 years of Local Plan implementation), occur in the medium term (within 5 – 10 years of Local Plan implementation) or occur in the long-term (10 – 25 years of Local Plan implementation).
- Spatial scale – where the impacts will occur within the area. Any transboundary effects outside of the study area would also be considered.
- Permanency – whether effects will be permanent or temporary.
- Level of certainty – the level of certainty in the prediction will be classified as low, medium or high.
- Cumulative and synergistic effects.

Where negative impacts are identified, measures will be proposed to offset, avoid or otherwise mitigate for the impact. In addition, measures which may further enhance benefits will also be identified as appropriate.

Tables 3-7 and 3-8 provide an explanation of the notation to be used on the assessment matrices.

Table 3-7 Assessment Scale

Impact	Description	Symbol
Major Positive Impact	The proposal strongly contributes to the achievement of the SA Objective.	++
Positive Impact	The option contributes partially to the achievement of the SA Objective.	+
No Impact/ Neutral	There is no clear relationship between the option and/or the achievement of the SA Objective or the relationship is negligible.	0
Negative Impact	The option partially detracts from the achievement of the SA Objective.	-
Major Negative Impact	The proposal strongly detracts from the achievement of the SA Objective.	--
Uncertain impact – 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 the appraisal or the impact may depend heavily upon implementation at the local level.	?
Positive and Negative Impacts	The option has a combination of both positive and negative contributions to the achievement of the SA Objective.	+/-
Timescale	The effects could be realised in the short-term (next 5 years), medium term (5-10 years), long term (more than 10 years) or a mix of these.	S / M / L
Direct/indirect	The effect is a direct or indirect consequence of the option.	D / I
Reversibility	The effect is reversible or irreversible.	R / I
Certainty	There is high, medium or low certainty in the prediction.	H / M / L

Table 3-8 – Notation used to identify types of effects

L-T	Effects likely to arise in 10-25 years of Local Plan implementation
M-T	Effects likely to arise in 5-10 years of Local Plan implementation
S-T	Effects likely to arise in 0-5 years of Local Plan implementation
D	Direct effects.
I	Indirect effects.
R	Effects are reversible
IR	Effects are irreversible
H/M/L	High, medium or low certainty of prediction

4 Stage B: Developing and Refining Options and Assessing Effects

4.1 Alternatives

As identified in Box 3, the SEA Directive requires that the assessment process considers alternatives:

Box 3: Consideration of Alternatives

'...an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated' (2001/42/EC) (Article 5.1).

Government guidance advises that only realistic and relevant alternatives should be considered and they should be sufficiently distinct to enable a meaningful comparison of their different environmental effects. This Draft IIA Report presents the assessment of the strategic plan policies that have been developed following the conclusion of the LDP Preferred Strategy.

4.2 Assessment of the Spatial Vision and Narrative

Good practice guidance recommends that the key aims and principles of the plan should be assessed against the IIA Objectives, in order to test their compatibility and to determine whether they accord with broad sustainability principles.

The Spatial Vision for Flintshire has been reviewed against the IIA Objectives, and a summary of the key strengths, weaknesses and recommendations are presented in Chapter 5. Recommendations were made to offset or alleviate any adverse impacts that were predicted, or to enhance any opportunities that were identified.

4.3 Assessment of the Strategic Options

Good practice guidance also recommends that the goals of a plan should be assessed against the SA Objectives. The assessment of the Strategic Options of the Pre-Deposit Local Plan against the SA Objectives has been undertaken using a simple matrix based approach and was conducted in autumn 2016. The recommendations provided contributed to the selection of the Preferred Strategy.

4.4 Appraisal of Preferred Policies and Policy Options

The preferred policies were assessed against the IIA Objectives using a matrix-based approach. This identified the positive and negative impacts associated with the policies and included mitigation measures to address any predicted adverse impacts. As there is a degree of overlap between the intentions of some of the policies they have been grouped together and the groups of policies, for example, all those relating to Design have been assessed in a single matrix.

The assessment notations used in the assessment, together with their definition (i.e. how a positive score was assigned) are presented in Chapter 3. When undertaking the assessment, the symbols assigned in the matrix were justified in the commentary box along with any uncertainties.

A summary of the assessment of the appraisal of the Preferred Strategic Policies is provided in Chapter 6. The complete results of the assessment are presented in Appendix D.

4.5 Mitigation

Where appropriate, mitigation measures are recommended to avoid, reduce or offset the potential adverse impacts as a result of the Local Development Plan. In addition, potential opportunities to benefit and enhance the social, economic and environmental receptors are identified.

As the LDP is being developed in parallel to the IIA process, mitigation measures are being fed back on a continual basis.

4.6 Appraisal of Cumulative and Synergistic Effects

The SEA Directive requires, *inter alia*, that cumulative effects should be considered. It stipulates the consideration of “*the likely significant effects on the environment...*” and that “*these effects should include secondary, cumulative, synergistic...effects*” (Annex I). The Practical Guide sets out the following definitions for these terms:

- Secondary or indirect effects comprise effects which do not occur as a direct result of the proposed activities, but as a result of complex causal pathway (which may not be predictable).
- Cumulative effects arise from a combination of two or more effects, for instance, where several developments each have insignificant effects but together have a significant effect; or where several individual effects of the plan or programme have a combined effect.
- Synergistic effects – synergy occurs where the joint effect of two or more processes is greater than the sum of individual effects.

The potential for cumulative, synergistic or secondary or indirect effects as a result of the LDP has been inherently considered within the appraisal, the findings of which are presented in Chapter 6.

4.7 Appraisal of Transboundary Issues

The SEA Directive requires SAs to consider the transboundary issues which in this case is assumed as closely neighbouring authorities. A key issue is that there is daily out-migration of people from Flintshire for employment, which could in turn be limiting Flintshire’s own economic growth. In practical terms, the cross border economic activity places considerable pressure on Flintshire’s housing market; on infrastructure such as waste facilities; and in terms of job creation (Flintshire is a net employer with a very low unemployment rate compared to national figures and to its neighbours).

For the issues which have been identified, these are covered within the policies and mitigation measures are included where appropriate.

4.8 Technical Limitations and Uncertainties

During the assessment of the LDP, there has sometimes been uncertainty when predicting the potential effects. Where this has occurred, the uncertainty is identified within the appraisal matrices and accompanied by recommendations to mitigate such impacts.

In addition, a number of data gaps are identified within the baseline context where data is unavailable or out of date. Obtaining these datasets would help to further increase the knowledge of the areas, and could potentially be filled through the use of the monitoring framework. These gaps do not impact on the robustness of the IIA.

The LDP Preferred Strategy essentially acts as a guidance document for the future development of the Flintshire area. There is therefore reliance upon future decision-makers to ensure sustainable development is delivered using the IIA as a decision-aiding tool.

5 Appraisal of the Spatial Vision and Narratives

5.1 Appraisal of the Spatial Vision

The LDP Preferred Strategy includes a Spatial Vision and narratives, which shape the direction of the Local Plan policies. The Draft Spatial Vision is:

“The LDP is about people and places. It seeks to achieve a sustainable and lasting balance which provides for the economic, social, and environmental needs of Flintshire and its residents, through realising its unique position as a regional gateway and area for economic investment, whilst protecting its strong historic and cultural heritage.”

The draft spatial vision for the going local and the thinking big sections have been appraised against the 18 IIA Objectives. To aid the assessment, the numbers from the LDP objectives have been used in the table to ensure compatibility.

5.2 Appraisal of the LDP Objectives

A number of strategic objectives have been developed to translate the vision into a framework which defines the broad focus for the plan. The objectives are clear statements of intent which focus in on how the LDP vision will be delivered. Like the vision, they take the key challenges facing the County and align them with the three themes of sustainable development:

- Enhancing Community Life;
- Delivering Growth and Prosperity; and
- Safeguarding the Environment.

One of the key challenges of producing a sustainable plan is to ensure that a reasonable balance is achieved between these elements of sustainability. This will need to minimise the potential conflicts that will arise from such a broad ranging set of Plan objectives. This process has been aided by consideration of the objectives via the IIA process, the outcome of which has been used to refine the objectives and reduce the areas of potential conflict. The objectives will also form part of the basis for monitoring the implementation of the Plan, once adopted and operational.

Broadly, the LDP objectives are compatible with the IIA objectives. A brief summary of each is given below under its relevant grouped heading, along with recommendations after the assessment table (**Table 5-1**).

Enhancing Community Life

The seven objectives grouped under this heading aim to ensure that all parts of Flintshire are given the same opportunities to develop into sustainable societies for all members of the community. The development of town and district centres (objective 2) and the focus on such areas for regeneration needs to be carefully managed to ensure that sustainable transport links are encouraged. Car use is an increasing issue in Flintshire, which is a largely rural county, but not all members of a community are able or willing to drive. Therefore, the Local Plan needs to be mindful of not only the impact on greenhouse gas emissions and air quality, but also to ensure that all communities can be catered for throughout the lifetime of the Plan (and aided by objective 7).

Delivering Growth and Prosperity

The seven objectives grouped under this heading aim to ensure Flintshire can continue to be an area of economic growth for Wales as well as the Deeside sub-region and has the right kind of supporting development (town centres, objective 10 and housing, objective 12) that will encourage businesses to invest in the area. Objective 13, and to some extent 14 seek to ensure that Flintshire's rural economy is also promoted.

Broadly, the objectives score well against the IIA objectives though some uncertainty can be seen for objectives 10 and 12 and against IIA objective 5 (sustainable access to basic goods). A promotion of town centres could mean that not all people have the same level of access to services, particularly if they are living in very rural conditions without reliable access to a wide range of transport options. The objective on diversifying the rural economy (objective 13) needs to be mitigated for in relation to the IIA objective on air

quality (objective 15). Reliance on the private car will only lessen if other transport options are developed, particularly within rural communities and this needs to be considered.

Safeguarding the Environment

The five objectives grouped under this heading aim to ensure that Flintshire's natural and historical environments continue to be protected, that its green infrastructure network will be enhanced as well as ensuring that the impact of Flintshire's continued economic growth. In the main, these objectives perform well against the IIA objectives. There is some uncertainty on objective 18 with regard to the IIA objective on quality of life in rural areas (IIA objective 9). Good design that is innovative may mean a detraction from traditional building techniques for which an area is known so these need to be considered carefully for all future developments.

Table 5-1 Compatibility of the Local Development Plan Narrative with the IIA Objectives

Key

✓ = Objectives are compatible

✗ = Objectives are potentially incompatible if not appropriately mitigated

0 = There is no link between objectives

? = The link between the objectives is uncertain

IIA Objective		Enhancing Community Life							Delivering Growth and Prosperity							Safeguarding the Environment				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	To reduce crime, disorder and fear of crime	0	0	0	✓	0	0	✓	0	0	0	0	0	0	0	0	0	0	✓	0
2	To improve levels of educational attainment for all age groups and all sectors of society	0	0	0	0	0	0	✓	✓	0	✓	0	0	0	0	0	0	0	0	0
3	To improve physical and mental health and wellbeing for all and reduce health inequalities	✓	0	0	✓	0	0	✓	0	0	0	0	0	0	0	0	✓	0	✓	0
4	To provide access to good quality, affordable housing that meets the needs and requirements of the community	?	0	✓	0	0	0	✓	0	0	0	✓	✓	0	0	0	0	0	✓	0
5	To improve sustainable access to basic goods, services and amenities for all groups	✓	?	✓	✓	0	0	✓	0	0	?	✓	?	0	0	0	0	0	✓	0
6	To build strong and cohesive communities	✓	✓	0	✓	0	0	✓	✓	0	✓	✓	✓	0	✓	0	0	0	✓	0
7	To promote a sustainable economy, business	0	✓	0	✓	0	0	0	✓	✓	✓	✓	0	✓	✓	0	0	0	0	0

IIA Objective		Enhancing Community Life							Delivering Growth and Prosperity							Safeguarding the Environment				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	development and investment																			
8	To provide employment opportunities across the County and promote economic inclusion	0	✓	✓	0	0	0	✓	✓	✓	✓	0	0	✓	✓	0	0	0	0	0
9	To maintain and improve the quality of life in rural areas	✓	0	0	✓	0	0	✓	0	0	0	?	?	0	0	✓	✓	0	?	0
10	To protect and enhance biodiversity and geodiversity	0	✓	?	0	0	0	0	0	?	✓	?	✓	0	0	✓	✓	✓	0	0
11	To conserve and enhance the County's landscape and townscape character and quality	0	✓	?	0	✓	0	0	0	0	✓	0	0	0	0	0	✓	✓	✓	0
12	To protect and enhance the cultural heritage assets	0	?	0	?	0	0	0	0	0	0	0	0	0	0	0	✓	0	0	0
13	To protect and enhance the quality of water features and resources	0	?	0	0	0	0	0	0	?	?	0	✓	0	0	✓	✓	0	0	0
14	To reduce the risk of flooding	0	?	0	0	0	0	0	0	0	0	0	0	0	0	✓	✓	0	0	✓
15	To protect and improve air quality and limit greenhouse gas emissions	0	✗	✓	?	0	0	0	0	?	?	0	?	✗	0	✓	0	0	0	✓
16	To increase energy efficiency, require the use of renewable energy and sustainable building design	0	✓	✓	?	0	0	0	0	0	0	?	✓	✓	0	✓	0	0	0	✓
17	To ensure sustainable use of natural resources	0	✓	✓	?	0	0	0	0	0	?	0	✓	✓	0	✓	0	0	0	✓
18	To encourage the protection and promotion of the Welsh Language	0	0	0	0	0	✓	0	0	0	0	0	0	0	0	0	0	0	0	0

5.2.1 Recommendations

Enhancing Community Life

- It is recommended that Objective 1 considers all groups, even though it is recognised that an elderly population is of particular concern for Flintshire.

Delivering Growth and Prosperity

- Objective 14 can be strengthened to ensure that sustainable tourism development is considered year-round for a range of different interests and people. It can also serve to ensure that Welsh culture is promoted.

Safeguarding the Environment

- Objective 18 can be strengthened to include safe by design principles.

6 Appraisal of Strategic Options

6.1 Appraisal of the Spatial Options and Growth Scenarios

The LDP Strategic Options, assessed in October 2016, included five options, summarised as follows:

Option 1 – Proportional Distribution
Description Developing a settlement hierarchy which allows for a proportional distribution of development based on sustainability principles
Spatial Expression / Settlements Affected This option is based on the 5 tier settlement hierarchy as set out below:
Main Service Centres
Local Service Centres
Sustainable Village
Defined Village
Undefined Village

Option 2 – Focussed Urban Growth
Description Directing all development to urban centres i.e. the upper two tiers of the settlement hierarchy
Spatial Expression / Settlements Affected This option is based on the top 2 tiers of the 5 tier settlement hierarchy as set out below:
Main Service Centres
Local Service Centres

Option 3 – Growth Area
Description Development would be focussed by directing all development based on a rigid definition of the growth area triangle embodied in the Wales Spatial Plan.
Spatial Expression / Settlements Affected This option is based on delineating a boundary in map form which is based on the growth area triangle in the Wales Spatial Plan. It would encompass the following settlements:
Settlements
Deeside Settlements, Mold, Sychdyn, New Brighton, Buckley, Mynydd Isa, Alltami, Penyffordd / Penymynydd, Hope Caergwrle, Abermorddu and Cefn y Bedd, Broughton, Saltney, Ewloe, Hawarden, Mancot, Northop, Northop Hall, Higher Kinnerton, Pontblyddyn, Dobshell

Option 4 – Hubs and Corridors		
Description Development would be distributed based on a strict interpretation of key road and rail transport hubs and routes.		
Spatial Expression / Settlements Affected This option is based on identifying the key strategic transport hubs and corridors and would focus on both public transport and key roads. The settlements that would fall within these hubs and corridors are as follows:		
Settlements with Stations on Railway Corridors		
Wrexham – Bidston Line: Cefn y Bedd, Caergwrle, Hope, Penyffordd, Buckley (Little Mountain), Hawarden, Shotton, Hawarden Bridge		North Wales Coast Line: Flint, Shotton
Settlements on Key Strategic Roads		
A494(T): Deeside Settlements, Ewloe, Alltami, New Brighton, Mynydd Isa, Mold, Sychdyn, Gwernymynydd, Cadole	A55(T): Broughton & Bretton, Dobshell, Ewloe, Northop, Northop Hall, Drury & Burntwood, Flint Mountain, Halkyn, Pentre Halkyn, Carmel, Brynford, Gorsedd.	A548: Deeside Settlements, Saltney, Flint, Bagillt, Greenfield, Mostyn. Ffynngroyw, Penyffordd, Gwespyr, Gronant

Option 5 – Sustainable Distribution plus Refined Approach to Rural Settlements
Description Development would be focussed on the first three tiers of the settlement hierarchy, based on identifying the most sustainable settlements and sites. In the rural settlements a more refined policy approach would be developed to ensure that a more flexible approach is taken to bringing about and delivering local needs housing.
Spatial Expression / Settlements Affected This option is based on the first three tiers of the settlement hierarchy as shown below:
Main Service Centres
Local Service Centres
Sustainable Village
For the following tiers in the settlement hierarchy a more refined policy approach will be developed which seeks to embrace more innovative methods of delivering development in a sensitive, needs driven, sustainable manner.
Defined Village
Undefined Village

Each of these options were then considered against three growth options – high, medium and low.

6.1.1 Summary of Assessment

The different options all score similarly across the environmental objectives in terms of development as it was anticipated that most sites coming forward will be on greenfield land. Most developable land within Flintshire is located near to the coast or rivers, particularly within the Deeside Area. Although this is protected by flood defences, negative impacts were assigned on the precautionary basis. Similarly, it is expected that the growth within the County will lead to increased car use compared to the baseline situation as well as an increase in energy use, waste production and natural resource use. There is limited capacity of some (not all) coastal settlements to accommodate additional development due to flood risk.

Given the similarities of the assessment outcome between the five options on the environmental objectives, a greater variation was seen between the options and against the social and economic IIA objectives.

Option 1 provides a proportional spread of development depending on proximity to services, with the highest growth scenario likely to provide the greatest benefits to Flintshire in terms of being able to improve existing, and provide new infrastructure, for the County. However, the option is pretty rigid in how it determines numbers of housing according to the definition given to a particular settlement, and hence, higher growth scenarios could fail to recognise that some settlements do not have capacity to meet such a growth in housing numbers.

Options 2, 3 and 4 perform similarly with regard to the social and economic objectives, as they are all particularly focussed on a particular geographical aspect of development (Option 2 looking at existing urban growth, focussing growth only in Main and Local Service Centres, Option 3 looking at growth in identified settlements only, according to the Wales Spatial Plan, and Option 4 along transport corridors). Across the assessments, concerns were raised that the whilst these will ensure that growth is coupled with Flintshire's drive to improve its economy following the recession, such growth strategies will have a negative impact on the rural life objective as well as create an imbalance of employment across Flintshire (ie by focussing all development around the Deeside Enterprise Zone).

Option 5 is a variation of Option 1 but which uses a more case-by-case approach to ensure that rural growth and viability is guided by local circumstances.

As such, Option 5 has been taken forward to inform the Preferred Strategy which is assessed within this report.

7 Appraisal of Preferred Strategy Policies

This Chapter provides a summary of the results of the preferred strategy, dated June 2017. The detailed results of the assessments of the Policies are presented in Appendix D. The policy wording can be found in the Preferred Strategy of the Flintshire County Council Local Development Plan 2015 - 2030 which accompanies this IIA Report for consultation. As noted earlier in this report, the assessments have been grouped into four sections; creating sustainable places and communities, supporting a prosperous economy, meeting housing needs and valuing the environment. As such, this is how the assessment is presented in this section.

7.1 Creating Sustainable Places and Communities

The Policies included within Tables D-1 to D-6 of Appendix D are as follows:

- STR1: Strategic Approach
- STR2: The Location of Development
- STR3: Strategic Sites
- STR4: Principles of Sustainable Development and Design
- STR5: Transport and Accessibility
- STR6: Services, Facilities, and Infrastructure

The detailed IIA of these individual policies together with recommendations for mitigation/enhancement measures is provided in **Appendix D**. A summary of the key IIA findings is presented below.

7.1.1 Summary of Assessment

The six policies under the banner of Creating Sustainable Places and Communities seek to set the scene and provide clear direction as to how Flintshire will be developed throughout the Local Development Plan period. The policies seek to ensure that employment is the main driving factor for Flintshire's continued growth which will, in turn, encourage inward investment and bring about improvements in Flintshire's services and infrastructure.

STR1 and STR2 have been assessed jointly as they should be considered together so as to ensure the strategic growth approach works in relation to the proposed location of development. This performs well against the IIA objectives on housing, employment and economy. It is unclear at this stage how the IIA objective on social cohesion would be impacted by this policy, and it is considered that there is scope to enhance the level of detail regarding rural considerations (IIA objective 9) within STR2.

STR3A and STR3B provide a strategic direction on what Flintshire would deem acceptable at two strategic sites – Northern Gateway and Warren Hall respectively. STR3A scores well against the housing, access and crime objectives but the strategic policy does not give a great deal of clarity on how the impact on biodiversity and landscape will be mitigated. A positive effect can be seen on the flooding objective given that the policy seeks to ensure a sustainable drainage/flood management element to the development at Northern Gateway. STR3B performs well against the housing and access objectives as well as the economy and employment objectives.

STR4, STR5 and STR6 each provide a strategic direction on how development should be implemented within the County, how transport, including public transport and walking/cycling, should be considered throughout the lifetime of the plan and what services should be improved within Flintshire as a result of incoming development. STR4 performs well against the majority of the IIA objectives though there are uncertain impacts on the objective on rural life as it is not clear how such development will reflect within a rural context. Similarly, seeking to protect heritage sites may be beneficial to the objective on Welsh language as it could encourage a renewed interest in Welsh culture, but this is unclear and of low probability.

STR5 and STR6 both perform well against the IIA objectives although there is an inherent conflict between introducing new transport routes (STR5) and the objectives on biodiversity and land/townscape due to the likely land take needed for such development. In such instances, it will be important for the policies to be read as a whole and thereby also consider the policies on environmental protection. STR6 performs well

against almost all IIA objectives except for those on crime and health – due to these topics not being referenced within the impacts that any new development should be mitigating for.

Recommendations:

Enhancing rural consideration within STR1 and STR2 would help to overcome the uncertainty of impacts on the objectives on rural life associated with STR4.

STR2 shows where that development should be directed to and its relevant proportions to defined tiers of settlement as well as Principal Employment Areas. This level of detail will be useful as the detailed policies are developed for the next stages of the Local Plan.

Both Strategic sites (3A and 3B) should also seek to minimise the impact of such a volume of development on the existing environment and resource use.

STR5 could be strengthened to include reference to STR2 and STR3 given their aims to provide transport solutions, whereas the policy supporting text can draw clearer linkages between cycling/walking and healthy lifestyles. The policy explanation text should also include text to state that walking and cycling routes will also assist in creating healthy lifestyles and will have health benefits. STR6 could be strengthened with regard to services such health in order to ensure that all key infrastructure requirements will be addressed due to new development.

For all the policies, further emphasis could be added with regards to specific rural issues that face the County to ensure that these areas are also able to benefit from the economic growth proposed by the plan.

7.2 Supporting a Prosperous Economy

The Policies included within Table D-7- D-10 of Appendix D are as follows:

- STR7: Economic Development, Enterprise, and Employment
- STR8: Employment Land Availability
- STR9: Retail Centres and Development
- STR10: Tourism, Culture, and Leisure

The detailed IIA of these individual policies together with recommendations for mitigation/enhancement measures is provided in Appendix D. A summary of the key IIA findings is presented below.

7.2.1 Summary of Assessment

The four policies under the banner of Supporting a Prosperous Economy seek to provide a strategy on how Flintshire's economy will be supported throughout the lifetime of the Plan by a wide range of economic streams for growth from retail, to sustainable tourism and strategic employment sites, focussed around the Deeside/Broughton area. The policies seek to ensure that employment is successful and will aid Flintshire's economic recovery, particularly after the global recession.

STR7, the policy on economic development and employment, scores positively or significantly positively against the social and economic objectives. The aim here is to provide employment that suits Flintshire's existing skillset but also seeks to ensure that enterprise is rewarded and that the County can grow its skills. This will have benefits on the IIA objectives around education and social cohesion as well as health. For the environment objectives, a worst-case negative impact has been assumed. Strategic sites aside, there is insufficient detail available at this stage to understand the impact on objectives such as biodiversity and

heritage so these have been scored negatively on a pre-cautionary basis, though with mitigation through other policies such as STR4, STR13 and STR14, this has potential to reduce/neutralise these impacts.

STR8, on employment land provision, scores positively against the access and education objectives, as it seeks to not only protect current employment sites but also provide new sites. It has no clear link to the health, housing or social cohesion objectives. A mixed impact is expected on the crime objective as new employment development could be a target for crime, as well as a regeneration catalyst. With mitigation, it is likely that the mix of new sites and expansion of existing employment land will provide both positive and negative impacts on the environmental objectives; this mitigation can be provided by ensuring sustainable design (STR4) and applying STR13 (natural/built environment and green networks) to such sites. The Welsh Language objective has an uncertain impact applied to it – provision of new employment sites to help stimulate growth could attract new residents to Flintshire and also encourage local, potentially Welsh-speaking people to stay but it is difficult to judge this at this strategic level.

STR9, on retail centres and development, scores positively on health, access and very positively on the social cohesion objectives, as well as against the economic objectives. Town and district centres will be the preferred locations for retail and other uses and this increase could encourage the vibrancy of existing spaces as well as make use of existing sites. There is a potential positive impact on the land/townscape objective as the focus is town-based rather than on out-of-town retail developments which should help protect greenfield locations. Both positive and negative impacts can be seen on the heritage, air and natural resources objectives – the expansion of sites could increase car use into centres but they are also the most accessible via sustainable transport. Similarly, the setting of heritage assets could potentially be both enhanced and detracted from through town-centre development depending on how it is designed.

STR10, on tourism, culture and leisure, scores very positively against the economic objectives as the policy seeks to ensure that tourism remains viable as a source of employment and economic growth in Flintshire year-round. This will contribute in turn to a likely positive conservation of protected sites within Flintshire, whether that's biodiversity, land/townscape or heritage designations. It is important that such sites are also well managed to avoid any form of degradation due to increased visitor pressure.

7.3 Meeting Housing Needs

The Policies included within Table D-11 – D-12 of Appendix D are as follows:

- STR11: Provision of Sustainable Housing Sites
- STR12: Provision for Gypsies and Travellers

The detailed IIA of these individual policies together with recommendations for mitigation/enhancement measures is provided in Appendix D. A summary of the key IIA findings is presented below along with policy recommendations.

7.3.1 Summary of Assessment

The two policies within the Meeting Housing Needs banner relate to provision of housing sites as well as specific provision for other types of communities, such as gypsies and travellers.

STR11 has positive impacts on almost all of the social objectives, with a mixed impact relating to the objective on crime. New housing developments on greenfield sites have the potential to create new crime targets though it is anticipated that the detail around design of such sites will mitigate such risk. The policy aim is to provide a range of housing that suits the entire demographic of Flintshire and at different economic levels. As such, the economic objectives can also be indirectly met as the diverse housing provision encourages a diverse workforce. At this strategic level, the policy does not specify particular locations for housing (this is instead directed broadly by STR2) and as such, a negative impact has been assigned for many of the environmental objectives on a precautionary basis. It is thought, that with reference to the other environmental policies within the Preferred Strategy, that many of these impacts can be neutralised.

STR12 relates specifically to gypsy and traveller provision. The assessment shows mainly uncertain and neutral impacts. This is due to the policy not identifying how sites for gypsies, travellers and travelling showpeople will be identified and it's therefore been difficult to ascertain how the policy will contribute to the wider sustainability aims of such groups within Flintshire.

Recommendations:

Site allocation criteria should be clarified in the next stages of Local Plan so as to provide a more positive impact around access to services and create social cohesion. It is unclear if this is intended to be undertaken at a later stage of plan-making.

7.4 Valuing the Environment

The Policies included within Table D-13- D-16 of Appendix D are as follows:

- STR13: Natural and Built Environment, Green Networks and Infrastructure
- STR14: Climate Change and Environmental Protection
- STR15: Waste Management
- STR16: Strategic Planning for Minerals

The detailed IIA of these individual policies together with recommendations for mitigation/enhancement measures is provided in Appendix D. A summary of the key IIA findings is presented below.

7.4.1 Summary of Assessment

The policies within Valuing the Environment seek to provide a range of environment related guidance for the development and protection of Flintshire's assets. Strong environment policies in the LDP will ensure that the environmental impact of the growth proposals is minimised as much as possible.

STR13 focuses on the protection and enhancement of Flintshire's wide range of natural and built assets. Maintaining and increasing greenspace provision will have a positive impact on the health, access and social cohesion objectives and could even seek to improve residents' health. An indirect positive link can be seen in the IIA objective on economy as better green spaces may attract further inward investment. Overwhelmingly there is a positive impact on the environmental objectives as it seeks to protect and enhance both protected and unprotected spaces.

STR14, on climate change and environmental protection, scores mostly neutral impacts on the majority of the social and economic objectives, with the exception of the health objective (a positive impact due to measures to improve air quality and mitigate land contamination) and the economy objective (a minor negative impact, with low certainty, based on the assumption that measures to minimise business impact on climate change could be costly for business and potentially discourage investment).

STR15, on waste management, has a neutral impact on all the social objectives and the majority of the economic objectives. The development of new waste facilities could, however, attract inward investment into

Flintshire (a benefit for the IIA economy objective). An indirect positive impact is likely against the biodiversity and land/townscape objectives as the policy seeks to ensure sites are located on existing and already allocated sites rather than new greenfield spaces. Furthermore, positive impacts are likely against the energy and natural resource objectives as investment in newer waste facilities could help to clean up smaller, more polluting sites as well as provide an alternative energy source for the County. The diversion of waste from landfill would help to reduce greenhouse gas emissions, particularly methane, which would have a positive impact on climate change.

STR16, on minerals planning, has a neutral impact on the social IIA objectives, and an uncertain impact on the housing one with regard to the sterilisation of minerals due to other development. A positive impact is seen across the IIA economy objectives as the policy ensures that Flintshire's rich mineral resource will be protected from sterilisation and therefore can be a continued source of Flintshire's employment and economy. Both positive and negative impacts are expected for the environmental objectives – extraction of a resource such as aggregate carries an environmental cost but this can be offset against ensuring that protected sites remain protected and that restoration plans for such mineral rich areas consider biodiversity, landscape, heritage and water issues.

Recommendations:

STR13 could be improved to include a specific reference to promoting an improved accessibility of greenspace across Flintshire, where possible. It would also be strengthened by adding reference to securing a net gain in biodiversity. The policy should seek to highlight specific mention of Flintshire's Welsh cultural heritage.

STR16 can be read alongside STR13 and should acknowledge that heritage site impacts should also be assessed alongside environmental and settlement impacts.

7.5 Cumulative Effects

Table 7-1 Cumulative Effects

Receptor	Cumulative / Synergistic Effect	Causes	Potential Trend
Crime Rates and Fear of Crime	Crime and fear of crime may reduce in response to wider regeneration initiatives in addition to the LDP provisions.	Regeneration provisions would also contribute to improved aspirations and environments in conjunction with the proposals in the LDP. This may reduce crime and fear of crime levels in the long-term, particularly within those parts of Flintshire in the bottom 10% of LSOAs.	Positive
Health of the County's population	Levels of health and well-being have the potential to improve in the long term.	Cumulative measures to promote walking and cycling together with co-location of jobs, homes and accessible greenspace can benefit healthy lifestyles and wellbeing.	Positive
Housing Provision	Housing will be provided to meet local needs and would contribute to regional targets.	The LDP would contribute to meeting local and regional housing needs with recognised need for affordable housing provision.	Positive
Access to goods and services	Access to services and facilities for local people and visitors would be improved.	Sustainable accessibility across the area and connecting to the wider region is a key feature of the LDP as well as ensuring that rural needs are met for all sections of society.	Positive
Sustainable Economic Growth	The LDP would help facilitate employment creation, business	The efforts of all the policies would help to raise the image of the area and attract inward	Positive

Receptor	Cumulative / Synergistic Effect	Causes	Potential Trend
	development and economic growth.	investment. The development of employment sites would help to meet regional needs.	
Economic Inclusion	Promotion of employment in areas of high employment / income deprivation.	Improved accessibility within the area as a whole, with improved public transport and walking / cycling opportunities and co-location of jobs and homes, should ensure easy access to employment for all.	Positive
Biodiversity	The LDP seeks to ensure protection of biodiversity resources. However, potential negative impacts could occur as a result of development within greenfield sites.	While the LDP seeks to encourage biodiversity enhancements, the overall quantum of development could have negative effects.	Positive and Negative
Land/Townscape Quality	Protection and enhancement of landscape and townscape through regeneration of town centres. Potential for development leading to coalescence of settlements. However Green Barrier Review will help to prevent this.	The LDP seeks to encourage the development within town centres and significant sites that are strategically located for transport reasons. There is likely to be a cumulative impact on using greenfield for such development.	Positive and Negative
Heritage Assets	Heritage assets could be directly affected by the LDP, and there is potential for undesignated heritage assets to be affected also.	Undesignated heritage assets should be identified and a suitable strategy developed ahead of the commencement of development, otherwise potentially negative effects could result.	Positive and Negative
Climate Change Water Air Quality Energy Efficiency Natural Resources Transport & Accessibility	Potential negative effects of traffic growth, or positive effects from a reduction in congestion and improved connectivity. Potential negative and positive contributions towards climate change. Potential positive effects as a result of promotion of sustainable travel. The prudent use of natural resources.	The LDP requires housing and employment growth which will all lead to an increase in resource use, emissions and traffic generation. However, the plan seeks to promote development near to existing centres and transport hubs and to promote sustainable travel modes and encourage local energy generation centres. Potential flood risk within the provision of specific measures to reduce this, could lead to significant cumulative negative effects.	Positive and negative

7.6 Habitats Regulations Assessment Screening

This HRA Screening exercise for the Preferred Strategy has been carried out at a high level to provide guidance for the next stages. The initial screening exercise has been able to rule out eight European sites and 11 polices from further detailed screening.

Potential for likely significant effect on the remaining 15 European sites, in relation to five polices and two strategic allocation sites, cannot be ruled out at this stage and will require further detailed screening. This will be carried out on the next iteration of the LDP.

This detailed screening will consider if implementation of the screened in polices/sites within the LDP could have a likely significant effect on those remaining European sites screened in.

8 SA Monitoring Framework

8.1 Introduction

This section provides an outline of how the proposed framework for monitoring the significant effects of implementing the plan will be developed as the LDP is developed. Monitoring is an ongoing process integral to the plan's implementation and can be used to:

- Determine the performance of the plan and its contribution to objectives and targets;
- Identify the performance of mitigation measures;
- Fill data gaps identified earlier in the IIA process;
- Identify undesirable sustainability effects; and
- Confirm whether sustainability predictions were accurate.

The SEA Regulations require that the plan is monitored to test the actual significant effects of implementing the plan against those predicted through the assessment. This process helps to ensure that any unforeseen, undesirable environmental effects are identified, and remedial action is implemented accordingly. Likewise, it is beneficial to check that the effects (including beneficial ones) occur as predicted by the IIA.

Based on the assessment conducted on the options and identification of potential significant environmental effects, a proposed monitoring framework has been drafted. Monitoring will be undertaken following adoption of the LDP and should be linked back to Flintshire's own Annual Performance Report.

8.2 Approach

The proposed monitoring framework will be developed to measure the performance of the plan against changes in defined indicators that are linked to its implementation. These indicators have been developed based on the following:

- The objectives, targets and indicators that were developed for the IIA Framework;
- Features of the baseline that will indicate the effects of the plan;
- The likely significant effects that were identified during the assessment; and
- The mitigation measures that were proposed to offset or reduce significant adverse effects.

The monitoring framework will be designed to focus mainly on significant sustainability effects including those:

- That indicate a likely breach of international, national or local legislation, recognised guidelines or standards.
- That may give rise to irreversible damage, with a view to identifying trends before such damage is caused.
- Where there was uncertainty in the IIA, and where monitoring would enable preventative or mitigation measures to be taken.

As well as measuring specific indicators linked to the implementation of the plan, contextual monitoring of social, environmental and economic change has been included i.e. a regular review of baseline conditions in the borough. This enables the measurement of the overall effects of the plan.

There are numerous IIA indicators available and it is not always possible to identify how a specific plan has impacted a receptor, for example housing provision is likely to be influenced by a number of actions and different plans. A thorough analysis of the data collated and the emerging trends will, therefore, be important.

A fundamental aspect of developing the monitoring strategy is to link with existing monitoring programmes and to prevent duplication of other monitoring work that is already being undertaken. Flintshire will need to consider how their Annual Performance Report can be used for this purpose.

8.3 Proposed Monitoring Framework

The proposed monitoring framework will be developed at a later stage of the LDP process and in response to Flintshire's Detailed Policies.

9 Next Steps

This IIA Report has now been issued for consultation alongside the LDP Preferred Strategy to all key stakeholders (including statutory consultees and the public) for comment. The Preferred Strategy along with this accompanying IIA Report and associated appendices will be consulted on. Following the close of the consultation period, Flintshire CC will review the feedback and incorporate it into the Deposit LDP as appropriate. The IIA Report will then be refined and added to at the Deposit stage.

If you would like to comment on this IIA Report, please send comments to:

developmentplans@flintshire.gov.uk

or

Andrew Farrow
Chief Officer (Planning and Environment)
Flintshire County Council
County Hall
Mold
Flintshire
CH7 6NF

Arcadis Consulting (UK) Limited

5th Floor,
401 Faraday Street
Birchwood Park
Warrington
WA3 6GA
[arcadis.com](https://www.arcadis.com)

Appendix A

Review of Plans, Programmes and Environmental Protection Objectives

Table 1-1 List of Relevant Plans, Policies and Programmes

International and European Level
The Johannesburg Declaration on Sustainable Development (2002)
The Kyoto Protocol on Climate Change (1997)
UN Framework Convention on Climate Change (1994)
Convention on Biological Diversity (1992)
Rio Declaration on Environment and Development, Statement of Principles for the Sustainable Management of Forests and Agenda 21 (1992)
Aarhus Convention (1998)
The Convention on the Conservation of Migratory Species of Wild Animals(Bonn Convention) (1979)
Convention on the Agreement on the Conservation of African – Eurasian Migratory Waterbirds (1995) The Bonn Convention
Public Sector Information Directive (PSI) 2003/98/EC on the Re-Use of Public Information (2003)
Ramsar Convention on Wetlands (1971)
Environmental Liability Directive 2004/35/EC
European Spatial Development Perspective (97/150/EC) (1999)
Ambient Air Quality and Cleaner Air for Europe Directive 2008/50/EC (2008)
EU Habitats Directive (92/43/EEC)
EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC) (1992)
The Birds Directive 2009/147/EC (2009)
EU Landfill Directive (99/31/EC) (1999)
EU Water Framework Directive (00/60/EC) (2000)
2006/44/EC Fish Directive (codified version) (2006)
Environmental Liability Directive (Directive 2004/35/EC)
EU Flood Directive (2007/60/EC)
EU Biodiversity Strategy to 2020 (2011)
EU Seventh Environmental Action Plan (2013 - 2020)
EU Soil Framework Directive (2006)
European Landscape Convention ratified (2006)

Energy Performance in Buildings Directive 2002/91/EEC (2002)
European Nitrates Directive 91/676/EEC (1991)
EU Groundwater Daughter Directive 2006/118/EC
EU Directive 2009/31/EC amending Directive 85/337/EEC on Environmental Impact Assessment
Environmental Impact Assessment Directive 2014/52/EU amending Directive 2011/92/EU
EU Rural Development Policy 2007-2013
European Common Agricultural Policy (Reform 2003)
European Employment Strategy (2002)
World Summit on Sustainable Development (2002)
Renewable Energy Coalition (2002)
Intelligent Energy Europe 2007-2013
Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)
Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973)
Convention on the Protection of Underwater Cultural Heritage United Nations (1979)
Geneva Convention on Long Range Transboundary Air Pollution
UN convention on the Rights of the Child 1989
Basel Convention (1989)
The Rio Convention on Biodiversity(1992)
Stockholm Convention on Persistent Organic Pollutants (2001)
The Copenhagen Accord (2009)
Cancun Adaptation Framework (2010)
UN Paris Agreement (2016)
Committee on the Rights of the Child Recommendations report (2016)
Guidelines for Community Noise 1999
Children's Environment and Health Action Plan for Europe (2004)
Convention on the Conservation of European Wildlife and Natural Habitats - The Bern Convention (1981)
European Convention on the Protection of the Archaeological Heritage (1992)
The Urban Waste Water Directive 91/271/EEC (1991)

The Drinking Water Directive 98/83/EC (1998)
National Emissions Ceiling Directive 2001/81/EC (2001)
Mineral Waste Directive 2006/21/EC (2002)
Environmental Noise Directive (END) 2002/49/EC (2002)
EU Thematic Strategy on Air Quality (2005)
European Thematic Strategy on Soil Protection European Commission (2006)
The Bathing Waters Directive 2006/7/EC (2006)
Sustainable Development Strategy (2006)
Together for Health - A Strategic Approach for the EU 2008-2013 (2007)
The Integrated Climate and Energy Package (2007)
Air Quality Framework Fourth Daughter Directive 2004/107/EC
Waste Framework Directive 2008/98/EC (2008)
Environmental Quality Standards Directive 2008/105/EC (2008)
Marine Strategy Framework Directive 2008/56/EC (2008)
Review of the EU Sustainable Development Strategy European Commission (2009)
Renewable Energy Directive 2009/8/EC (2009)
Industrial Emissions Directive (integrated pollution prevention and control) 2010/75/EU (2010)
Europe 2020: A strategy for smart, sustainable and inclusive growth (2010)
Energy 2020 - A Strategy for Competitive, Sustainable and Secure Energy (2010)
A Roadmap for Moving to a Competitive Low Carbon Economy in 2050 (2011)
Roadmap to a Single European Transport Area (2011)
Energy Efficiency Directive (2012/27/EU) (2012)
Strategy on Adaptation to Climate Change (2013)
Towards Social Investment for Growth and Cohesion 2014-2020 (2013)
Seventh Environmental Action Programme to 2020 'Living well, within the limits of our planet' (2013)
2030 Policy Framework for Climate and Energy (2014)
SEA Directive (2001/42/EC) (2001)

Regional and National Level
Wales – A better Country – The Strategic agenda of WAG September 2003
UK Sustainable Development Strategy –‘Securing the Future’ 2005
The Future of our Farming (Defra) – July 2009
Planning Policy Wales(Edition 9) – November 2016
A Living Wales – a new framework for our environment, our countryside and our seas Consultation – September 2010
Welsh Assembly Government Play Policy 2002 and Implementation Plan - February 2006
Welsh in Education Strategic Plan 2014-2017
Child Poverty Strategy for Wales (2015)
Getting On Together - a Community Cohesion Strategy for Wales – November 2009
Capturing the Potential: A Green Jobs Strategy for Wales – July 2009
Low Carbon Revolution – the Welsh Government Energy Policy Statement (2010)
A Climate Change Strategy for Wales – October 2010
UK National Energy Efficiency Action Plan (2014)
One Wales, One Planet, The Sustainable Development Scheme of the Welsh Assembly Government – May 2009
One Future, Different Paths – The UK’s Shared framework for Sustainable Development (2005)
People, Places, Futures – The Wales Spatial Plan Update Consultation (2008)
A Winning Wales – The National Economic Strategy of the Welsh Assembly Government (2002)
Technical Advice Notes (TANs) – TAN1- Joint Housing Land Availability Studies 2006, TAN2 – Planning and Affordable Housing 2006, TAN3 – Simplified Planning Zones 1996, TAN4 - Retailing and Town Centres 1996, TAN 5 Nature Conservation and Planning 2009, TAN6 – Planning for Sustainable Rural Communities 2010, TAN7 – Outdoor Advertisement Control 1996, TAN8 – Renewable Energy 2005, TAN9 – Enforcement and Planning Control 1997, TAN10 – Tree Preservation Orders 1997, TAN11 – Noise 1997, TAN12 – Design 2009, TAN13 – Tourism 1997, TAN14 – Coastal Planning 1998, TAN15 – Development and Flood Risk 2004, TAN16 – Sport, Recreation and Open Space 2009, TAN18 – Transport 2007, TAN19 – Telecommunications 2002, TAN20 – The Welsh Language – UDPs and Planning Control 2000, TAN21 – Waste 2001; TAN 22 – Sustainable Buildings (2010); TAN 23 Economic Development

Minerals TAN 1 – Aggregates (2004)
'Improving Lives and Communities – Homes in Wales' – April 2010
Living Well – Living Independent Lives (2009)
The Strategy for Older People in Wales 2013- 2023
Food for Wales, Food From Wales 2010:2020 (October 2010 Consultation) and Local Sourcing Action Plan (2009)
Conserving Biodiversity – The UK Approach - October 2007
UK Biodiversity Action Plan (1994)
Environment Agency, Water Resources Strategy for England and Wales - March 2009
Environment Agency, GP3 (Groundwater Protection Policy and Practice) (2013)
Cultural Tourism Strategy for Wales 2003 and Review (2007)
Wales Coastal Tourism Strategy (2008)
Partnership for Growth: The Welsh Government Strategy for Tourism 2013 – 2020 (2013)
Sustainable Tourism Framework (2007)
Countryside Rights of Way Act (2000)
Environment Strategy for Wales and Action Plans (2006)
Towards Zero Waste - the Overarching Waste Strategy Document for Wales (2010)
Welsh Assembly Government - Strategic Policy Position Statement on Water (2011)
National Transport Plan – March 2010 and Prioritised National Transport Plan - December 2011
A Walking and Cycling Action Plan for Wales 2008-2013 – December 2008
Woodlands for Wales - March 2009 and Action Plan 2010-2015, March 2011
Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)
Vibrant and Viable Places New Regeneration Framework (2013)
North Wales Regional Transport Plan (2009)
North Wales Joint Local Transport Plan (2014)
North Wales Regional Employment Land Strategy (2014)
Well Being of Future Generations (Wales) Act(2015)
The Department for Business, Innovation and Skills (BIS) (2010) Local Growth: Realising Every Place's Potential (Local Growth White Paper)

Committee on Climate Change (2008) Building a Low-Carbon Economy - the UK's Contribution to Tackling Climate Change Defra (2005) Safeguarding Sea Life
Fisheries 2027: A long-term vision for sustainable fisheries (2007)
Our Seas – a Shared Resource: High Level Marine Objectives (2009)
Air Pollution: Action in a Changing Climate (2010)
Welsh Language (Wales) Measure (2011)
West Cheshire – North East Wales Sub Regional Spatial Strategy (2006)
Wales Transport Strategy (2008)
National Transport Finance Plan (2015)
Ozone-Depleting Substances Regulations (2015)
National Infrastructure Plan (2014)
Children's Commission for Wales (2016) Annual Report 15-16
Committee on Climate Change (2017) UK Climate Change Risk Assessment 2017 Evidence Report, Summary for Wales
Consultation on a Welsh Government draft strategy: a million Welsh speakers by 2050 (2016)
Historic Environment (Wales) Act 2016
Public Health (Wales) Bill (2016)
Local Level
Flintshire Local Biodiversity Action Plan (2000)
Flintshire Local Flood Risk Management Strategy (2013)
Flintshire Rights of Way Improvement Plan 2008-2018
Flintshire Improvement Plan 2012-2017
Flintshire Waste Management Strategy 2009-2025
Flintshire Regeneration Strategy 2009-2020
Flintshire Local Housing Strategy 2012-2017
Flintshire Contaminated Land Inspection Strategy (2013)
Flint Strategy and Masterplan 2021 (2012)
Single Integrated Plan for Flintshire 2013-2017
Good Health, Good Care in Flintshire 2011-2014

Strategic Equality Plan 2016-2020
Flintshire Tourism Strategy 2008-2013
Flintshire Joint Housing Land Availability Study (2012)
Alyn Valley Woods SAC Management Plan (2008)
Berwyn and South Clwyd Mountains SAC Management Plan (2008)
Dee Estuary SAC Management Plan
Deeside and Buckley Newt Sites SAC Management Plan (2008)
Halkyn Mountains SAC Management Plan (2008)
River Dee and Bala Lake SAC Management Plan (2008)
Assessment of Local Well-being for Flintshire (2017)
The Deeside Plan (2017)

Table 1-2 Sustainability Themes linked to IIA Objectives

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
Environmental							
Protect and enhance biodiversity, habitats and species which are internationally, nationally and locally important	Convention on Biological Diversity, The EU Biodiversity Strategy, Convention on Biological Diversity, EU Habitats Directive, 2006/44/EC Fish Directive (codified version) (2006);, Agenda 21, Rio Declaration on Environment and Development, EU Directive 2014/52/EU 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment, Environmental Liability Directive 2004/35/EC, World Summit on Sustainable Development, The EU Directive on the Conservation of Wild Birds, Bern Convention; Bonn Convention; EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC, Ramsar Convention on Wetlands; Convention on the Agreement on the Conservation of African – Eurasian Migratory Waterbirds – The Bonn Convention; Convention on International Trade in	One Wales: One Planet – the Sustainable Development Scheme for Wales (2009) The Climate Change Strategy for Wales (2010) Woodlands for Wales (2011) UK Biodiversity Action Plan 1994 PPW edition 7; TAN5 – Nature Conservation and Planning; Conserving Biodiversity- the UK Approach; Sustainable Tourism Framework; Environment Strategy for Wales; Woodlands for Wales; The Environment Strategy Wales; Well Being of Future Generations Act; Fisheries 2027: A long-term vision for sustainable fisheries; Our Seas – a Shared Resource: High Level Marine Objectives	Flintshire Unitary Development Plan, Flintshire Local Biodiversity Action Plan; Alyn Valley Woods SAC Management Plan; Berwyn and South Clwyd Mountains SAC Management Plan; Dee Estuary SAC Management Plan; Deeside and Buckley Newt Sites SAC Management Plan; Halkyn Mountains SAC Management Plan; River	The LDP should contribute positively to biodiversity and sites of local and national importance. Development should not adversely affect biodiversity sites, designated sites and important habitats or species. Conservation and enhancement of designated areas should be promoted.	The IIA Framework should include objectives, indicators and targets that seek to conserve or enhance biodiversity, species and habitats.	Biodiversity , Flora and Fauna	10

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
	Endangered Species of Wild Fauna and Flora; The Rio Convention on Biodiversity; Cancun Adaptation Framework; Cancun Adaptation Framework; Paris Agreement; Convention on the Conservation of European Wildlife and Natural Habitats - The Bern Convention; The Birds Directive 2009/147/EC		Dee and Bala Lake SAC Management Plan				
Reduce air pollution and ensure improvements in air quality	Ambient Air Quality and Cleaner Air for Europe Directive, EU Directive 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment, Environmental Liability Directive 2004/35/EC, EU Seventh Environmental Action Plan; Geneva Convention on Long Range Transboundary Air Pollution; Stockholm Convention on Persistent Organic Pollutants; Cancun Adaptation Framework; Paris Agreement; National Emissions Ceiling Directive; EU Thematic Strategy on Air Quality; Air Quality Framework Fourth Daughter Directive 2004/107/EC; Industrial Emissions Directive (integrated pollution prevention and	PPW edition 7; Environment Strategy Wales, Air Quality Strategy for the UK; National Transport Plan; A Walking and Cycling Action Plan for Wales; North Wales Regional Transport Plan – Taith; Climate Change The UK Programme; UK Air Quality Strategy; The Environment Strategy Wales; Well Being of Future Generations Act; Air Pollution: Action in a Changing Climate; Wales Transport Strategy; National Transport Finance Plan; North Wales Joint Local Transport Plan; Ozone-Depleting Substances Regulations	Flintshire Unitary Development Plan	The LDP should seek to incorporate measures to improve air quality such as increasing accessibility of public transport and encouraging the use of sustainable transport modes.	The IIA Framework should include objectives that encourage the improvement of air quality.	Air Quality and Climate Change	15

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
	control) 2010/75/EU; A Roadmap for Moving to a Competitive Low Carbon Economy in 2050						
Reduce the risk of flooding and/or coastal erosion by assessing developments against the precautionary principle, and promote protection of floodplains or areas of managed realignment from inappropriate development	The EU Water Framework Directive, EU Flood Directive, European Sustainable Development Strategy, EU Directive 2014/52/EU 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment; Cancun Adaptation Framework; Paris Agreement; Marine Strategy Framework Directive 2008/56/EC; Review of the EU Sustainable Development Strategy European Commission	PPW edition 7; TAN15 - Development and Flood Risk; The UK's Shared Framework for Sustainable Development; Surface Water Management Strategy Policy and Practice for the Protection of Floodplains	Flintshire Unitary Development Plan; Local Flood Risk Management Strategy	The LDP should take flood risk and coastal erosion into consideration when determining the location and design of new development. The LDP should ensure that new development does not increase flood risk and should seek to ensure development incorporates climate change adaptation measures such as the use of sustainable drainage features.	The IIA Framework needs to include objectives, targets and indicators that address flooding risk.	Water Human Health	13, 14
Encourage the use of more sustainable forms of transport and development locations, Reducing the need to travel by car	European Sustainable Development Strategy; Review of the EU Sustainable Development Strategy European Commission	PPW edition 7; TAN18; Wales Spatial Plan; The UK's Shared Framework for Sustainable Development; National Transport Plan; Regional Transport Plan; Plan; One Wales, One Planet; A Walking and Cycling Action Plan	Flintshire Unitary Development Plan; Flintshire Rights of Way Improvement Plan	The LDP should provide opportunities to access new and existing development and services by a range of travel modes. Development should encourage efficient and sustainable patterns of movement.	The IIA Framework should include objectives, indicators and targets that encourage sustainable transport.	Population Human Health Air Quality and Climate Change	5

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
		for Wales; TAN6-Planning for Sustainable Rural Communities; Food for Wales, Food from Wales; Countryside Rights of Way Act; Well Being of Future Generations Act; West Cheshire – North East Wales Sub Regional Spatial Strategy; Wales Transport Strategy; National Transport Finance Plan; North Wales Joint Local Transport Plan (2014)					
Address the causes of climate change and promote the reduction of greenhouse gas emissions	Johannesburg Declaration on Sustainable Development, Kyoto Protocol on Climate Change, The EU Seventh Environmental Action Plan, European Sustainable Development Strategy, United Nations Framework Convention on Climate Change, European Climate Change Programme, The EU Air Quality Framework Directive, Agenda 21, EU Directive 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment, UN Framework Convention on Climate	Environment Strategy for Wales; Air Quality Strategy for England, Scotland, Wales and Northern Ireland; Wales Spatial Plan; The UK's Shared framework for Sustainable Development; National Transport Plan; Regional Transport Plan; The Future of our Farming; WAG Energy Policy Statement; National Energy Efficiency Action Plan; Climate Change Strategy for Wales; One Wales, One	Flintshire Improvement Plan; Waste Management Strategy; Flintshire Local Biodiversity Action Plan	The LDP should aim to reduce the causes of climate change by reducing greenhouse gas emissions associated with all aspects of new developments, transportation and utilities infrastructure.	The IIA Framework should include objectives, indicators and targets that address climate change issues.	Air Quality and Climate Change	15

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
	Change Directive to Promote Electricity from Renewable Energy (2001/77/EC); Paris Agreement; National Emissions Ceiling Directive; Industrial Emissions Directive (integrated pollution prevention and control) 2010/75/EU; A Roadmap for Moving to a Competitive Low Carbon Economy in 2050	Planet; Sustainable Tourism Framework; North Wales Regional Waste Plan; Water Resources Strategy for England and Wales; EA GP3 (Groundwater Protection Policy and Practice); Surface Water Management Strategy; TAN6-Planning for Sustainable Rural Communities; TAN 22 – Sustainable Buildings; Food for Wales, Food from Wales; Energy White Paper: Our Energy Future; Climate Change Wales; Well Being of Future Generations Act; Committee on Climate Change (2008) Building a Low-Carbon Economy - the UK's Contribution to Tackling Climate Change Defra (2005) Safeguarding Sea Life; Air Pollution: Action in a Changing Climate; West Cheshire – North East Wales Sub Regional Spatial Strategy; Wales Transport Strategy; National Transport					

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
		Finance Plan; North Wales Joint Local Transport Plan; Committee on Climate Change (2017) UK Climate Change Risk Assessment 2017 Evidence Report, Summary for Wales					
Minimise waste generation and landfill, and increase levels of reuse and recycling to achieve more sustainable waste management	The EU Landfill of Waste Directive, EU Waste Framework Directive, European Sustainable Development Strategy , EU Directive 2014/52/EU 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment, Environmental Liability Directive; (EU) Council Framework; EU Packaging and Packaging Waste Directive (94/62/EC); Basel Convention; The Urban Waste Water Directive 91/271/EEC; Mineral Waste Directive 2006/21/EC; Sustainable Development Strategy	Environment Strategy Wales, The UK's Shared Framework for Sustainable Development; TAN21 – Waste; PPW edition 7; North Wales Regional Waste Plan; Wales a better Country; Wales Spatial Plan; One Wales, One Planet; Towards Zero Waste; Sustainable Tourism Framework; Well Being of Future Generations Act	Flintshire Unitary Development Plan; Flintshire County Council; Waste Management Strategy	The LDP should promote the reduction of waste in new developments. Opportunities for recycling and reuse should be encouraged and opportunities to send waste to landfill should be increased.	The IIA Framework should include objectives, indicators and targets that seek to encourage sustainable waste management.	Population, Air Quality and Climate Change	17
Increase energy efficiency and require the use of renewable energy resources	European Sustainable Development Strategy, EU Directive on Energy performance of buildings, Kyoto	The UK's Shared Framework for Sustainable Development; One Wales, One Planet;	Flintshire Unitary Development Plan	The LDP should promote reduced energy usage and energy efficiency in new developments and the creation of	The IIA Framework should include objectives that seek to encourage	Population, Air Quality and Climate Change	16

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
	protocol on climate change, EU Directive 2014/52/EU 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment, Renewable Energy Coalition; A Roadmap for Moving to a Competitive Low Carbon Economy in 2050	Wales a better Country; PPW edition 7; TAN8 – Renewable Energy; TAN6-Planning for Sustainable Rural Communities; Wales Spatial Plan; WAG Energy Policy Statement; National Energy Efficiency Action Plan; Climate Change Strategy for Wales; A Walking and Cycling Action Plan for Wales; North Wales Regional Waste Plan; Water Resources Strategy for England and Wales; TAN 22 – Sustainable Buildings Directive to Promote Electricity from Renewable Energy (2001/77/EC); Our Energy Challenge: Securing Clean, Affordable Energy for the Long Term (2006); Well Being of Future Generations Act; West Cheshire – North East Wales Sub Regional Spatial Strategy		energy from renewable sources.	energy efficiency.		
Ensure sustainable use	European Sustainable Development Strategy,	North Wales Regional Waste Plan;	Flintshire Unitary	The use of renewable resources	The IIA Framework	Population	17

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
of natural resources and promote sustainable design in new development	Kyoto protocol on Climate Change, , EU Directive Directive 2014/52/EU 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment, Renewable Energy Coalition Intelligent Energy Europe The European Spatial Development Perspective; Cancun Adaptation Framework; Paris Agreement; National Emissions Ceiling Directive; Sustainable Development Strategy; The Integrated Climate and Energy Package; Environmental Quality Standards Directive 2008/105/EC; Review of the EU Sustainable Development Strategy European Commission; Renewable Energy Directive 2009/8/EC; Industrial Emissions Directive (integrated pollution prevention and control) 2010/75/EU; Energy 2020 - A Strategy for Competitive, Sustainable and Secure Energy; Energy Efficiency Directive (2012/27/EU); Strategy on Adaptation to Climate Change; 2030 Policy Framework for Climate and Energy; SEA Directive (2001/42/EC)	MTAN1; Wales Spatial Plan; WAG PPW edition 7, TAN12 – Design; TAN 22 – Sustainable Buildings; TAN 10 - Tree Preservation Orders; TAN 6- Sustainable Rural Communities; WAG Energy Policy Statement; National Energy Efficiency Action Plan; Fuel Poverty Strategy; One Wales, One Planet; A Walking and Cycling Action Plan for Wales; Water Resources Strategy for England and; UK Sustainable Development Strategy Wales; EA GP3 (Groundwater Protection Policy and Practice); Surface Water Management Strategy; Wales Rural Development Plan; Well Being of Future Generations Act	Development Plan; Flintshire Regeneration Strategy; Flintshire Local Housing Strategy	and of sustainably produced materials from local sources should be encouraged. The LDP should ensure sustainable design within new development which complements the local area.	should seek to promote the use of sustainable resources and should encourage sustainable development.	Human Health, Climatic Factors, Population, Material Assets, Cultural Heritage, Landscape	

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
To conserve soil resources and maintain their quality	European Sustainable Development Strategy, EU 6 TH Environmental Action Plan, EU Soil Framework Directive, European Nitrates Directive, , EU Directive Directive 2014/52/EU 97/11/EC amending Directive 85/337/EEC on Environmental Impact Assessment, Environmental Liability Directive2004/35/EC; EU Nitrates Directive; European Thematic Strategy on Soil Protection European Commission	Environment Strategy for Wales; Wales Spatial Plan; Surface Water Management Strategy; The Future of our Farming; Food for Wales, Food from Wales	Flintshire Unitary Development Plan; Flintshire Contaminated Land Inspection Strategy; Flintshire Local Biodiversity Action Plan	The LDP should ensure soil resources are not adversely affected by development. Appropriate remediation of contaminated land should be carried out where necessary and should not increase the potential for groundwater pollution.	The IIA Framework should include objectives with a focus on the protection of soil resources.	Soils and Geology Landscape Water	10, 17
Protect and enhance the local distinctiveness and the historic environment and its setting	European Landscape Convention; Convention Concerning the Protection of the World Cultural and Natural Heritage; Convention on the Protection of Underwater Cultural Heritage; European Convention on the Protection of the Archaeological Heritage	PPW edition 7; Cultural Tourism Strategy; Coastal Tourism Strategy; Sustainable Tourism Framework; Regional Transport Plan; TAN12 – Design; Consultation on a Welsh Government draft strategy: a million Welsh speakers by 2050; Historic Environment (Wales) Act	Flintshire Unitary Development Plan	The LDP should protect and enhance local distinctiveness, valued historic environment and cultural heritage and its setting.	The IIA Framework should include objectives that seek to protect local distinctiveness and the historic environment.	Cultural Heritage Landscape	11, 12
Social							
Improve accessibility and transport		TAN18 - Transport; National Transport Plan;	Flintshire Unitary	The LDP should ensure	The IIA Framework should include	Population and Human Health	4, 5

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
links to basic goods and services from residential areas		Wales Spatial Plan, PPW edition 7; Older People in Wales; Regional Transport Plan - Taith; Countryside Rights of Way Act; West Cheshire – North East Wales Sub Regional Spatial Strategy; Wales Transport Strategy; National Transport Finance Plan; North Wales Joint Local Transport Plan (2014)	Development Plan; Flintshire Rights of Way Improvement Plan; Single Integrated Plan for Flintshire; The Deeside Plan	developments and key services are served by a range of transport options to improve accessibility.	objectives, indicators and targets that seek to promote public transport use and improve accessibility to meet local needs.		
Improve the health and wellbeing of the population and reduce health inequalities	Guidelines for Community Noise; Children's Environment and Health Action Plan for Europe; The Drinking Water Directive; Environmental Noise Directive (END) 2002/49/EC; Together for Health - A Strategic Approach for the EU 2008-2013	PPW edition 7; Wales Spatial Plan; Play Policy Implementation Plan; Gypsy Traveller Good Practice Guidelines; National Energy Efficiency and Savings Plan; Fuel Poverty Strategy; One Wales, One Planet; Living Well – Living Independent Lives; The Strategy for Older People in Wales; Towards Zero Waste; A Walking and Cycling Action Plan for Wales; Wellbeing in Wales; Well Being of Future Generations Act; Guidelines for Community Noise 1999;	Flintshire Unitary Development Plan; Flintshire Rights of Way Improvement Plan; Assessment of Local Well-being for Flintshire	The LDP should promote healthy and active lifestyles. Health facilities should be located to maximise accessibility. Accessibility to and linkages between areas of open space providing both formal and informal recreational opportunities should be considered as health benefits and wellbeing benefits can be achieved from green space.	The IIA framework should include a variety of social objectives, indicators and targets that seek to benefit health and the local community.	Population, Human Health	3

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
		Children's Environment and Health Action Plan for Europe; West Cheshire – North East Wales Sub Regional Spatial Strategy; Children's Commissions for Wales; Public Health (Wales) Bill					
Promote and protect the Welsh language		Welsh Language (Wales) Measure 2011; a million Welsh speakers by 2050; Planning (Wales) Act 2015; One Wales – A Progressive Agenda for the Government of Wales; Well-being of Future Generations (Wales) Act (2015); One Wales: Connecting the Nation; Vibrant and Viable Places New Regeneration Framework; Welsh Medium Education Strategy 2010		The LDP should support activities which promote and facilitate the use of the Welsh language.	The IIA Framework should include objectives that promote the Welsh language	Population and Cultural Heritage	18
Raise educational attainment to help improve opportunities for life	Aarhus Convention, PSI Directive; UN convention on the Rights of the Child 1989; Committee on the Rights of the Child Recommendations report	Medium Education Strategy; Community Cohesion Strategy for Wales; Vibrant and Viable Places New Regeneration Framework ; Welsh in Education Strategic Plan for Flintshire; Wales – A	Flintshire Unitary Development Plan; Single Integrated Plan for Flintshire	The LDP should seek to raise educational attainment.	The IIA Framework should include objectives, indicators and targets that seek to improve local	Population, Human Health	2

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
		Better Country; Well Being of Future Generations Act; Welsh Language (Wales) Measure; Children's Commissions for Wales; Consultation on a Welsh Government draft strategy: a million Welsh speakers by 2050			skills and education.		
Improve access to good quality affordable housing to ensure that everyone has the opportunity to live in a decent affordable home		TAN1- Joint Housing Land Availability Studies, TAN2 – Planning and Affordable Housing, TAN12 – Design; Wales Spatial Plan; PPW edition 7; Gypsy Traveller Good Practice Guidelines; Travelling to a Better Future; Improving Lives and Communities; Living Well – Living Independent Lives; West Cheshire – North East Wales Sub Regional Spatial Strategy; National Transport Finance Plan	Flintshire Unitary Development Plan; Flintshire Local Housing Strategy; Joint Housing Availability Study; Flintshire Improvement Plan; The Deeside Plan	The LDP should promote safe and sustainable communities.	The IIA Framework should include objectives, indicators and targets that address housing issues.	Population, Human Health	4
Reduce levels of crime and fear of crime and promote safer neighbourhoods		TAN 12- Design, PPW edition 4; Play Policy Implementation Plan; Community Cohesion Strategy for Wales;	Flintshire Unitary Development Plan; Flintshire Local	Policies should promote safe and sustainable communities.	The IIA Framework should include objectives, indicators and	Population, Human Health	1

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
			Housing Strategy; Single Integrated Plan for Flintshire; Flintshire Improvement Plan		targets that address crime.		
Create sustainable, cohesive and balanced communities	Johannesburg Declaration on Sustainable Development, European Spatial Development Perspective, European Sustainable Development Strategy, Agenda 21, Rio Declaration on Environment and Development, EU Rural Development Policy, Aarhus Convention, PSI Directive; Towards Social Investment for Growth and Cohesion 2014-2020	National Energy Efficiency and Savings Plan; Living Well – Living Independent Lives; A Walking and Cycling Action Plan for Wales; Vibrant and Viable Places New Regeneration Framework; Wales – A Better Country;	Flintshire Unitary Development Plan; Flintshire Improvement Plan; Strategic Equality Plan; The Deeside Plan	The LDP should provide for a range of housing, employment and other opportunities to enable people to realise their individual aspirations.	The IIA Framework should include objective, targets and indicators that address community needs.	Population Human Health	3, 4, 6, 7, 8, 9
Economic							
Promote quality employment opportunities	Johannesburg Declaration on Sustainable Development, The European Employment Strategy	PPW edition 7; Winning Wales; Coastal Tourism Strategy; The National Economic Strategy of WAG; Green Jobs Strategy for Wales; Sustainable Tourism Framework; A Skills and Employment Strategy and Action Plan; Wales – A Better Country,	Flintshire Unitary Development Plan; The Deeside Plan	The LDP should ensure adequate provision of local employment opportunities.	The IIA Framework should address employment provision.	Population	8

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
		North Wales Regional Employment Land Strategy; Well Being of Future Generations Act; Technical Advice Note (TAN) 23: Economic Development; National Transport Finance Plan					
Promote sustainable economic growth, diversity and business competitiveness	European Spatial Development Perspective, The European Employment Strategy; Europe 2020: A strategy for smart, sustainable and inclusive growth	A Winning Wales, The National Economic Strategy of WAG, Wales Spatial Plan; National Transport Plan; North Wales Regional Transport Plan - Taith; Vibrant and Viable Places New Regeneration Framework; Partnership for Growth: The Welsh Government Strategy for Tourism 2013 – 2020 (; Farming for the Future; North Wales Development Strategy; Technical Advice Note (TAN) 23: Economic Development; The Department for Business, Innovation and Skills (BIS) (2010) Local Growth: Realising Every Place's Potential (Local Growth White Paper); West Cheshire –	Flintshire Unitary Development Plan; Flint Strategy and Masterplan; Regeneration Strategy; Flintshire Improvement Plan; The Deeside Plan	The LDP should encourage the creation of infrastructure and networks which enable business innovation and stimulates business growth.	The IIA Framework should include objectives, indicators and targets relating to economic growth and development.	Population	7, 9

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
		North East Wales Sub Regional Spatial Strategy; National Infrastructure Plan					
Establish a strong tourist economy, sensitively capitalising on environmental, heritage, and leisure assets and ensuring the benefits are experienced locally		TAN13 – Tourism, Cultural Tourism Strategy for Wales; Coastal Tourism Strategy; Wales Spatial Plan; Partnership for Growth: The Welsh Government Strategy for Tourism 2013 – 2020 (; Sustainable Tourism Framework; Wales: A Vibrant Economy; Welsh Language (Wales) Measure; West Cheshire – North East Wales Sub Regional Spatial Strategy	Flintshire Tourism Strategy (now out of date); Flintshire Regeneration Strategy	The LDP should promote the use and enhancement of landscape, coastal, cultural and historic resources for tourism development.	The IIA Framework should include reference to capitalising on the tourist economy within Flintshire.	Population, Cultural Heritage, Landscape, Biodiversity	7, 11, 12
Improve the vitality and vibrancy of town centres	European Sustainable Development Strategy	PPW edition 7; TAN4 – Retailing and Town Centres; National Transport Plan; North Wales Regional Transport Plan - Taith; TAN12 – Design; Child Poverty Strategy for Wales; Sustainable Tourism Framework; A Walking and Cycling Action Plan for Wales; National Transport Finance Plan; National	Flint Strategy and Masterplan; The Deeside Plan	The LDP should enhance the accessibility and role and function of town centres, which should be the focus for community life.	The IIA Framework should include objectives, indicators and targets relating to improving town centre vitality and vibrancy.	Population	7

Themes relevant to IIA of Flintshire LDP	Source					Main IIA Topics	Relevant IIA Objective
	International and European	National (UK and Wales)	Local	Implications For the LDP	Implications for the IIA		
		Infrastructure Plan; Children's Commissions for Wales					

Appendix B

Baseline Data

A POPULATION

Relevant SA Objectives

All SA Objectives.

Overview of Baseline Conditions

The following baseline indicators have been used to identify key population trends and characteristics:

- Population Change (NOMIS, Stats Wales)
- Age Structure / Change (Stats Wales, Public Health Wales)
- Population density (Stats Wales, Neighbourhood Statistics)
- Percentage ethnic groups (Stats Wales, Neighbourhood Statistics)
- Resident population knowledge of welsh language (Stats Wales)
- Country of Birth (Neighbourhood Statistics)
- Number of in-migrants per year (Stats Wales)

Population Change

Latest figures show that the population of Flintshire was 153,200 in 2013 (NOMIS). This is an increase of 4,000 people over the last 10 years, a 2.6% rise. This is a slower population growth than the Welsh national average and considerably lower than the rest of Great Britain (GB), 4.7% and 6.98% respectively over the same period. It is projected by Welsh Government that by 2030 the population may reach 157,553 (3.2% increase). The mid-year population estimates for Flintshire between 1991 and 2013 are shown in Table A-1 below (statswales.wales.gov.uk).

Table A-1 Flintshire Mid-Year Population Estimates

Date	Mid-Year Population Estimate	Difference on previous year
Mid-2013	153,240	+ 497
Mid-2012	152,743	+ 77
Mid-2011	152,500	+ 3900
Mid-2001	148,600	+ 6564
Mid-1991	142,036	-

Source: statswales.wales.gov.uk

County Age Structure / Change

The age structure in Flintshire is similar to the UK average with 61.5% of the population aged 16-64 (roughly equivalent to the working age). Flintshire's population age structure for 2013 is shown in Figure A-1. It shows the dominant age group in the County is 45 – 64 years old and that the overall age structure is one of an aging population. Projections show that this is expected to continue. In 2011 the ratio of older people per 100 people of working age who have dependents was 32.7. By 2039 the percentage of people aged 65 and over is predicted to rise to 29.2% of the total population and the percentage of people over 85 is predicted to rise to 6.6%. In contrast, over the

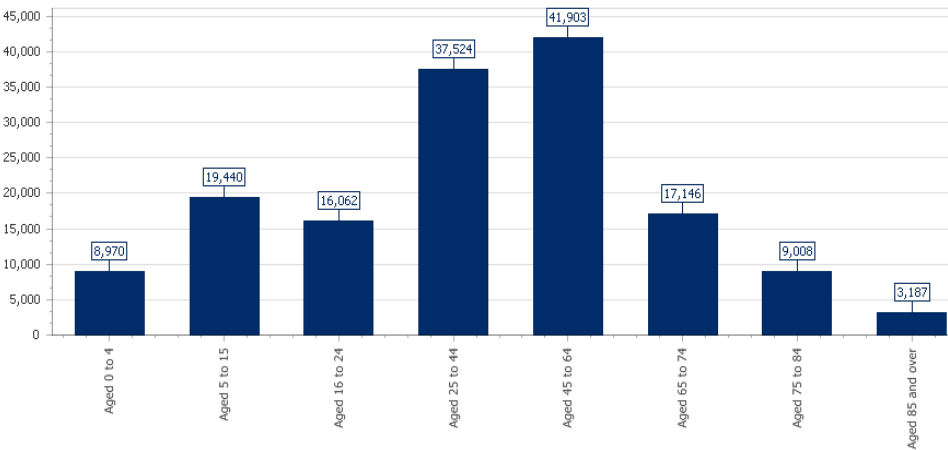
same period the population of 18-24 year olds in the County is expected to fall by ca. 14.5% to 10,010 – less than half those aged 55-64 (statswales.wales.gov.uk).

The trend towards an ageing population is not unique to Flintshire. Across both North Wales and Wales generally the trend is mirrored in population projections. This can be seen clearly in Figure A-2.

Population Density

The population density of Flintshire in 2016 was 353.0 persons per square kilometre. This has grown steadily over the last two decades, from 324.7 in 1991, 339.7 in 2001 and 350.3 in 2013. In comparison to the Welsh average of 150.1 and UK average of 191.3 the current population density is high. However, the County is still far more sparsely populated than the capital Cardiff, currently at 2,565.5persons per square kilometre (statswales.wales.gov.uk, Neighbourhood Statistics).

Figure A-1 Population Age Structure of Flintshire (2013 Mid-Year Estimates)



Source: statswales.wales.gov.uk – Population Projections

Percentage Ethnic Groups

The ethnic make-up of Flintshire compared to national figures is shown in Table A-2 below.

Table A-2 Percentage Ethnic Groups in Flintshire and Wales

	White (%)	Asian / Asian British Mixed (%)	Black / Black British Mixed (%)	Other
Flintshire	98.6	0.8	0.1	0.5
Wales	95.6	2.2	0.6	1.6

Source: 2011 Census – Neighbourhood Statistics

In 2011, Flintshire had 3% more of its population who were white compared to the rest of Wales and a lower percentage of people who were Asian, black or other. The percentage of Flintshire residents from a non-white background has risen from 0.8-1.2% over the 10 year period from 2004-

2014. This is in line with the overall Welsh trend, although the rate of increase is lower, having gone from 2.4-4% over the same period (statswales.wales.gov.uk).

Resident Population Knowledge of Welsh Language

In comparison to the rest of Wales, Flintshire has a lower percentage of its population who can speak Welsh. The 2011 Census reported that 13.2% of Flintshire residents could speak the language with the highest levels generally found in rural areas (the average for Wales is 19%), whereas 19% nationally reported they could do so. In the 2015/16 school year, five out of Flintshire's 67 primary schools were first language Welsh or bilingual schools and were attended by 6% of the County's primary school pupils. Only one of the nine secondary schools provide Welsh medium or bilingual education and which was attended by 5% of Flintshire's secondary school pupil population (Flintshire Preferred Strategy, 2017). These figures show a drop of 1.17% in Welsh speakers since the 2001 Census, which is in-line with the national decline of 1.76% in that time (statswales.wales.gov.uk, Neighbourhood Statistics).

Country of Birth

Table A-3 shows data on the country of birth for Flintshire and Welsh residents in 2001 and 2011. It shows that the proportion of Flintshire residents of Welsh origin is much lower than the national average of those born in Wales living there now. The 2011 census reported that 50% of those living in Flintshire were of Welsh origin, 22.6% lower than the average across Wales. These figures represent a slight (1.1%) reduction since the 2001 census for Flintshire and for Wales as a whole (2.8%). Of those making up the rest of Flintshire's population, 45.8% originate from the rest of the UK compared to 21.9% for Wales nationally. This leaves 4.2% of the Flintshire population made up of people born either in the EU (excluding the UK) or elsewhere – slightly lower than the 5.5% for Wales nationally. These figures are likely due to the County's close location to England to the East (Neighbourhood Statistics).

Table A-3 Country of Birth in 2001 and 2011 for Flintshire (top) and Wales (bottom)

Country of Birth	2001 (%)	2011 (%)	Percentage change (%)
Wales	51.1	50	-1.1
UK (excluding Wales)	46.8	45.8	-1
Elsewhere	2.1	4.2	+2.1

Country of Birth	2001 (%)	2011 (%)	Percentage change (%)
Wales	75.4	72.6	-2.8
UK (excluding Wales)	21.9	21.9	0
Elsewhere	2.7	5.5	+2.8

Number of in-Migrants Per Year

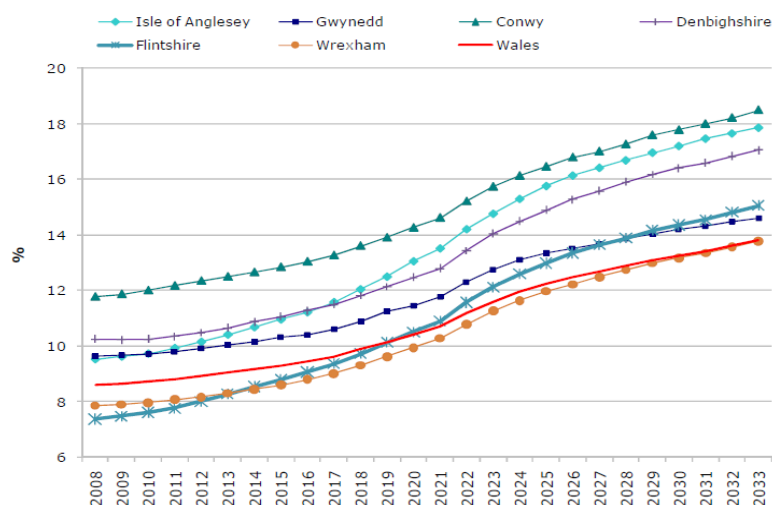
Net migration in Flintshire has fluctuated over the past decade. Between 2003 and 2013 there have been four years of net inward migration and six of net outward movement. The most recent figures show that between 2012 and 2013 there was a net inward migration into the area of 80. Wales nationally experienced steady net inward migration during 2003-2013. However this has been gradually reducing overall and in 2012-13 there was a net outward migration of 670 (stats.wales.gov.uk).

Evolution of the Baseline

Based on 2011 mid-year estimates, by 2020 the population of Flintshire is projected to grow by 2,895 people (1.9%). It will then remain stable for the following decade, growing by just 283 people by 2030, then begin to decline – shrinking by 1,306 residents in the subsequent 6 years (-0.84%). This leaves a projected 2036 population of 154,538 in the County (stats.wales.gov.uk).

The ageing population already present in Flintshire is set to become exacerbated in coming years, with growth in the numbers of all older age groups – particularly the very elderly (85+). By 2039 the number of people aged 65+ is predicted to rise to account for ca. 29.2% of the overall population. In addition, the number of people aged 85+ is set to have increased by 125% during the period 2012-2030. By 2039, it is estimated the percentage of the population over 85 is 6.6%. In contrast, over the same period (2012-2030), the population of 18-24 year olds in the County is expected to fall by ca. 14.5% to 10,010 – less than half those aged 55-64 (stats.wales.gov.uk). The trend towards an ageing population is not unique to Flintshire. Across both North Wales and Wales generally the trend is mirrored in population projections. This can be seen clearly in Figure A-2.

Figure A-2 Projected Population, 2008-2033, % aged 75 and over



Source: Public Health Wales – North Wales profile 2011

Projected household growth and type:

- The number of projected households is anticipated to grow by 4.4% by 2016, with single person households seeing the most growth - 34.4%.

- One adult and one child, and one adult and two child households are anticipated to see the next highest rise at 29%.

Likely population trends for Flintshire are identified below:

- The number of younger residents in Flintshire is set to fall.
- The number of Welsh speakers in Flintshire has been falling in recent years and it is likely that this trend will continue in line with the pattern across Wales.
- Flintshire's net migration has been relatively neutral over the past decade and would suggest that this trend will continue going forward.

Key Sustainability Issues and Opportunities

Issues

- Pressures associated with an increasingly ageing population in Flintshire are likely to cause issues across the County, including:
 - Pressure on health services to provide adequate care;
 - Availability of residential homes to meet the needs of the whole population, including but not limited to, the elderly and adults with a learning disability; and
 - Provision of appropriate services for an older generation (e.g. transport).
- The fall in the number of young people in Flintshire will bring a number of associated pressures. Principally will be shortages in an active workforce. With fewer younger people, schools may also find it difficult to fill all their places and remain viable.
- In addition, fewer young people combined with an increase in the older population will mean that there will be less people within the population to provide care, both formally and informally, for older people.

Opportunities

- The provision of accessible services should meet local population growth needs.
- The provision of healthcare and key services to the elderly should be prioritised.

Data Gaps and Uncertainties

- Overall migration statistics for Flintshire and Wales.

B EDUCATION

Overview of Baseline Conditions

Relevant SA Objectives

2. To improve levels of educational attainment for all age groups and all sectors of society
<ul style="list-style-type: none">▪ To increase levels of participation and attainment in education for all members of society▪ To improve access to and involvement in lifelong learning opportunities▪ To improve the provision of education and training facilities▪ To improve qualification and skills for all parts of the community

The following baseline indicators have been used to identify key education trends and characteristics:

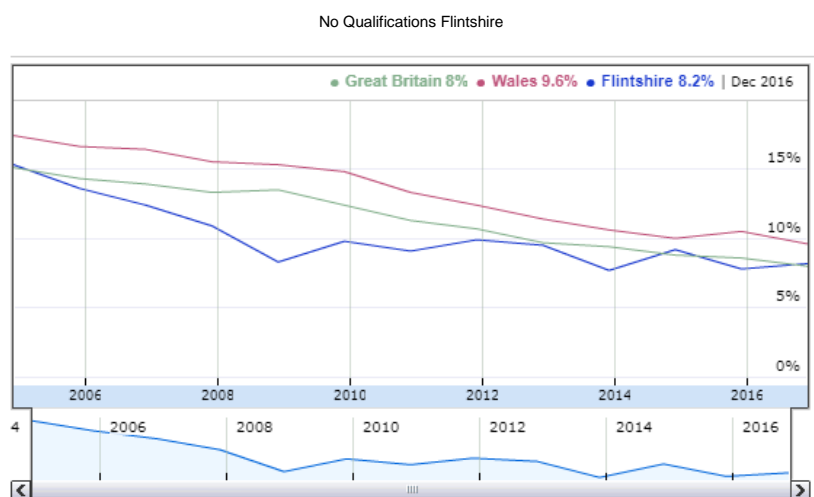
Percentage of working age population with no qualifications (NOMIS)

- Percentage of working age population with National Qualifications Framework (NQF) Level 4 and above (ONS)
- Secondary school pupil attendance rate (Welsh Government)
- Number of Lower Super Output Areas (LSOAs) in bottom 10% Education Deprivation Domain (Welsh Index of Multiple Deprivation (WIMD))
- Attainment of expected levels in English or Welsh first language, mathematics and sciences from key stage 2 pupils (Welsh government)
- Location of all education establishments (Department for Education)

Percentage of Working Age Population with no Qualifications

The number of Flintshire residents of working age with no qualifications has been steadily falling over the past decade and is now at a low of 8.2%, see Figure B-1. This is a trend which has been replicated across Wales and the whole of Great Britain; however the proportion of Flintshire residents is lower than those areas by 2.9% and 1.6% respectively from the latest figures (NOMIS).

Figure B-1 Percentage of Working Age (16-64) Population in Flintshire, Wales and GB with No Qualifications – January 2006 – Dec 2016

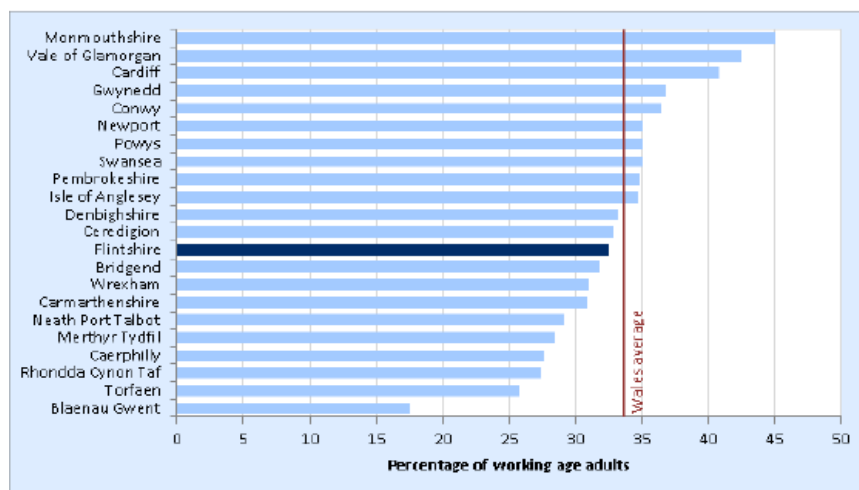


Source: NOMIS

Percentage of Working Age Population with NQF Level 4 and Above

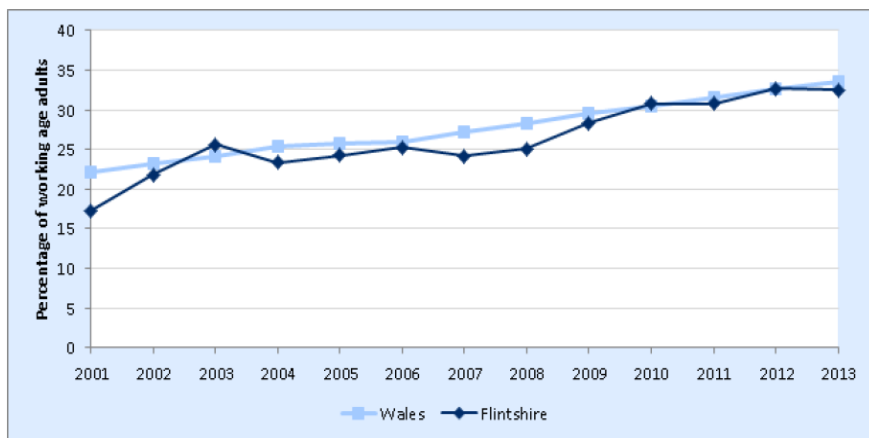
The percentage of working age adults with a NQF level 4 or above, equivalent to a graduate level degree or higher, for 2013 for Flintshire compared to other Welsh counties is shown below in Figure B-2. The percentage of these adults during 2001-2013 is shown in Figure B-3.

Figure B-2 Working Age Adults (%) with Qualifications at NQF Level Four or Above, 2013



Source: Office for National Statistics

Figure B-3 Working Age Adults (%) with Qualifications at NQF Level Four or Above, 2001 - 2013



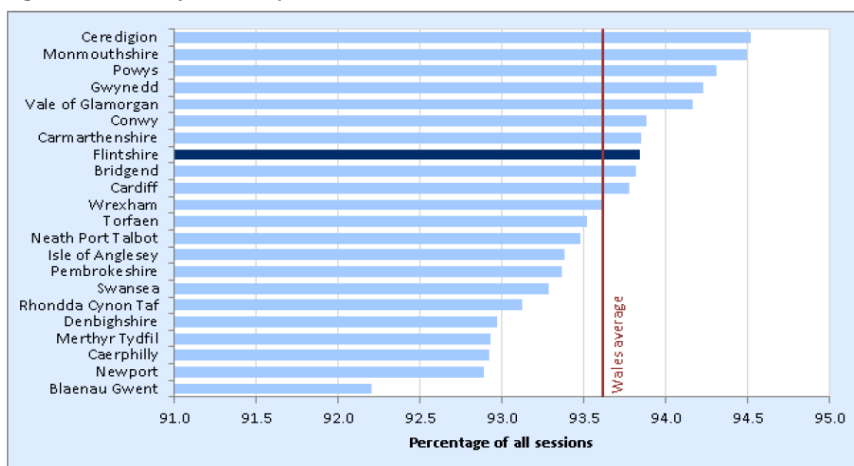
Source: Office for National Statistics

Figure B-2 shows that the number of working age Flintshire residents who possess a NQF level 4 or above is just below the national Welsh average of 34%. However, Figure B-3 demonstrates that this number has been steadily increasing since 2001 where it was around 17%.

Secondary School Pupil Attendance Rate

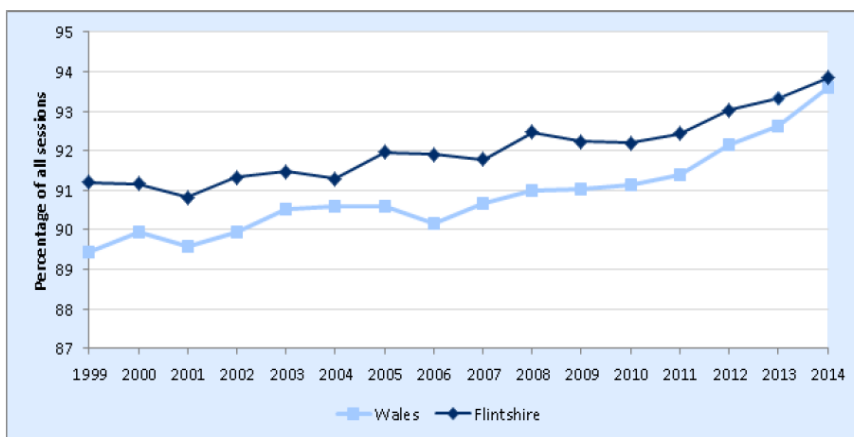
The attendance rate (%) of secondary school pupils for 2014 and over the past 15 years is shown in Figure B-4 and B-5, respectively.

Figure B-4 Secondary School Pupil Attendance Rate, 2014



Source: Welsh Government

Figure B-5 Secondary School Pupil Attendance Rate, 2014



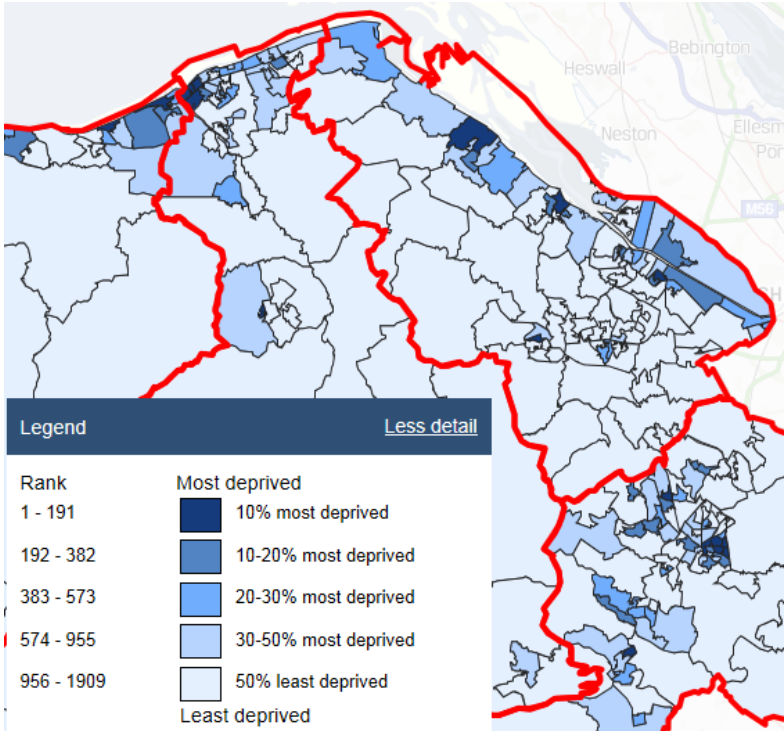
Source: Welsh Government

It can be seen by looking at the figures above that the secondary school attendance rate for Flintshire in 2014 was above the national average at 94% and that this rate has been climbing progressively from 91% since 1999.

Number of LSOAs in bottom 10% Education Deprivation Domain

The distribution of LSOAs and their relative deprivation for education across Flintshire is shown in Figure B-6 below.

Figure B-6 Education Deprivation for Flintshire's LSOAs



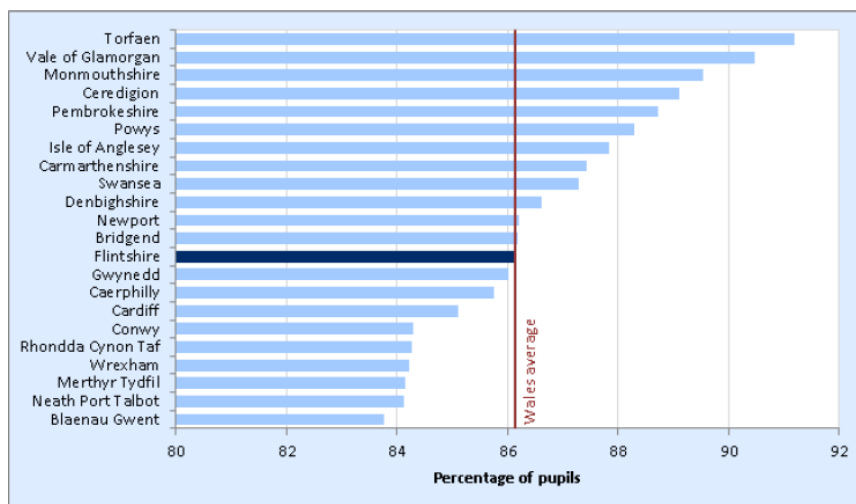
Source: WIMD

In 2014 of the 92 LSOAs in Flintshire, four were within the bottom 10% most deprived of all the 1909 LSOAs in Wales for education deprivation. These LSOAs were: Shotton Higher, Greenfield, Mold West and Flint Castle. This was an increase of four LSOAs in the bottom 10% for educational deprivation since 2001 (Source: WIMD, 2014). The majority of the LSOAs in the County are located within the 50% least deprived.

Attainment of Expected Levels in English or Welsh First Language, Mathematics and Sciences from Key Stage 2 Pupils

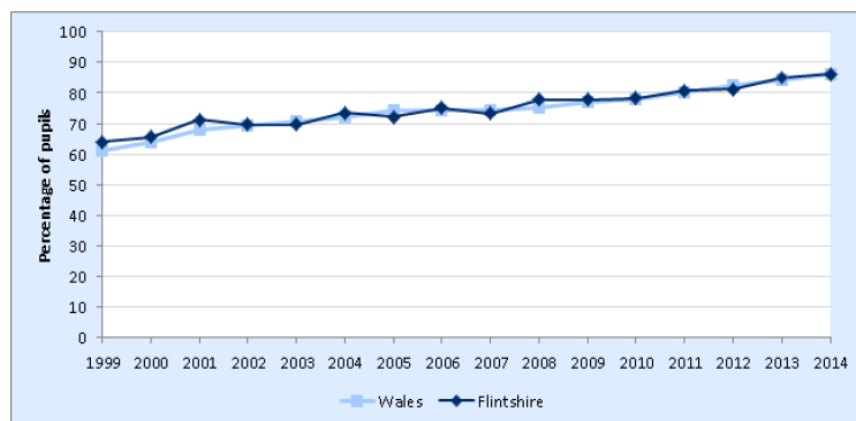
The attainment of the expected levels in English or Welsh first language, mathematics and sciences in 2014 and since 1999 for key stage two pupils is shown in Figures B-7 and B-8, respectively.

Figure B-7 Key Stage 2 Core Subject Indicator Attainment, 2014



Source: Welsh Government

Figure B-8 Key Stage 2 Core Subject Indicator Attainment, 1999-2014



Source: Welsh Government

Figure B-7 shows that in 2014 Flintshire's key stage two pupils attained the same as the Welsh average for the expected levels of English or Welsh first language, mathematics and science at 86%. It can be seen in Figure B-8 that this level of achievement has been gradually rising since 1999 where it was 65%. **Education Establishments**

In Flintshire, there are 134 primary schools, 12 high schools and two further education colleges (Flintshire County Council). Figure B-9 shows the location of these education establishments. It shows that education facilities in Flintshire are fairly evenly distributed, with the concentrations around Flint, Mold and Deeside.

Figure B-9 Location of all Education Establishments in Flintshire



Source: Department for Education 2017*

***No mapping information is currently available for Broughton Primary School, Bryn Tirion Hall School, The Haven, Hawarden Village Voluntary Aided C.I.W. Primary, Options Kinsale, Ysgol Cae'r Nant, Ysgol Maes Hyfryd, Ysgol Maes-Y-Felin, Ysgol Mynydd Isa, Ysgol Pen Coch, Ysgol Penyffordd, Ysgol Ty Ffynnon.**

Welsh Government data for 2010 showed that the percentage of surplus places in Flintshire schools was below the Welsh average, although there was a higher percentage of surplus places in both primary and secondary schools than in 2009 (A report on the quality of local authority education services for children and young people, 2011).

Flintshire has a higher than average provision of programmes within the engineering sector – 17% of apprenticeships (8% for Wales) and 14% of all programmes (6% for Wales). The manufacturing sector also has a higher proportion of learning programmes than the Wales average (LDP Preferred Strategy).

Evolution of the Baseline

- The number working age Flintshire residents with no qualifications has been falling and this trend is expected to continue.
- The number of people in Flintshire with a NQF level 4 or higher has been rising and it is likely that at current rates it will surpass that current national average which is currently behind.
- Attendance rates of secondary school pupils are rising in Flintshire and across Wales.
- Attainment of core subjects has risen in line with the national average over the past decade and is predicted to continue.

Key Sustainability Issues and Opportunities

Issues

- There is an increased number of LSOAs which in the bottom 10% for educational deprivation.
- The percentage of working age Flintshire residents with a NQF level 4 or above qualification is lower than that of the national average.

Opportunities

- Opportunities should be sought to raise the number of working age Flintshire residents with a level 4 or above NQF to, or above, the national average.
- The number of Flintshire LSOAs in the bottom 10% for Welsh educational deprivation should be reduced.
- Positive trends in the following should be encouraged:
 - Reducing the number of residents without a qualification.
 - Improving secondary school attendance rate.
 - Improving core subject attainment levels.

Data Gaps and Uncertainties

- Percentage of 16 - 17 year olds who have continued to participate in higher education.
- Percentage of 15 / 16 year olds leaving full-time education without a recognised qualification.
- Provision of and participation in training.

C BIODIVERSITY, FLORA AND FAUNA

Overview of Baseline Conditions

Relevant SA Objectives

10. To protect and enhance biodiversity and geodiversity

- To protect and enhance designated sites of nature conservation importance
- To protect the integrity of European, proposed European and listed Ramsar sites, or where not at a favourable conservation status, enhance their interest features
- To protect and enhance wildlife especially rare and endangered species
- To protect and enhance habitats and wildlife corridors
- To conserve, enhance and create appropriate wildlife habitats and wider biodiversity in urban and rural areas
- To avoid damage or fragmentation of designated sites, habitats and protected species and encourage their enhancement and connection
- To provide opportunities for people to access wildlife and open green spaces
- To protect and enhance geodiversity

The following baseline indicators have been used to characterise conditions across the County:

- Number and distribution of internationally, nationally, regionally and locally designated sites (NRW, Flintshire County Council, SEA Environmental Report 2014)
- Wildlife Sites (Flintshire County Council website, www.flintshire.gov.uk)
- Key BAP Biodiversity Action Plan (BAP) species / habitats present (Flintshire County Council website, www.flintshire.gov.uk)
- Natural Resources Wales (<https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/find-protected-areas-of-land-and-seas/designated-sites/?lang=en>)

Flintshire Local Development Plan Preferred Strategy 2015 – 2030 (2017) **Number and Distribution of Internationally, Nationally, Regionally and Locally Designated Sites**

The Dee Estuary, Deeside & Buckley Newt sites and Halkyn Mountain are the most important sites for conservation in the county and are all internationally designated. Woodlands cover 8.8% of the county – well below the Wales average of 14%. Compared with many areas in Wales the county is largely urban/industrial. There are 28 Sites of Special Scientific Interest (SSSIs), six Special Areas of Conservation (SACs), two Special Protection Areas (SPAs), (there are currently no candidate SPAs) and one Ramsar site within Flintshire. They are listed below:

Ramsar: The Dee Estuary

Site Of Special Scientific Interest: Afon Dyfrdwy (River Dee), Alyn Valley Woods and Alyn, Buckley Claypits and Commons, Caerwys Tufa, Cefn Meadow, Chwarel Cambrian Cambrian Quarry Gwernymynydd, Coed Talon Marsh, Coed Trefraith, Comin Helygain, Connah's Quay Ponds, Ddol Uchaf, Dee Estuary, Glaswelltiroedd Trelogan - Trelogan Grasslands, Gronant Dunes and Talacre Warren, Hendre Bach, Herward Smithy, Inner Marsh Farm, Llandegla Moor, Maes y Grug, Moel Hiraddug a Bryn Gop, Mynydd y Fflint Flint Mountain, Parc Bodlondeb a Gwenallt Parc, Lixwm, Parc Linden, Lixwm, Pen-y-cefn Pasture, Prestatyn Hillside, Shotton Lagoons and Reedbeds, Teilia Quarry, Tyddyn-y-barcut

Special Area of Conservation: Alyn Valley Woods - Coedwigoedd Dyffryn Alun, Berwyn and South Clwyd Mountains, Dee Estuary Aber Dyfrdwy, Deeside and Buckley Newt Sites, Halkyn Mountain - Mynydd Helygain, River Dee and Bala Lake

Special Protection Area: Liverpool Bay, The Dee Estuary.

The distribution of these designated sites can be seen on Figure 1 Ecological Designated Sites of Appendix C. The SACs are distributed across the County, with concentrations around Mold and Rhymwyn. The SSSIs in the County are also reasonably evenly spread.

Gathering Grounds Woods Local Nature Reserve (LNR) is the only LNR within Flintshire.

Wildlife Sites

There are three Wildlife Trust Sites in Flintshire listed below. The location of these sites is shown on Figure C-1.

- Coed y Felin;
- Coed Trellvniau and;
- Y Ddol Uchaf.

Figure C-1 Location of Wildlife trusts in Flintshire



Source: WildlifeTrustsWales.org

In addition there are a total of 308 non statutory wildlife sites within Flintshire (Community Strategy Flintshire 2009-2019).

Key BAP Species / Habitats Present

Flintshire contains a rich variety of wildlife which the Council recognises needs protecting and enhancing. The Flintshire Local Biodiversity Action Plan (LBAP) identifies protected species and habitats that are of conservation concern within the County. The list also includes species identified as being of Principal Importance for Conservation in Wales under Section 42 of the Natural Environment and Rural Communities Act 2006. The LBAP contains species and habitat action plans for species and habitats some of which are listed as follows:

Species action plans include:

- Bat;
- European Hedgehog and;
- Native black poplar.

Habitat action plans include:

- Woodland;
- Upland and;
- Freshwater farmland.

Action plans for species and habitats include plans for native black poplars, hedgehogs. More specifically the plans seek to protect important native black poplars through tree preservation orders (TPOs); plant native black poplar at appropriate locations and promote hedgehog friendly habitat management.

Table C-1 shows the biodiversity priority habitats in Flintshire.

Table C-1 Flintshire Priority Habitats

Biodiversity Priority Habitat	Welsh LBAP area	Area (PHW)	% Welsh resource
Lowland Heath	Flintshire	160	1
Lowland meadow	Flintshire	22	1.3
Lowland calcareous grassland	Flintshire	200	17
Lowland dry acid	Flintshire	300	<1
Purple moor grass	Flintshire	50	<1
Blanket Bog	Flintshire	0	0
Upland heath	Flintshire	230	<1
Lowland fens	Flintshire	32	<1
Wet reedbeds	Flintshire	4	1
Coastal Sand dunes	Flintshire	49	<1
Coastal & Floodplain grazing	Flintshire	2500	5
Wood pasture and parkland	Flintshire	10	5
Woodland	Flintshire	1800	2

Source: Flintshire County Council, January 2011

Evolution of the Baseline

Biodiversity indicators for the UK as a whole indicate that the long term decline in some species such as farmland birds continues, but appears to have been stabilised for others, including woodland birds, selected butterflies and selected bat species. Plant diversity is generally declining. Many UK priority habitats and species have shown signs of recovery in the last ten years.

Flintshire contains a wide variety of important habitats and wildlife. With continued pressures from Climate Change and associated environmental degradation it is likely that the number of protected landscape areas and species will remain high to protect these important assets. The number of SSSIs has increased since 2014.

Key Sustainability Issues and Opportunities

Issues

- There is potential for impacts to important national and international sites as a result of development.
- There is also potential for indirect effects to species as a result of an increasing population and the resulting development required to meet population needs.
- There are variations across the County in the ability of residents to access green spaces.

Opportunities

- The protection and safeguarding of designated sites and protected species such as Great Crested Newts should be prioritised.
- In combination effects of development, notably new housing provision should be taken into consideration as required with the HRA.
- Sites such as the Deeside and Buckley SAC and its protected Great Crested Newts should be protected from developmental impacts.
- Developers should make design or financial contributions in order to ensure that impacts to designations, species and habitats is minimised.
- Opportunities should be sought to develop accessible greenspaces.
- Opportunities should be sought to ensure that protected species have favourable conservation status and are thriving.
- Opportunities should be sought to promote habitat connectivity.

Data Gaps and Uncertainties

- Sites in favourable condition and / or area.
- Woodland / farmland bird populations and change.
- Area of parks and green spaces per 1,000 head of the population (Hectares).
- Areas of Ancient Woodland.
- Number of designated sites in land management schemes.

D LANDSCAPE

Overview of Baseline Conditions

Relevant SA Objectives

11 To conserve and enhance the County's landscape and townscape character and quality
<ul style="list-style-type: none">▪ To protect and enhance areas of landscape character and quality▪ To protect and enhance townscape character and quality▪ To respect and enhance local distinctiveness and diversity▪ To promote sensitive design in development▪ To protect and enhance the enjoyment of geological resources
12. To protect and enhance the cultural heritage assets (see also section H)
<ul style="list-style-type: none">▪ To protect and enhance heritage assets including Listed Buildings, Scheduled Monuments and Historic Landscapes▪ To protect and enhance historic landscape value

The following baseline indicators have been used to characterise conditions across the County:

- Landscape / townscape characterisation (Flint Strategy and Masterplan 2021)
- Landscapes of Historic Importance (CCW Register of Historic Landscapes)
- Distribution and area of Areas of Outstanding Natural Beauty (AONBs), National Parks and County landscape designations (NRW, SEA Environmental Report 2014)

Landscape / Townscape Characterisation

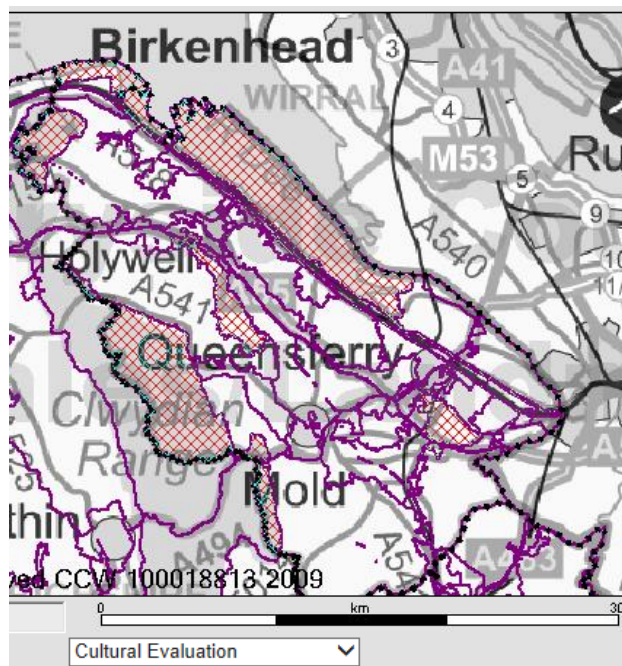
Flintshire has diverse landscape character types ranging from undulating hills and heather moorland of the Clwydian Range and Dee Valley AONB to the coastal and estuarine flats of the River Dee refer to Figure 2 Heritage Assets and Landscape Features within Appendix C.

In recent years there has been significant (public and private) investment in and around Flintshire, particularly in terms of retail investment in the form of £1.6 million Townscape Heritage Initiative funding, improvements to Flint Retail Park by owners HMG, investment in the Castle Park Industrial Estate (£1.1 million (WG funded), investment in the All Wales Coastal Path and two new supermarkets. A £1.8 million refurbishment and expansion of the Pavilion Leisure Centre is currently underway (Flint Strategy and Masterplan 2021).

Figure D-1 shows all of the aspect areas in Flintshire evaluated as being Outstanding in regard to their cultural landscape.

Commented [HL1]: Need App C

Figure D-1 Areas of Outstanding Cultural Landscape Evaluation in Flintshire



Source: LANDMAP

Figure D-1 shows that there are a number of areas within the County which are classified as Outstanding culturally which refers to areas of international or national importance. In particular the Dee Estuary constitutes for a large percentage of these areas.

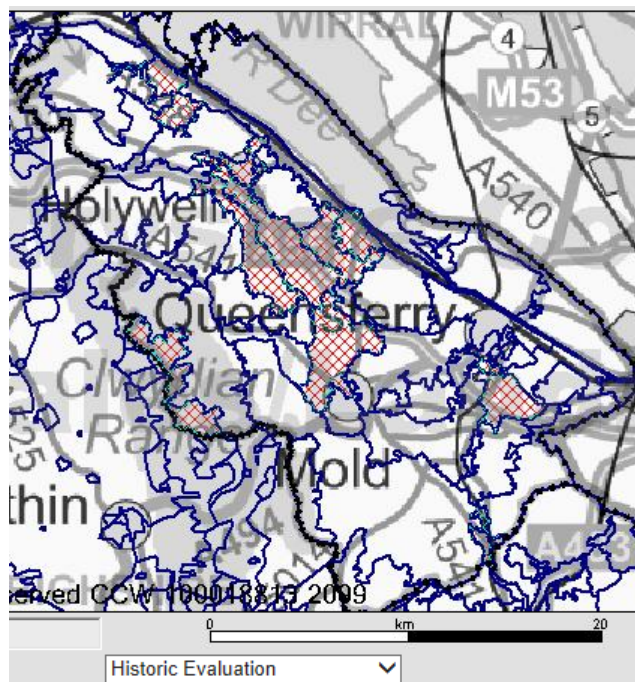
Landscapes of Historic Importance

The Holywell and Halkyn Mountain landscape of historic importance lies within Flintshire. It is an upland limestone plateau between the Clwydian Hills and the Dee Estuary in northern Flintshire. It comprises extensive and highly distinctive relict 18th and 19th century lead mining remains, associated features and settlements. A small part of the Vale of Clwyd landscape of historic importance lies in Flintshire. This is a broad lowland valley, edged by the Clwydian Hills that is centred on Denbighshire. It is the best surviving and most complete historic part of the Vale of Clwyd. It contains significant evidence of the late prehistoric and medieval land use (Countryside Council for Wales).

Flintshire covers 438km² and encompasses a wide range of landscapes in its relatively small area coverage. These landscapes range from the shores of the Dee Estuary, through tracts of agricultural land, open common land, small wooded valleys to the slopes of the Clwydian Range.

Figure D-2 shows the aspect areas in Flintshire were classified overall as being 'Outstanding' when evaluated for their historical importance.

Figure D-2 Outstanding Areas for Historical Importance in Flintshire



Source: LANDMAP

Figure D-2 shows that the majority of Flintshire is classified as having an Outstanding or High evaluation for historical significance. It shows that the main areas of historical significance in Flintshire are around central regions such as Halkyn.

Section H also discusses many important aspects which make up the historical importance of Flintshire.

Distribution and Area of AONBs, National Parks and County Landscape Designations

The Clwydian Range and Dee Valley AONB, along with a number of other landscape features and heritage assets, is located in Flintshire and has national recognition for its special qualities.

The Clwydian Range forms a 35km north - south chain of undulating hills extending to 160km² and rising to 554m at the summit of Moel Famau in the centre of the area. In 2011 a further 229 Km² were added to the designation. The area of the AONB straddles the Counties of Flintshire and Denbighshire. The hills stretch from the Vale of Clwyd in the west to the foothills of the Dee Estuary to the east; from Prestatyn Hillside in the north to the Nant y Garth pass in the South. Seen at its best from the Vale of Clwyd, the open heather moorland of the high ridge dominates the small hedged fields and coppice woodland of the lower slopes. In places, limestone rock outcrops are

exposed in attractive wooded escarpments and on the fringes of the area, highly fertile farmland gives a soft pastoral foreground to the hills.

Evolution of the Baseline

The European Landscape Convention (2007) requires policies on the protection, management and planning of landscapes to be integrated into planning policy. With the number of protected landscapes and special landscapes encompassed by these six counties, much consideration will be needed as to what impacts might result from alterations to transport infrastructure in North Wales.

Any developments would need to be incorporated within the landscape in a sensitive manner that has regard to local landscapes / townscapes.

Key Sustainability Issues and Opportunities

Issues

- Vulnerability of the valuable townscapes / landscape character of County to, for example, new developments.

Opportunities

- The valuable townscapes/landscape character of County should be protected from inappropriate development.
- Opportunities should be sought to continue the preservation of the special landscapes in Flintshire;
- Opportunities should be sought to maintain the important historic aspects of Flintshire; and
- Access and awareness of the unique aspects of the County should be improved.
- Part of the Clwydian Range and Dee Valley AONB is situated in the County which must be protected and enhanced where appropriate.

Data Gaps and Uncertainties

There are no significant data gaps or uncertainties.

E SOILS AND GEOLOGY

Overview of Baseline Conditions

Relevant SA Objectives

10. To protect and enhance biodiversity and geodiversity
<ul style="list-style-type: none">▪ To protect and enhance designated sites of nature conservation importance▪ To protect the integrity of European, proposed European and listed Ramsar sites, or where not at a favourable conservation status, enhance their interest features▪ To protect and enhance wildlife especially rare and endangered species▪ To protect and enhance habitats and wildlife corridors▪ To conserve, enhance and create appropriate wildlife habitats and wider biodiversity in urban and rural areas▪ To avoid damage or fragmentation of designated sites, habitats and protected species and encourage their enhancement and connection▪ To provide opportunities for people to access wildlife and open green spaces▪ To protect and enhance geodiversity
17. To ensure sustainable use of natural resources
<ul style="list-style-type: none">▪ Ensure that contaminated land will be guarded against▪ Encourage development of brownfield land where appropriate▪ Maintain and enhance soil quality▪ To protect peatland within the County

The following baseline indicators have been used to characterise soil and geology conditions across the County:

- Soil types / classification (Soilscapes) Percentage land stock contaminated (Contaminated Land Strategy, Flintshire County Council) Geology types (British Geological Survey – Geology viewer)
- Agricultural land quality (Community Strategy Flintshire 2009-2019)

Soil Types / Classification

Flintshire covers an area of 43,464ha including the River Dee Estuary. Flintshire is predominantly rural (80%) and the majority of land is used for agriculture. A number of sand, gravel and limestone quarries operate in the rural areas of Flintshire, including Halkyn Mountain, Cadole and Hendre.

The types of soil that can be found within Flintshire are identified on Figure E-1.

[illegible]

Source: Cranfield Soil and Agrifood Institute Soilscales

Figure E-1 shows that soil types within the County largely consists of free draining slightly acid loamy soils, slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils and slowly permeable seasonally wet acid loamy clay soils.

Contaminated Land

Flintshire's industrial past follows its geological and geographical features. Industrial areas were concentrated, as they are today, around areas where minerals can be found and the River Dee and its estuary.

Principal activities within Flintshire included lead mining, coal mining, steel production, clay, pottery and brick making, textiles, quarries, munitions and aircraft (Contaminated Land Strategy, Flintshire County Council, 2013).

The majority of Flintshire's lead mines were concentrated around the areas of Halkyn Mountain and Brynford. Since its decline in the 19th Century, lead mining has left a legacy of land contamination.

There are several closed landfill sites within Flintshire with many located along the shoreline. Cefn Mawr Quarry Landfill is a large authorised landfill located in Mold.

It is possible that soil contamination may have occurred as a result of vehicles and traffic through heavy metal roadside contamination and deposition however details of this type of contamination are not known for Flintshire.

The bedrock geology of Flintshire consists of a mixture of bedrock geology types predominantly Pennine Lower Coal, Dinantian Rocks and Minstone Grit see Figure E-2.

Pennine Lower Coal

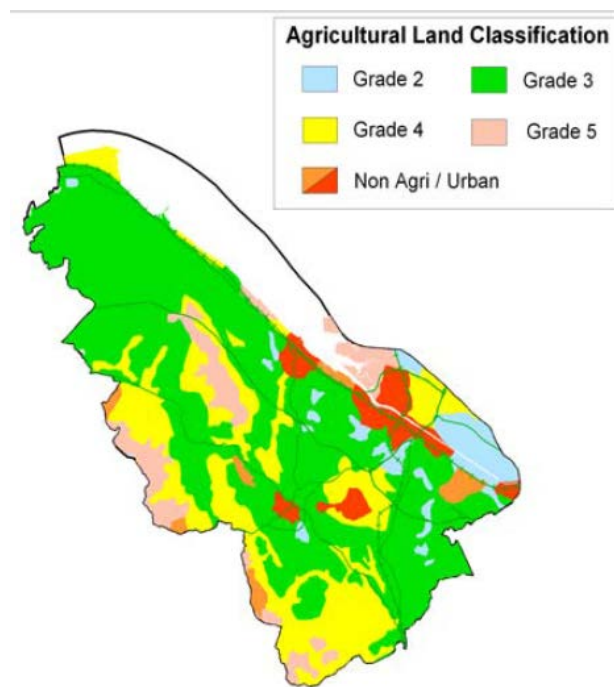
Dinantian Rocks

Milestone Grit

Agricultural Land Quality

The agricultural land quality in Flintshire can be seen in Figure E-3.

Figure E-3 Agricultural Land Quality in Flintshire



Source: Community Strategy Flintshire 2009-2019

Figure E-3 shows that the dominant quality of Flintshire's agricultural land is of Grade 3 standard, which is classed as good to moderate. There is an absence of Grade 1 quality agricultural land in the County, with some Grade 2 that is mainly located around Deeside. The lowest quality graded farm land is towards the south and west of Flintshire.

Evolution of the Baseline

The implementation of the Local Development Plan, would ultimately bring about remediation to soil resources with a view to preventing future contamination.

Key Sustainability Issues and Opportunities

Issues

- Lead mining has left a legacy of land contamination which gives rise to number of development issues.
- There are several issues concerned with residual contaminated land.

Opportunities

- To protect the County's soils from contamination and continue to remediate areas which were impacted in the past.
- Brownfield sites should be redeveloped where possible in preference to greenfield sites.
- There is a need to preserve and enhance the RIGS within the County for the future and to enhance access for the public's enjoyment where possible.

Data Gaps and Uncertainties

- Percentage of new homes built on previously developed land.

F WATER

Overview of Baseline Conditions

Relevant SA Objectives

13. To protect and enhance the quality of water features and resources
<ul style="list-style-type: none">▪ To protect and enhance ground and surface water quality▪ To protect and enhance coastal waters▪ Encourage sustainable use of water resources
14. To reduce the risk of flooding
<ul style="list-style-type: none">▪ To encourage the inclusion of flood mitigation measures such as sustainable urban drainage systems▪ To reduce and manage flooding

The following baseline indicators have been used to characterise the water environment in the County:

- Water Features (National Flood and Coastal Risk Management Strategy 2011, Welsh Government)
- River Water Quality Data (Western Wales River Basin District Management Plan 2009, NRW – Living Waters for Wales 2013)
- Flood Risk (Flintshire SEA of the Local Flood Risk Management Strategy 2013, Welsh Government)
- Presence of aquifers (Ground Water Vulnerability Mapping for Cheshire and Clwyd basin)
- Bathing water quality (stats.wales.gov.uk)
- Water supply (Flintshire County Council)

Water Features

Based on records from the NRW website there are approximately 44 main rivers and associated tributaries that are located within the boundary of Flintshire. These include the River Terrig, the River Cegidog, the River Alyn, the River Dee and the River Flintshire. The main water course that flows within the County is the River Dee (Afon Dyfrdwy). Beyond Connah's Quay the river opens out into the Dee Estuary, forming the north-easternmost section of the North Wales coast and the western coast of the Wirral. Towns along the coast include Flint, Holywell and Mostyn. The River Dee also rises on the slopes of Dduallt in the Snowdonia National Park and then flows into Bala Lake before discharging and flowing in an east-south-east direction off the Denbigh Moors.

Water Quality

Flintshire is located within both the River Dee Basin Management Plan (2009 – 2015) and the Western Wales District Management Plan (2009 – 2015). The River Dee is considered as part of a wider river basin including the river, its tributaries and estuary. The River Dee Basin Management Plan 2009 stated that 28% of the surface waters were at good or better ecological / potential status now and 51% of the assessed surface waters were at a good or better ecological status.

Under the standards set by the Water Framework Directive, 37% of all Wales water bodies are currently at good or better ecological status in comparison to 31% in 2009. The top reasons for water body failure in Wales are pollution from abandoned mines and contaminated land,

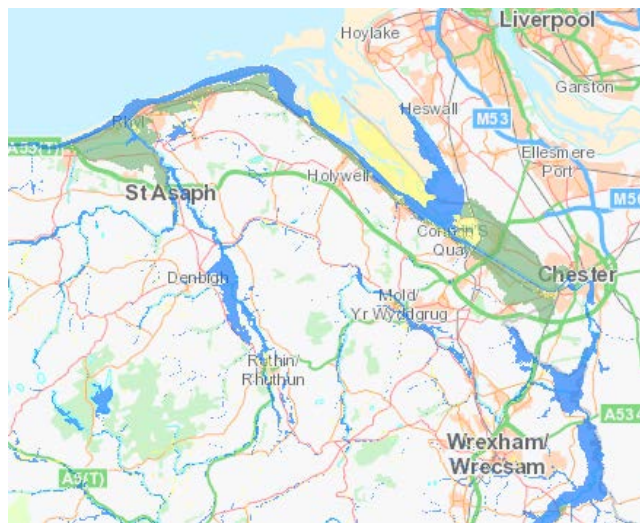
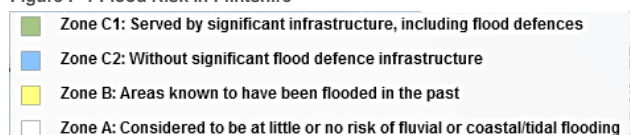
agricultural pollution, barriers to fish migration and impoundments. Sewage discharges, acidification, forestry, flood protection and land drainage, surface water drainage from urban and transport development, abstraction and industrial discharges are also factors. Natural Resources Wales' (NRW) ambition is to achieve 50% at good or better ecological status across Wales by 2015 (NRW).

Flood Risk

Flintshire has experienced widespread flooding in recent years in a number of locations including Mold, Flint, Rhydymwyn, Hendre, Pontblyddyn, and Bagillt in 2000, where some 150 residential properties were flooded including a number of commercial properties. As a result of this flooding incident significant emergency works were conducted and a number of capital works schemes were carried out in the count (Flintshire Local Flood Risk Management Strategy 2013).

Flooding within the County can occur from a variety of different sources which can include tidal and fluvial flooding, overland flows, groundwater flooding, drainage (sewers) and flooding from artificial sources such as manmade water bodies (lakes, reservoirs and canals). Flood risk within the County is shown in Figure F-1 and on Figure 3 Flood Risk within Appendix C of the SA Scoping Report.

Figure F-1 Flood Risk in Flintshire



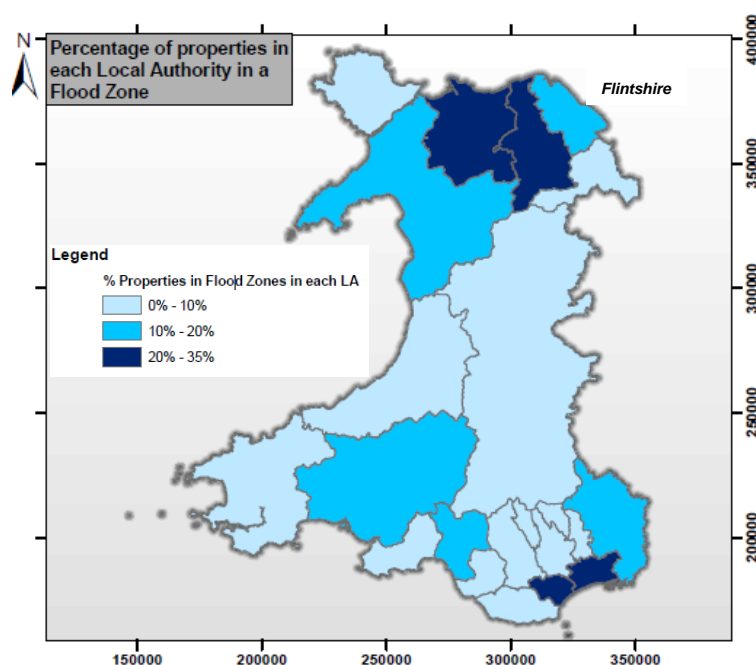
Sources: Wales (Development Advice Maps)

Surface water flooding is a common source of flooding within Flintshire and occurs when periods of high intensity rainfall generates run-off which flows over the ground's surface and collects in low lying areas (Flintshire SEA of the Local Flood Risk Management Strategy 2013).

In January 2013, a rise in temperatures caused snow to melt and coupled with heavy rain flooding occurred across North Wales. Floodwaters covered the rail lines around Flintshire which caused cancellations and delays to train services. Several roads were also affected (North West & Mid Wales Integrated Transport Network Technical Report 2014). Around 357,000 properties in Wales, or 1 in 6 properties, are at risk of flooding from rivers, the sea, surface water or a combination of the three. In addition to residential properties, many key industrial developments and other key infrastructure like power supplies, transport links and schools are situated on land at risk of flooding. As well as potentially being a risk to life, flooding can undermine the viability of communities and have a significant impact on the local economy (Welsh Government).

The percentage of Flintshire properties in a flood zone can be seen and compared to the rest of the LAs in Wales in Figure F2 below.

Figure F-2 Percentage of Properties in Welsh LAs in a Flood Zone



Source: NRW, Flintshire

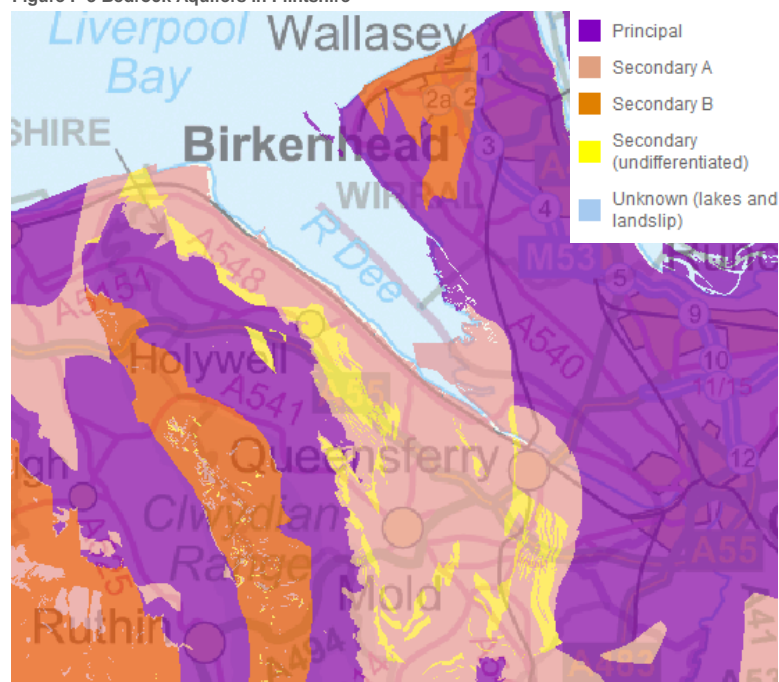
Figure F2 shows that Flintshire has between 10 and 20% of the properties within it located in a flood zone. This is slightly higher than the rest of Wales which typically have 0-10%.

Presence of Aquifers

Much of the County is underlain by carboniferous limestone and shrewsbury sandstone. Both act as an aquifer. Minor aquifer underlies much of the east of the County, including the main industrial areas and settlements of Mold and Buckley. Further to the west, towards and up to the Clwydian Hills, the area is underlain by major aquifer (Ground Water Vulnerability Mapping for Cheshire and Clwyd basin).

The bedrock aquifer designations can be seen in Figure F-3.

Figure F-3 Bedrock Aquifers in Flintshire



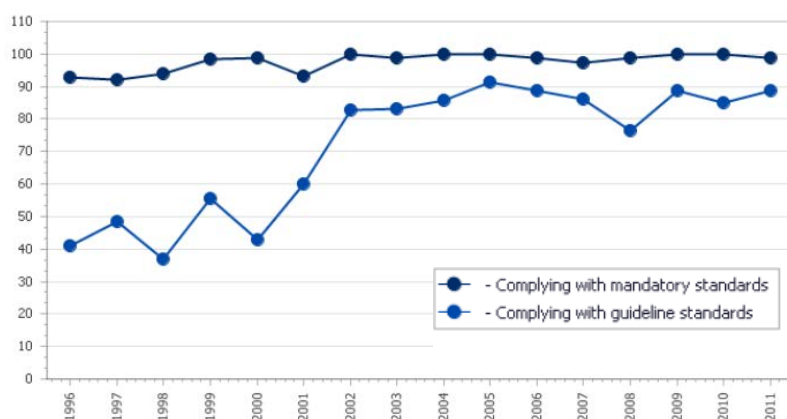
Source: Environment Agency

Figure F-3 shows that the main aquifer on the eastern part of the County is Secondary A interspersed with Secondary (undifferentiated). On the western side of the county this alters and is dominated by principal aquifers.

Bathing Water Quality

The percentage of European Commission (EC) beaches meeting mandatory or guideline standards for bathing quality in Wales are shown for the period 1996-2011 in Figure F-4 below.

Figure F-4 Bathing Quality of EC Designated Bathing Waters in Wales



Sources: statswales.wales.gov.uk

As of 2011 there were 88 beaches in Wales under EC designation. None of the beaches in Flintshire fall under the EC designation, but there are a number in the surrounding areas. Talacre beach is the principal beach in the County has been awarded a Yellow Seaside Flag award for its cleanliness and quality.

Water Supply

Welsh Water operates 24 Water Resource Zones (WRZ) across 26 Local Planning Authorities within Wales. Flintshire occupies 85.2% of one of the 24 WRZs (Final Water Resources Management Plan, 2014 Welsh Water). Dee Valley also supplies water for Flintshire. Dee Valley manage the important resource of the River Dee and also obtain water from their eight impounding reservoirs, which are fed from collecting grounds on the local hills and around Llandegla.

The River Dee regulation scheme is a system of flow balancing and quality management along the River Dee managed by United Utilities, Welsh Water and Dee Valley Water; together with NRW, the regulator. Much of the natural flow of the River Dee during most summers is insufficient to sustain any significant abstractions. To overcome this problem, a series of reservoirs are used to store the excess water available in the winter time and release it back into the River Dee during the drier months.

Flintshire County Council has in excess of 120 properties whose only source of drinking water is from a private supply. Monitoring of public and private water supplies takes place to ensure that drinking water in the County poses no risk to health.

Evolution of the Baseline

UK Climate Projections 2009 suggest that by 2050, rainfall is projected to increase in winter on average by 14% and decrease in summer by 16%, sea levels around Wales are predicted to rise

by approximately 20cm and storm intensity in summer and winter will increase, leading to more severe storms and larger waves attacking shores. Taken together these factors are likely to increase the frequency and consequences of flooding and coastal erosion which will have an effect on transport infrastructure across North Wales.

Overall, in the last ten years, river water quality has improved in the UK. However, as road traffic continues to increase, there is a risk that the amount of pollution entering the watercourses (particularly within urban areas) via surface water will continue to put pressure on water quality (including groundwater, i.e. drinking water supply).

Key Sustainability Issues and Opportunities

Issues

- There is an increased threat from surface water flooding due to increased precipitation rates generated by climate change.
- There is a higher likelihood of coastal flooding as a result of rising sea levels due to climate change.
- There are risks associated with flooding and the mobilisation of contaminants linked to contaminated land within the County.

Opportunities

- Risks of surface and coastal flooding should be mitigated against through measures such as improved coastal defences and increased flood response/awareness.
- Development within floodplain should be avoided.
- The area's water quality – particularly in the County's major water region, the River Dee basin area should be improved.

Data Gaps and Uncertainties

There are no significant data gaps or uncertainties.

G AIR QUALITY AND CLIMATE CHANGE

Overview of Baseline Conditions

Relevant SA Objectives

15.To protect and improve air quality and limit greenhouse gas emissions
<ul style="list-style-type: none">▪ To protect and improve local air quality▪ To reduce greenhouse gas emissions including in both existing and new development▪ To reduce CO2 emissions from the transport sector▪ To encourage all new development to be climate change resilient▪ To reduce negative effects of power generation, heavy industries and transport on local air quality▪ To encourage cleaner technology for power regeneration, heavy industry and transport
16. To increase energy efficiency, require the use of renewable energy and sustainable building design
<ul style="list-style-type: none">▪ To reduce the demand for energy and increase energy efficiency▪ To encourage sustainable building design▪ To increase the use of renewable energy▪ To increase the use of renewable energy▪ To increase energy efficiency
17. To ensure sustainable use of natural resources
<ul style="list-style-type: none">▪ Reduce the demand for raw materials▪ Promote the use of recycled and secondary materials in construction▪ Ensure that contaminated land will be guarded against▪ Encourage development of brownfield land where appropriate▪ Maintain and enhance soil quality▪ Increase the proportion of waste recycling and re-use▪ Reduce the production of waste▪ Reduce the proportion of waste landfilled▪ To protect peatland within the County

The following baseline indicators have been used:

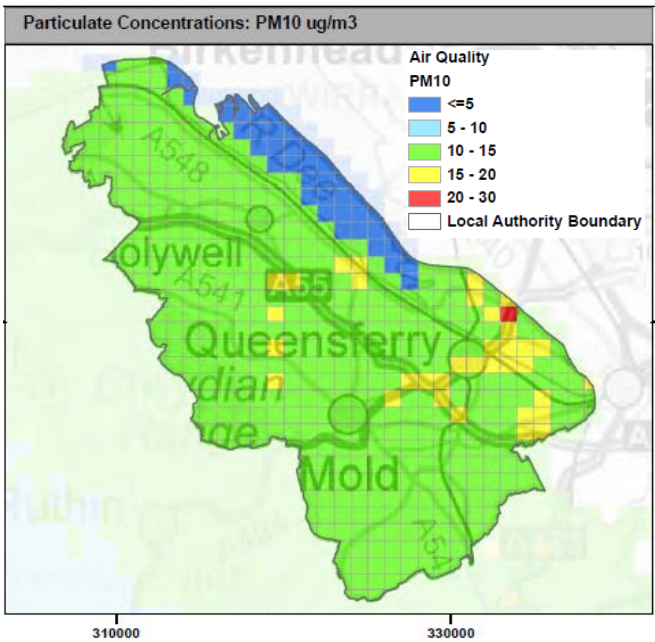
- Particulate Matter (PM) concentrations
- Total CO₂ emissions (statswales.wales.gov.uk, Single Integrated Plan for Flintshire 2013-2017)
- Annual average domestic gas and electricity consumption per consumer (Neighbourhood Statistics)

Air Quality

Particulate Matter (PM) is made up of a wide range of materials and is produced by a variety of processes such as combustion, mechanical breakdown of hard materials (e.g. quarrying) and natural sources (e.g. sea salt). Both short-term and long-term exposure to ambient levels of PM are consistently associated with respiratory and cardiovascular illness and mortality as well as other ill-

health effects. Figure G-1 shows the PM concentration of PM₁₀ - particles with a diameter less than 10µm, which are known to cause a variety of the mentioned health problems.

Figure G-1 Particulate Matter Concentrations: PM₁₀µm / m3 in Flintshire



Sources: statswales.wales.gov.uk

Figure G-1 shows that across the majority of the County the PM₁₀ concentration is between 10 and 15 µm / m³. Around Deeside and parts of the A55 there some areas with [PM₁₀] between 15 and 20 µm / m³. The current UK National Air Quality Strategy objectives and Air Quality Standards (Wales) 2010 Regulations limit values for PM₁₀ are a concentration of less than 40 µg m³ measured as an annual mean and 50 µg m³ measured as a 24 hour mean (not to be exceeded more than 35 times per year). In comparison to the PM₁₀ values in Flintshire can be considered low.

There currently no Air Quality Management Areas in Flintshire.

Total CO₂ Emissions

In line with national and international targets, Flintshire has committed to reducing its carbon footprint. In the County they are aiming to reduce their carbon emissions 3% year on year, with the goal of meeting the overall UK target of an 80% reduction by 2050. Flintshire's progress can be seen in Table G-1 below.

Table G-1 Flintshire CO₂ Emissions from 2008 / 09 – 2012 / 13

Year	CO ₂ Actual	Total Annual Weather Corrected CO ₂	Percentage change against base year	Percentage change year on year
2007/08 Base Year Co₂ =	22,655,934			
2008/09 =	23,983,507	22,856,344	0.88% Increase	0.88% Increase
2009/10 =	23,873,021	22,167,577	2.16% Decrease	3.04% Decrease
2010/11 =	24,476,745	22,703,359	0.21% Increase	2.42% Increase
2011/12 =	22,363,726	21,960,726	3.07% Decrease	3.28% Decrease
2012/13 =	23,832,065	20,789,458	8.24% Decrease	5.33% Decrease

Sources: Single Integrated Plan for Flintshire 2013-2017

Table G-1 shows that changes in CO₂ emissions have fluctuated considerably against the base year over the 5 year period, with Flintshire Council citing cold spells and other uncontrollable circumstances as the reason. Year on year they are moving in the right direction, with a 5.33% decrease from the base year in 2012 / 13. However the rate of reduction is not up to pace with the targeted declines.

The fall in CO₂, as well as a number of contributory greenhouse gases, for Wales is shown in Figure G-2.

Figure G-2 Percentage Reduction in a Range of Greenhouse Gases in Wales from 1990-2012

Sources: statswales.wales.gov.uk

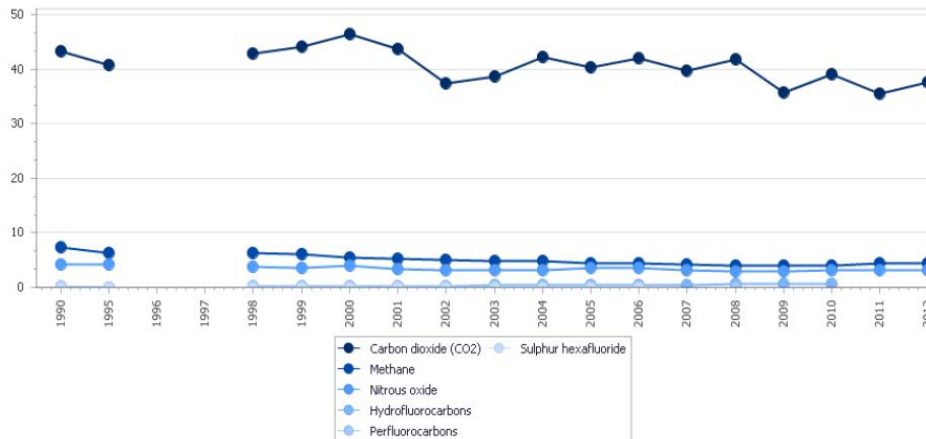


Figure G-2 shows that there has been a steady overall decline in the CO₂ emissions for the whole of Wales. However, much like Flintshire, the rate of reduction is slower than required to meet current targets.

Annual Average Domestic Gas and Electricity Consumption Per Consumer

Figure G-3 below shows the total consumption of domestic electricity and gas for Flintshire in 2011 compared to the rest of the local authorities (LAs) in Wales as well as overall usage since 2005.

Figure G-3 Total Consumption of Domestic Electricity and Gas (Megawatt hours)

Flintshire (Unitary Authority) within Wales (Country)

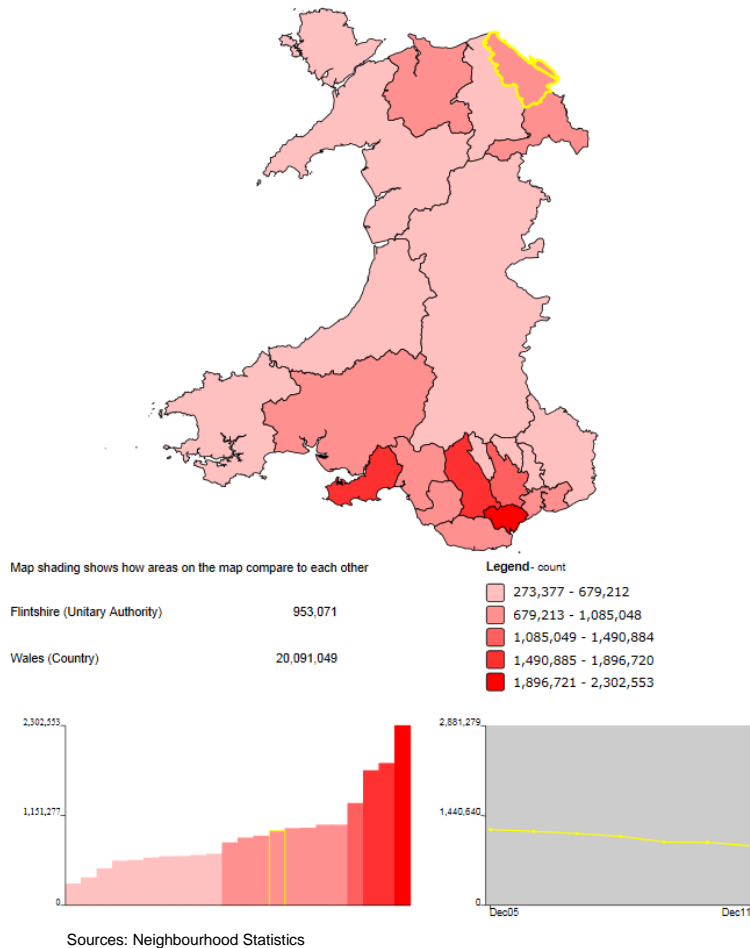


Figure G-3 shows that in 2011 the total domestic energy use for Flintshire was around average for the LAs across Wales, making up ca. 4.74% of the national usage. It can also be seen that since 2005 the usage for Flintshire has been steadily falling – reducing 260,917 Mwh (21.5%) over those six years. This mirrors almost exactly the fall in consumption for Wales nationally over the same period (21.3%).

Evolution of the Baseline

There is a growing body of evidence to suggest that climate change may result from the emission of certain gases.

The UK climate change impacts programme (UKCIP) published information in summer 2009 detailing a range of results taking into account variations between different global climate models and uncertainties in global climate modelling. The medium emissions scenario for 2050 indicates:

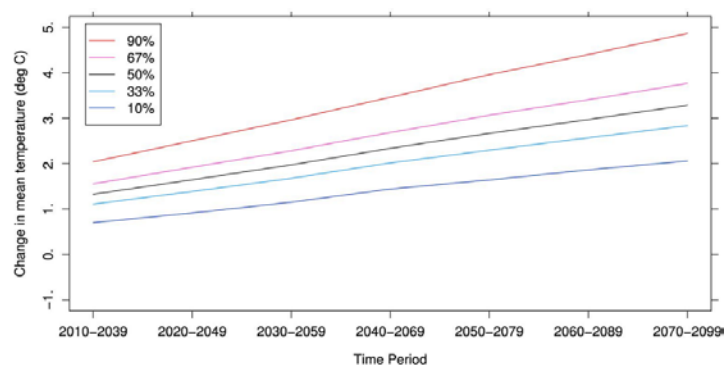
- Across Wales by 2050 average annual temperatures are projected to increase by 2.3°C.
- Rainfall is projected to increase in winter on average by 14% and decrease in summer by 16%. Overall, the total annual rainfall is predicted to remain the same.
- Sea levels around Wales are predicted to rise by approximately 20cm by 2050.

The Welsh Government's Climate Change Strategy (2010) indicates that the impacts that can be expected from these changes to the climate are:

- Hotter and drier summers.
- Increase in extremely warm days.
- Milder wetter winters.
- Reduction in snowfall and frost.
- Increase in frequency of intense rainfall events.
- Decrease in groundwater levels.
- Increased flooding of low-lying coastal areas.

UK Climate Projections produced key climate change projection graphs for Great Britain depicting annual temperature change, winter and summer precipitation change. Figure G-4 indicates the average annual change under the medium emissions scenario in Wales. The various lines indicate the minimum change for the confidence limits shown, where 10% indicates that the change is very unlikely to be less than indicated and 90% very unlikely to be greater.

Figure G-4 Average Annual Temperature Change: Medium Emissions Scenario



Sources: UKCP09 2009

Figures for recent years indicate that Flintshire is moving in the right direction to help combat some of the most serious impacts of climate change. By reducing domestic energy usage and overall CO₂ emissions the area is helping Wales and the whole of the UK meet its ambitious reduction targets. However, although moving in the right direction, change needs to happen in Flintshire, Wales and across the UK to ensure reduction targets are met.

Key Sustainability Issues and Opportunities

Issues

- Climate change could lead to increased flood events or drought.

Opportunities

- Greenhouse gas emissions should be reduced at the rate required to meet local and national targets, helping to mitigate the impacts of climate change.
- The reduction of energy use in Flintshire should be encouraged.
- The reduction in greenhouse gas emissions should be encouraged.

Data Gaps and Uncertainties

- Annual gas and electricity consumption in the commercial / industrial sector.
- Applications for renewable energy developments.
- Total tonnage of municipal waste arisings, percentage used to recover heat, power, and other energy sources.

H CULTURAL HERITAGE

Overview of Baseline Conditions

Relevant SA Objectives

12. To protect and enhance the cultural heritage assets
<ul style="list-style-type: none">▪ To protect and enhance heritage assets including Listed Buildings, Scheduled Monuments and Historic Landscapes▪ To protect and enhance historic landscape value
5. To improve sustainable access to basic goods, services and amenities for all groups
<ul style="list-style-type: none">▪ Improve access to cultural and recreational facilities, including Welsh culture and heritage▪ Improve access to open space▪ Conserve and enhance opportunities for public access to the countryside and coast

The following baseline indicators have been used to characterise the cultural heritage baseline:

- Distribution and no. of Listed Buildings, Scheduled Monuments, country parks, historic landscapes, Conservation Areas (CAs), historic parks and gardens (Flintshire County Council website, www.flintshire.gov.uk)

Distribution and Number of Listed Buildings, Scheduled Monuments, Conservation Areas, Historic Parks and Gardens

The County has a rich heritage and contains many Listed Buildings, Scheduled Monuments, conservation areas, and historic parks and gardens as shown on Figure 2 Heritage Assets and Landscape Features within Appendix C.

CAs are zones of special architectural or historic interest. The local planning authority has a statutory duty to designate them and to preserve and enhance their special character or appearance. Flintshire has 32 designated CAs, the location of which can be seen on Figure H-1 (Flintshire County Council website, www.flintshire.gov.uk).

- St Winefride's Chapel and Well, Holywell
- Basingwerk Abbey, Holywell
- Church of St Mary, Halkyn
- Pentrehobyn, Leeswood
- Rhual (including attached wall to the N side), Gwernaffield
- Henblas, Llanasa
- St Deiniol's Library, Hawarden
- Nerquis Hall, Nercwys
- Tower, Broncoed, Nercwys
- Flint Castle Including Revetment Wall of Ditch, Castle Dyke Street, Flint
- Llettau at Pentrehobyn, Leeswood
- Porth Mawr, Mostyn Hall, Mostyn
- Mostyn Hall, Mostyn

There are currently around 132 Scheduled Monuments in the Flintshire area.

There are currently 23 Registered Historic Parks and Gardens within the County. There are also a substantial number of undesignated historic assets within the County with regional and local importance. There is one Historic Landscape area along the eastern boundary of the Vale of Clwyd. Important historical landscapes of Flintshire are also discussed in Chapter D Landscape.

There is one country park located within Flintshire - Waun-y-llyn and two located partly within Flintshire. These are Loggerheads and Moel Famau.

Evolution of the Baseline

Archaeological sites are perhaps the most vulnerable of North Wales assets as the majority have no economic use. Many of the Scheduled Monuments are within or adjacent to settlement boundaries and are at risk of development which may directly affect assets or impact on their setting. Low lying archaeological sites are also at risk from flooding or agricultural improvements. Monuments on higher land outside settlement boundaries are less at risk from flooding, but still vulnerable from agricultural improvements, burrowing animals, and general erosion. The setting of Scheduled Monuments is easily affected compared to those within the settlement boundaries.

Table H-1 shows the number of Listed Buildings at risk as of a 2011 survey.

Table H-1 Listed Buildings at Risk in Flintshire (2011)

Risk Level	Grade 1	Grade 2*	Grade 2	Total
At extreme risk			25	25
At grave risk			2	2
At risk	1	6	99	106
Total at risk	1	6	126	133
Vulnerable		8	128	136
Not at risk	26	65	672	763
TOTAL	27	79	926	1032

Source: Flintshire County Council – Heritage Buildings

Table H-1 shows that 133 buildings or structures (13% of all listed buildings within the County) are considered to be at some form of risk. The majority of structures were not classified as being at risk, but there was a number categorised as 'vulnerable'. This reflects that whilst their condition in 2011 did not warrant a 'risk' classification, there was nevertheless a concern raised that without preventative maintenance or intervention, their condition could deteriorate by the time of the next survey to justify a 'risk' classification. Without investment and maintenance it is therefore likely that the number of buildings at risk of deteriorating will increase in years to come.

Key Sustainability Issues and Opportunities

Issues

- There are risks to heritage assets arising from climate change.
- There is the potential for undiscovered archaeological remains to exist throughout the County.

Opportunities

- Opportunities should be sought to safeguard and promote awareness of the important heritage assets within Flintshire.
- In addition to safeguarding statutory sites it is important to ensure that non-designated heritage and archaeological resources are also protected.

Data Gaps and Uncertainties

- Percentage of listed buildings at risk of decay.
- Number of Scheduled Monuments considered to be at risk.
- A decrease in number of Grade 2* listed buildings and levels of buildings at risk is unknown.

I MINERALS AND WASTE

Overview of Baseline Conditions

Relevant SA Objectives

17. To ensure sustainable use of natural resources

- Reduce the demand for raw materials
- Promote the use of recycled and secondary materials in construction
- Ensure that contaminated land will be guarded against
- Encourage development of brownfield land where appropriate
- Increase the proportion of waste recycling and re-use
- Reduce the production of waste
- Reduce the proportion of waste landfilled

The following baseline indicators have been used to characterise the existing conditions:

- Total tonnage of municipal waste arisings. Percentage reused, recycled or composted (statswales.wales.gov.uk; Flintshire Local Development Plan Preferred Strategy)
- Total tonnage of municipal waste arisings, percentage landfilled (statswales.wales.gov.uk)
- Location of current landfill sites (Environment Agency)
- Mineral Reserves (North Wales Regional Aggregates Working Party)
- Flintshire Local Development Plan Preferred Strategy 2015 – 2030 (2017)

Total Tonnage of Municipal Waste Arisings Reused, Recycled Composted or Sent to Landfill

Around 85,000 tonnes of municipal waste is generated in Flintshire each year.

In 2014-15 55% of Flintshire's municipal waste was either reused / recycled or composted, just below the all-Wales figure of 56.2%.. Since 2008 this figure has increased year on year when it was 42.4% and in 2004 / 5 it was just 22% (Flintshire LDP Preferred Strategy). Compared to the national average (54.3%), current recycle / reuse / compost rates in Flintshire are 0.8% higher. The national trend for recycling / reusing and composting rates is similar to that of Flintshire, and has itself grown from 37.5% in 2008 and 19.44% in 2004 / 05. Between 2004/05 and 2014/15 the annual volume of waste going to landfill has reduced by about 5,000 tonnes in Flintshire (-6%). The average for Wales as a whole was -20% in the same period. Significant investment is still needed to meet the European target of 70% by 2025.

In 2013-14 41.67% of Flintshire's municipal waste was sent to landfill. This is a decrease of 32.79% from 2004/05 where the figure was 74.46%. Compared to the national average (37.72%) Flintshire sends 3.95% more of its waste to landfill. This difference could arise from waste being disposed of in different ways (e.g. incinerated) or used for energy production

The location of current landfill sites in Flintshire can be seen in Figure I-1. There are a number of sites located near the estuary and the largest facility at Cefn Mawr Quarry Landfill, near Mold.

Figure I-1 Authorised Landfill Sites in Flintshire



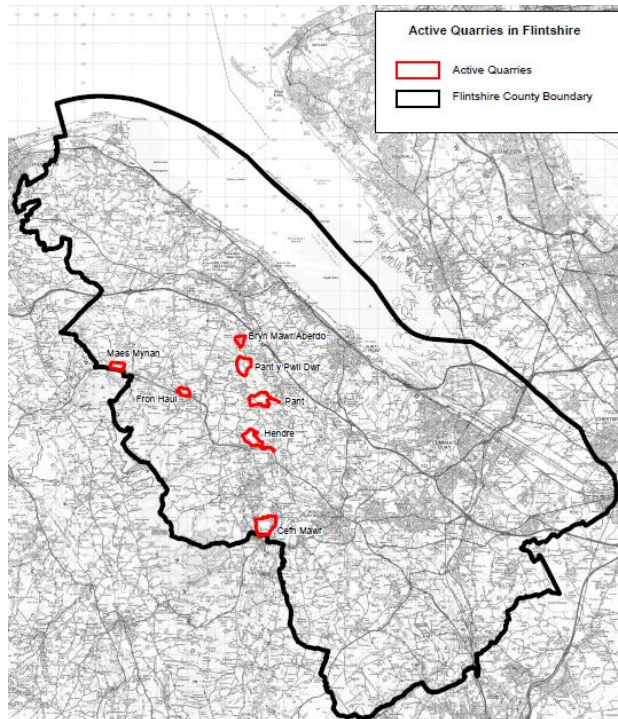
Source: Environment Agency

Mineral Reserves

Flintshire holds a significant proportion of the mineral reserves in North Wales, along with Conwy and Gwynedd. The landbank for limestone is 30 years and 15 years for sand and gravel.

Extensive quarrying activity across the County, notably for limestone extraction, concentrated in central areas but also small scale quarrying around a number of settlements including Afonwen, Bagillt, Buckley, Drury, Ewloe, Holywell, Pentasaph, Bryn-Mawr, Halkyn area.

There are seven active quarries within Flintshire see Figure I-2 below.



The active quarries are:

- Maes Mynan
- Fron Haul
- Hendre
- Cefn Mawr
- Pant
- Pant y Pwll Dwr
- Bryn Mawr/Aberdo

Evolution of the Baseline

The amount of municipal waste being sent to landfill in Flintshire and across Wales has fallen considerably over the past decade. Similarly the amount of waste being recycled / reused / composted has risen greatly over the same period. These trends will likely continue as Wales heads towards its aim of being a zero waste nation by 2050 (Welsh Government).

With extensive quarrying and finite resources mineral resources in the County will continue to be reduced.

Key Sustainability Issues and Opportunities

Issues

- Depletion of valuable finite mineral resources.

Opportunities

- Opportunities should be sought to continue the reduction in waste being sent to landfill.
- Increase recycling, reuse and composting of waste which would otherwise be landfilled.
- Mineral assets in the County should be safeguarded for future generations.

Data Gaps and Uncertainties

- Quantity of secondary and recycled materials used in construction.
- Location of key quarrying sites.

J HUMAN HEALTH

Overview of Baseline Conditions

Relevant SA Objectives

3. To improve physical and mental health and wellbeing for all and reduce health inequalities
<ul style="list-style-type: none">▪ To improve access to health and social care services especially in isolated areas▪ To reduce health inequalities amongst different groups in the community▪ To promote healthy lifestyles▪ Encourage the development of strong, cohesive communities
6. To build strong and cohesive communities
<ul style="list-style-type: none">▪ Provide similar life opportunities for people from different backgrounds and develop strong, positive relationships between people in the workplace, schools and within neighbourhoods▪ Reduce inequalities experienced by people with protected characteristics – age/disability/gender reassignment/race/religion and belief/sex/sexual orientation▪ Ensure children who have any kind of disability can lead full and independent lives▪ Ensure children can live to a standard that is good enough to meet their physical and mental needs▪ Ensure children can develop healthily, and have access to good quality health care, clean water, nutritious food and a clean environment

The following baseline data has been used to identify key trends:

- Percentage resident population in good and bad health compared with national / regional averages (Neighbourhood Statistics)
- Life expectancy for males / females (Neighbourhood Statistics)
- Standardised Mortality Rates (SMR) compared to national / regional averages (statswales.wales.gov.uk)
- Infant Mortality Rate (IMR) (Neighbourhood Statistics)
- Rate of teenage pregnancy per 1,000 women for under 18s (Neighbourhood Statistics)
- No of LSOAs in bottom 10% Health deprivation domain (Welsh Government)

Percentage of Resident Population in Good and Bad Health

In 2011 the percentage of people classified as being of in either good or very good health in Flintshire was 81.2%. This is an increase of 11.6% since the 2001 figures. Nationally the percentage of Welsh residents in either good or very good health was slightly lower, at 77.7% - 9.1% higher than in 2001 (Neighbourhood Statistics).

The 2011 percentage of Flintshire residents in bad or very bad health was 5.6%. This is a 4.18% reduction on the 2001 figure of 9.77%. Across Wales the average number of people in bad or very bad health for 2011 was 7.6%, a 4.85% reduction over the ten years from 2001 (Neighbourhood Statistics).

Only around a third of the adult population in Flintshire meet recommended physical activity levels and eat the recommended 'five a day'. 44% drink above the recommended guidelines and 19% are smokers

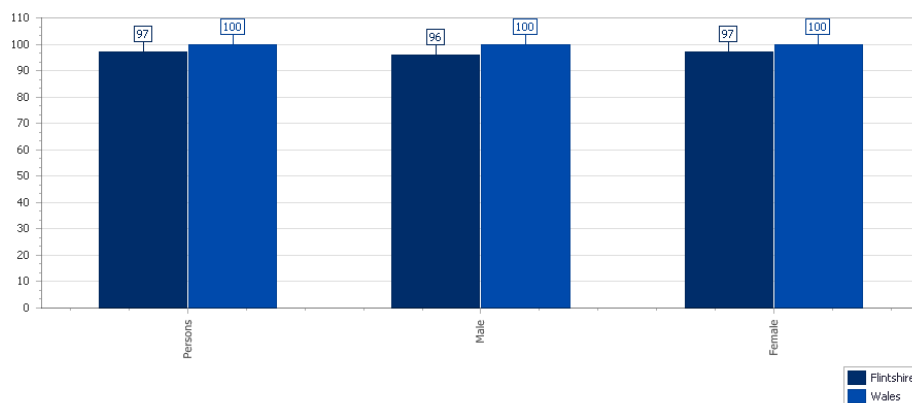
Life Expectancy for Males / Females

The life expectancy at birth in Flintshire in 2010-2012 for males was 79.0 and females 82.4. This is an increase in males by 0.9 and females by 0.4 from the 2007 – 2009 values for males and females of 78.1 and 82, respectively. The 2010-2012 life expectancy values is a 2.7 increase for males and a 2.4 increase for females from the period 2001 and 2003. In Wales, in 2010- 2012, the life expectancy for males was 78.2 and females was 82.2. Flintshire life expectancies are higher for both genders. In England and Wales combined between 2010 and 2012 the average life expectancy was 79.11 and 82.93 for males and females, respectively. (Neighbourhood Statistics, www.statswales.gov.wales).

Standardised Mortality Rates

Figure J-1 shows the SMR for Flintshire and Wales by gender over the period 2008 -2010. In 2003 the SMR (gender specifics unavailable at the time of writing) was 104. This represents a 7 point fall, indicating that the County has a lower death rate than the national average.

Figure J-1 SMR for Flintshire and Wales by Gender, 2008 -2010

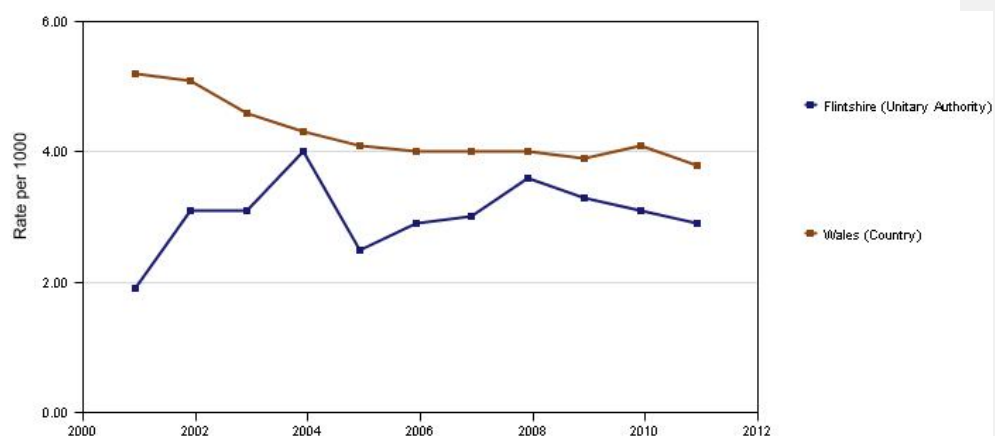


Source: statswales.wales.gov.uk

Infant Mortality Rate

Figure J-2 shows the IMRs for Flintshire and Wales from 1998 – 2000 to 2008 - 2010.

Figure J-2 Infant Mortality, 95% Confidence Interval, 1998 – 2000 to 2008 – 2010 for Flintshire and Wales



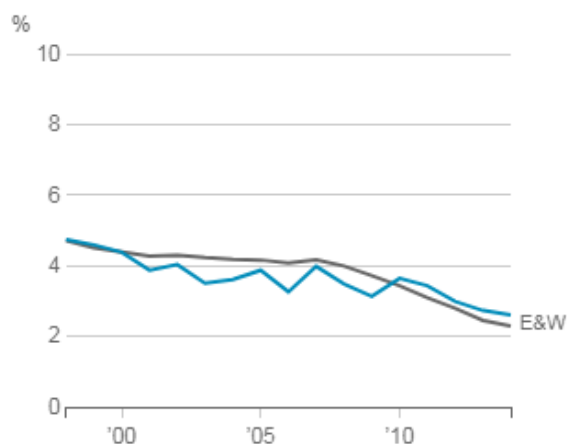
Source: Public Health Wales

It can be seen in Figure J-2 that the IMR for Flintshire has fluctuated considerably over the assessment period with a general trend of increasing. In contrast the Welsh average IMR has fallen steadily over the same period. However the IMR for Flintshire have been lower than the national average over the entire period.

Rate of Teenage Pregnancy Per 1,000 Women for Under 18s

The pregnancy rate for under 18s for Flintshire and Wales between 1998 and 2007 is shown in Figure J-3.

Figure J-3 Under 18 Conception Rate per 1000 from 1998 – 2014 for Flintshire and England and Wales



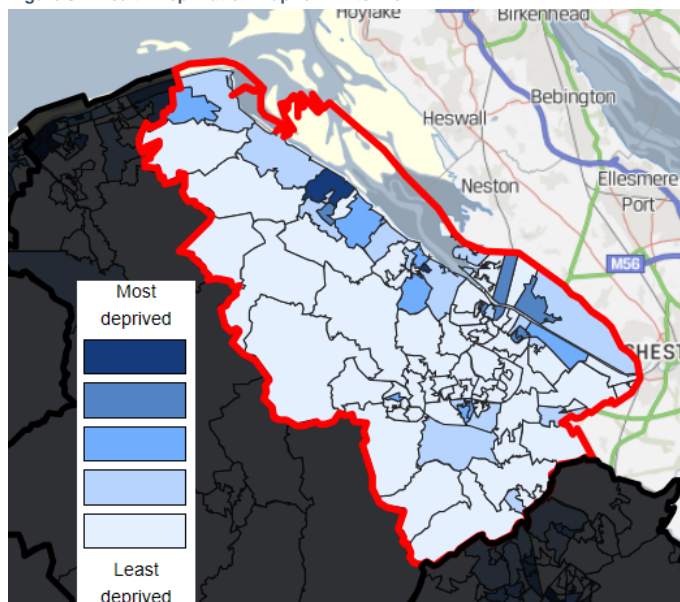
Source: (<http://visual.ons.gov.uk/teenage-pregnancies-perception-versus-reality/>)

Figure J-3 shows that over the assessment period Flintshire's under 18 conception rate has fallen progressively to be 2.6% in 2014. It is slightly higher than the average for England and Wales, which has also fallen steadily to a 2014 percentage of 2.2%.

Number of LSOAs in Bottom 10% Health Deprivation Domain

Of the 92 LSOAs in Flintshire, two are within the bottom 10% of health deprivation across the 1909 LSOAs in Wales, see Figure J-4. They are Greenfield 1 and Flint Oakenholt 1. This is one fewer than in 2005 and represents 2.2% of Flintshire and 0.1% nationally.

Figure J-4 Health Deprivation Map for Flintshire



Source: WIMD

Evolution of the Baseline

Overall health statistics for Flintshire compare well to the rest of Wales and the majority of key statistics show a positive picture.

The life expectancy in Flintshire and across Wales has been rising in recent times and this is likely to continue. Those in good health has risen with those in bad health falling and continue to be above the Welsh average.

The data also shows a decline in under 18 conception rate across Flintshire and England and Wales. The Flintshire percentage is slightly higher still than the England and Wales average.

One statistic which has been rising is the County's IMR. Although this remains below the national average, if current trends continue it will overtake it.

Key Sustainability Issues and Opportunities

Issues

- There are pockets of health deprivation in the County with two LSOAs in the bottom 10% for health deprivation (Greenfield and Flint Oakenholt).
- The infant mortality rate has fluctuated considerably since 1998-2010.
- Diseases of the circulatory system, including coronary heart disease, remain the main cause of mortality in Flintshire, accounting for 41% of all deaths.

- Over 65% of the adult population still do not meet the recommended guidelines for physical activity.
- 44% of the population drink above the recommended guidelines and 19% of the adult population are smokers.

Opportunities

- The rise of people who are in good health across the County and the continued reduction of those in poor health should be supported.
- Healthcare opportunities should be sought in order to reduce the increased mortality rate across Flintshire.
- Standardised mortality rates are falling and this trend should be continued.

Data Gaps and Uncertainties

- SMR for main causes of death - coronary heart disease, cancer, alcohol, compared with national / regional averages.
- Percentage population with a long-term limiting illness.
- Access to doctor's surgeries and dentists within rural area.

K LOCAL ECONOMY

Overview of Baseline Conditions

Relevant SA Objectives

7. To promote a sustainable economy, business development and investment
<ul style="list-style-type: none">▪ To encourage economic growth▪ To diversify the economy and encourage new business formation and inward investment▪ To encourage and promote sustainable tourism within the County
8. To provide employment opportunities across the County and promote economic inclusion
<ul style="list-style-type: none">▪ To increase local employment opportunities across the County▪ To improve access to jobs▪ Maximise traineeship and apprenticeship opportunities

The following baseline indicators have been used to characterise economic conditions across the County:

- Gross Value Added (GVA) per head
- Number of LSOAs in bottom 10% for income deprivation (WIMD)
- Number of LSOAs in bottom 10% employment deprived (WIMD)
- Employment in different sectors (stats.wales.gov.uk)
- Employment in different occupation groups (NOMIS)
- Value Added Tax (VAT) registered stock (stats.wales.gov.uk)
- Economic activity rate (NOMIS)
- Percentage of working age unemployed (NOMIS)
- Average earnings compared with national / regional average (ONS)
- Percentage of Jobseekers Allowance Claimants (stats.wales.gov.uk)

Flintshire Local Development Plan Preferred Strategy 2015 – 2030 (2017)

Flintshire's economy has seen successful regeneration and diversification following the steel, coal and textiles closures of the 1980s and 1990s. The County is, in general, a healthy mixed economy, with a strong manufacturing base (Flintshire Economic Regeneration Strategy 2009-2020). The manufacturing industry provides 34% of all jobs (UK is 13%). Flintshire is also home to a growing IT and financial services sector, with moneysupermarket.com and Unilever's Global IT Service Centre both located at St Davids Park and Ewloe and DARA (Defence Avionics Repairs Agency) at Sealand (Flintshire Preferred Strategy, 2017).

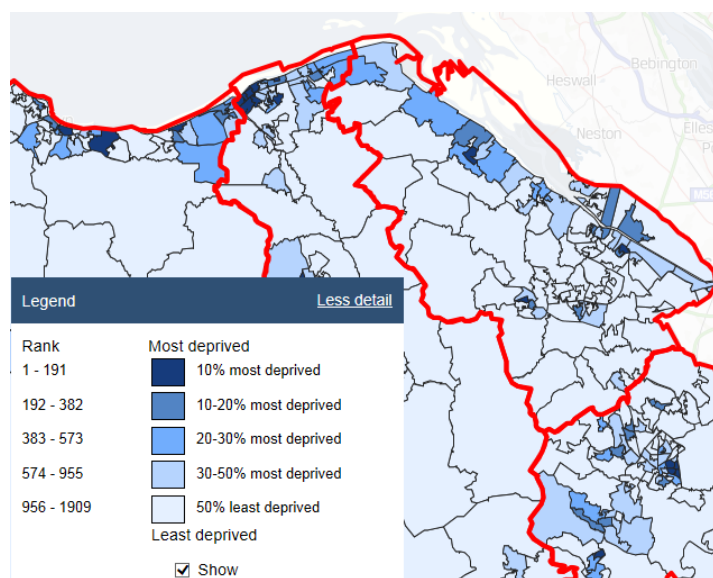
GVA Per Head

The GVA of the County is £2,216 higher than the Welsh average at £16,442, but is lower than the overall UK average of £18,945 (Flintshire Economic Regeneration Strategy 2009-2020).

Number of LSOAs in Bottom 10% for Income Deprivation

Figure K-1 shows the deprivation levels of the LSOAs in Flintshire with regard to income.

Figure K-1 Income Deprivation Map for Flintshire



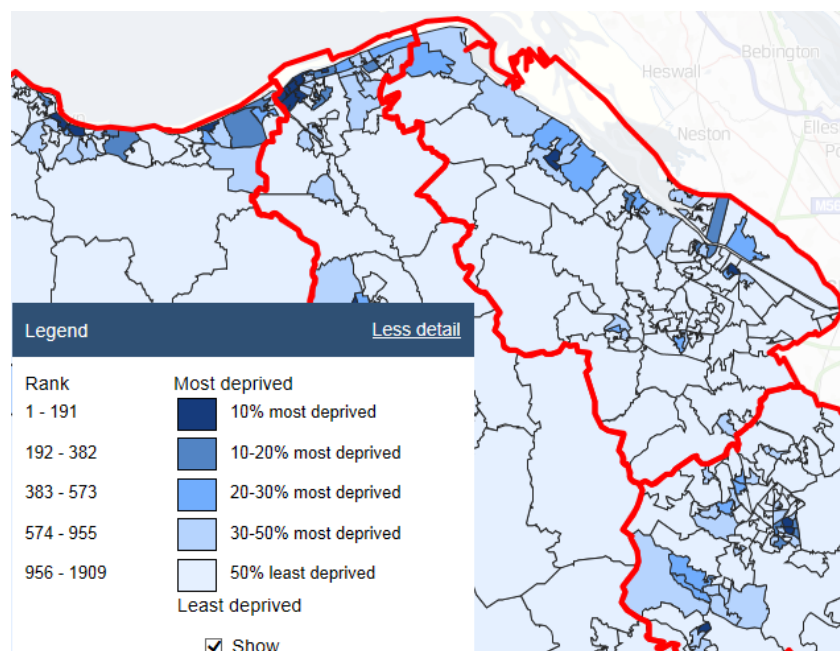
Source: WIMD

Of the 92 LSOAs in Flintshire, three are within the bottom 10% nationally for income deprivation. These LSOAs are: Shotton Higher, Holywell Central and Mold West. This is unchanged from the figures in 2005 (WIMD). It can be seen on Figure K-1 that the eastern side of the county has a higher proportion of income deprived areas than the western side.

Number of LSOAs in Bottom 10% Employment Deprived

Figure K-2 shows the deprivation levels of the LSOAs in Flintshire with regard to employment

Figure K-2 Employment Deprivation Map for Flintshire



Source: WIMD

There are currently two Flintshire LSOAs in the bottom 10% for employment deprivation. They are Holywell Central and Shotton Higher. In 2005 there were no LSOAs in the bottom 10% or this criterion though Holywell Central and Shotton Higher were in the bottom 20% of employment deprivation (WIMD).

Employment in Different Sectors

Figure K-3 and K-4 show the employment total for Flintshire in 2001 and 2013, respectively.

Figure K-3 Workplace Employment in Flintshire by Industry, 2001

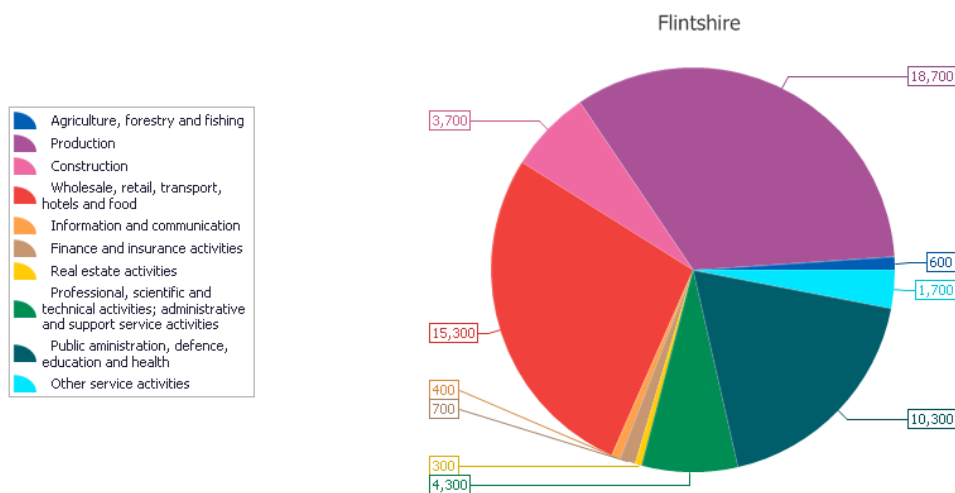
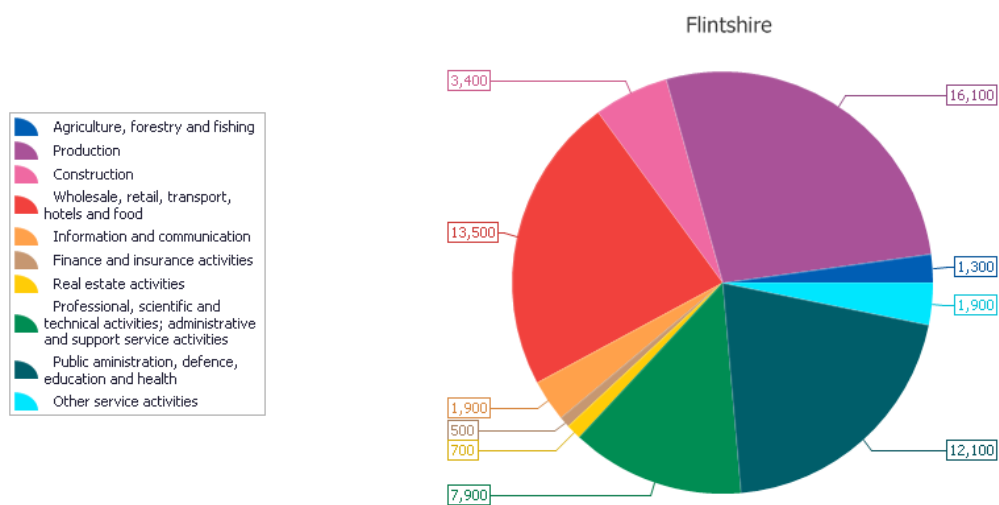


Figure K4 Workplace employment in Flintshire by Industry, 2013



Source: NOMIS

Figures K-3 and K-4 show that the sector which has seen the largest growth over the 12 year period is 'Public administration, defence, education and health'. 'Wholesale, retail, transport, hotels and food' and 'Production' have both seen decreases in employment. 'Information and communication' has grown considerably, as has 'agriculture, forestry and fishing' which has more than doubled.

Employment in Different Occupation Groups

Table K-1 shows the number and percentage of people working in different occupations in Flintshire and nationally.

Table K-1 Employment by Occupation in Flintshire, Wales and Great Britain, April 2016 – March 2017

	Flintshire (Numbers)	Flintshire (%)	Wales (%)	Great Britain (%)
Soc 2010 Major Group 1-3	25,600	36.3	40.6	45.5
1 Managers, Directors And Senior Officials	6,400	9.1	9.6	10.7
2 Professional Occupations	9,800	13.8	18.8	20.4
3 Associate Professional & Technical	9,400	13.3	12.1	14.2
Soc 2010 Major Group 4-5	18,000	25.6	22.8	20.7
4 Administrative & Secretarial	7,100	10.1	10.3	10.2
5 Skilled Trades Occupations	10,900	15.4	12.4	10.4
Soc 2010 Major Group 6-7	10,200	14.5	18.2	16.7
6 Caring, Leisure And Other Service Occupations	5,800	8.2	10.1	9.1
7 Sales And Customer Service Occs	4,400	6.2	8.1	7.5
Soc 2010 Major Group 8-9	16,600	23.6	18.3	17.1
8 Process Plant & Machine Operatives	6,700	9.5	7.1	6.3
9 Elementary Occupations	9,900	14	11.1	10

Source: NOMIS

It can be seen that the largest occupation group in Flintshire is the 'major group 1-3' which includes managers and professionals and the smallest was 'major group 6-7' which includes caring, sales and customer service roles. Compared to the rest of Wales and Great Britain, the Wales and Great Britain average percentage for 'major group 8-9' and 'major group 4-5' lower than Flintshire but slightly higher in other occupation major groups.

Employment in the manufacturing sector is well above the national rate, 30% compared to 8% for GB and 11% for Wales). There is a low reliance on the public sector for employment (19%) against the Wales average (32%). Employment in the high skills, high wages sector e.g. finance, professional, scientific, is relatively low (19%) as is tourism related employment (16%). The arts, entertainment, recreation sector employs about 2,000 people in Flintshire, representing about 3% of all employment in the area. Flintshire has a high proportion of small businesses, having seen an increase of 15% since 2011. 73% of these businesses employ fewer than 4 people. (Flintshire LDP Preferred Strategy).

Farmers manage nearly 75% of the total land in Flintshire and over 1,550 people are directly employed in agriculture. Between 2003 and 2013 the number of people working in agriculture fell by 10% (from 1,709 to 1,556) mainly driven by a decrease in the number of full- and part-time farmers.

The seven main town centres: Buckley, Connah's Quay, Flint, Holywell, Mold, Queensferry and Shotton, provide the key employment areas for Flintshire. The county is strategically located and is considered to be the economic driver for North Wales. It lies on the important Trans European network from Dublin to Hamburg and within 30 minutes drive there is a population of >1.5 million; principally within north west England to the east. The main access is provided by the A55 passing through it which allows excellent linkages with surrounding large economies including Wrexham and Chester and facilitates Flintshire's position as the key economy in north Wales (Flintshire Economic Regeneration Strategy 2009-2020). A high proportion of Flintshire residents (43%) work outside of the County, but this is balanced by a high number of people who commute into Flintshire for work (Flintshire LDP Preferred Strategy).

Deeside Industrial Park is a key employment provider within Flintshire as well as Cheshire, Merseyside and North Wales. Industries range from construction to food production. Deeside is also home to steel manufacturer Tata Steel and aircraft manufacturer Airbus. The Deeside Industrial Park is part of the Deeside Enterprise Zone which has helped to deliver key employment within and Flintshire and it is considered that its success will continue to attract new companies and support the provision of jobs in the medium term to long term.

VAT Registered Stock

Figure K-5 shows the VAT registered stock in Flintshire from 1994 to 2008.

Figure K-5 VAT Registered Business Stock in Flintshire from 1994 to 2008

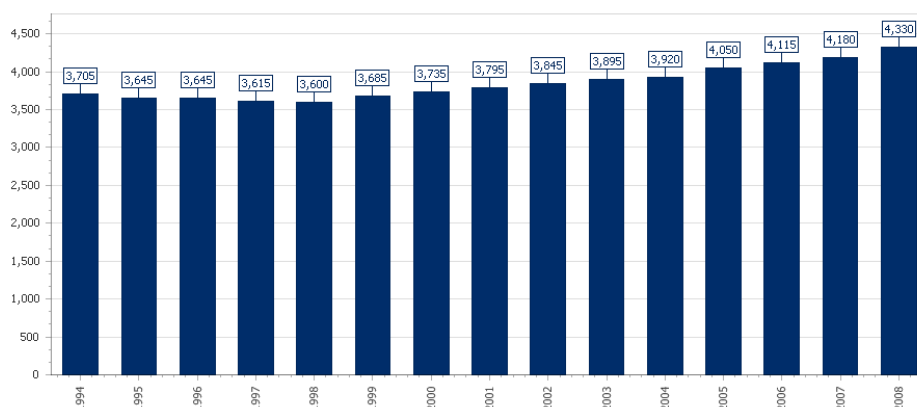


Figure K-5 shows that apart from a slight dip in around 1997 / 8 the number of overall VAT registered enterprises in the County has been rising year on year, increasing by 15% from 1994 to 2008. National figures follow much the same trend, dipping in number around the same time but increasing overall by 8% during the same time period to 87,335 in 2008 (stats.wales.gov.uk).

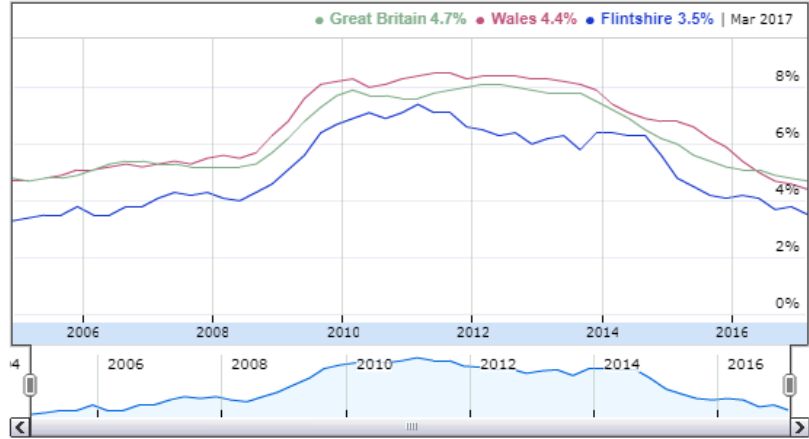
Economic Activity Rate

The number of people economically active has fallen in Flintshire by 5.3% from 79.2% to 73.9% in 2016. This is in contrast to the national trend which has risen from 72.7% to 78% over that period. For Flintshire the drop in those economically active has come mainly from men; with the number for males dropping 3.3% and females 2.2% over the last ten years.

Percentage of Working Age Unemployed

There has been an overall increase in those unemployed since 2006 linked with the economic activity rate. This can be seen in Figure K-6. It is apparent from the figure where the recession hit economies across the world around 2009 with the unemployment rate rising sharply and now recovering across Flintshire, Wales and the UK. The unemployment rate in Flintshire is lower than the average for Wales and Great Britain.

Figure K-6 Unemployment Rate in Flintshire, Wales and the UK, 2006-2016

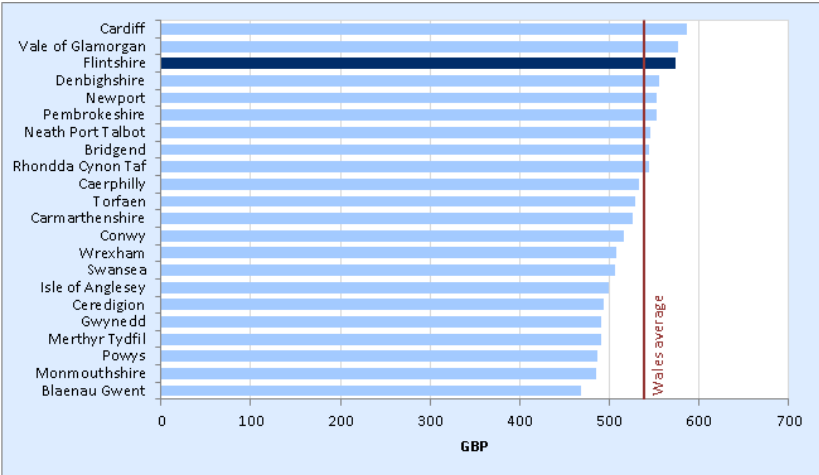


Source: NOMIS

Average Earnings

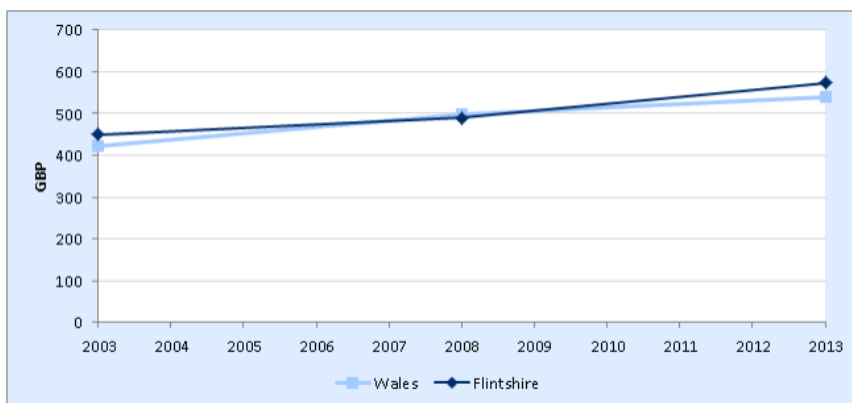
Figure K-7 shows the gross weekly earning data for Flintshire, relative to the other Welsh LAs and the Welsh average. Figure K-8 shows the change over time in Flintshire compared to the change in Wales.

Figure K-7 Average Gross Weekly Full-Time Earnings in Flintshire and all Welsh LAs, 2013



Source: Annual Survey of Hours and Earnings, Office for National Statistics

Figure K-8 Average Gross Weekly Full-Time Earnings in Flintshire and Overall Welsh Averages, 2013

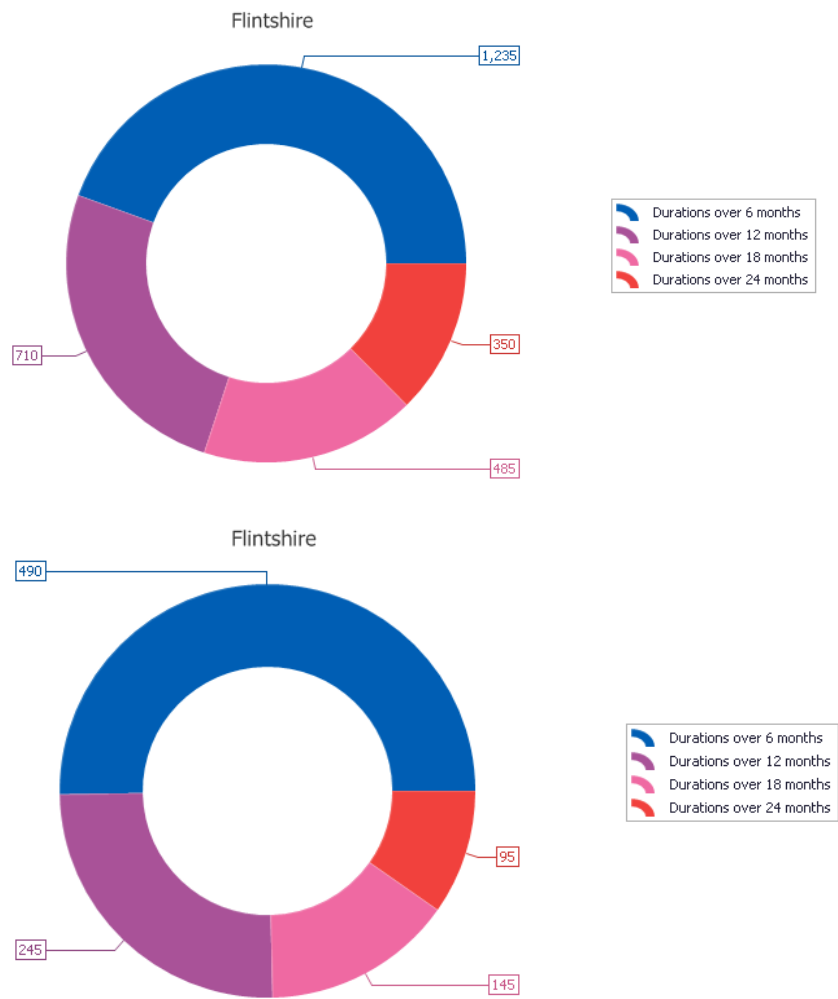


Source: Annual Survey of Hours and Earnings, Office for National Statistics

Figure K-7 shows that the average gross weekly earnings of those in Flintshire is the third highest across all LAs in Wales at £574. Figure K-8 shows that the average earnings in Flintshire have risen closely in line with the national average since 2003. In 2008 earnings fell slightly below the national average, but since 2009 have been steadily rising above it.

Figure K-9 shows the number of Job Seeker Allowance (JSA) claimants by duration for 2013 and 2003 in Flintshire. It shows that the number of people claiming JSA has risen for each of the duration periods over the ten years and overall by 1245(74.6%) to 2915 since 2003 where it was 1670. The duration claimants were receiving JSA compared to 10 years ago is broadly similar, with the main difference being the increase in those claiming for more than 12 months in 2013 than that 10 years previously (stats.wales.wales.gov.uk).

Figure K-9 Claimant Count of JSA in Flintshire by Duration, 2013 (top) 2003 (bottom)



Evolution of the Baseline

With an aging population that is projected to continue (refer to section A), it is likely that the number of people who are economically inactive in Flintshire will continue to grow.

With the UK economy on the road to recovery from the recent recession it is also likely that the unemployment rate in Flintshire should continue its recent trend in declining.

Employment by industry figures show that there is a move away from the area's largest employment sector, construction, to other more technical and service based roles.

Key Sustainability Issues and Opportunities

Issues

- There is an increase in JSA Claimants.
- There are currently two Flintshire LSOAs in the bottom 10% for employment deprivation. They are Hollywell Central and Shotton Higher.
- There has been a fall in the proportion of Flintshire residents economically active which may lead to a labour shortfall.

Opportunities

- Opportunities should be sought to support the unemployed back into work.
- The ageing population is linked to an ageing workforce within the County and training should be extended to the older population so that they can support the likely stretched labour force with an increasingly ageing population.
- Opportunities should be sought to enhance the County's natural and built assets in order to benefit tourism and support the local economy.
- Opportunities should be sought to provide employment and business opportunities that meet the current and future needs of the local economy.

Data Gaps and Uncertainties

- Location of key industries.
- Number of organic farms registered.
- Major public and private sector employers.

L HOUSING

Overview of Baseline Conditions

Relevant SA Objectives

4. To provide access to good quality, affordable housing that meets the needs and requirements of the community

- Ensure that there is sufficient housing to meet identified needs in all areas, including rural housing
- Ensure that housing meets acceptable standards
- Increase the availability of affordable housing
- Increase availability of housing for independent living
- Reduce levels of homelessness
- Reduce number of households in income poverty

The following baseline indicators have been used to characterise housing conditions across the County:

- Average house prices compared to regional / national averages (Proviser)
- Percentage of households living in type of accommodation (Neighbourhood Statistics)
- No. of Houses in Multiple Occupation (HMOs) (statswales.wales.gov.uk)
- Proportion of vacant housing (statswales.wales.gov.uk)
- Number and distribution of LSOAs within bottom 10% most deprived housing (WIMD)
- Additional affordable housing provision (statswales.wales.gov.uk)
- Flintshire Local Development Plan Preferred Strategy 2015 – 2030 (2017)

Average House Prices

Figure L-1 shows the average house prices from 1995 to 2013 in Flintshire. It shows that prices have fluctuated considerably since 2005 after there was a steep rise from 2002 to was around £144,000. This average was slightly lower than the current Welsh average which is currently around £167,522. In April 2016, the average house price was £152,250, 5.6 times the average household income of £27,300 and 10.1 times the lowest of £15,000. This suggests that entering the housing market as a home owner is well out of the reach of the average household (Flintshire LDP Preferred Strategy). This shows over a £8000 increase over three years.

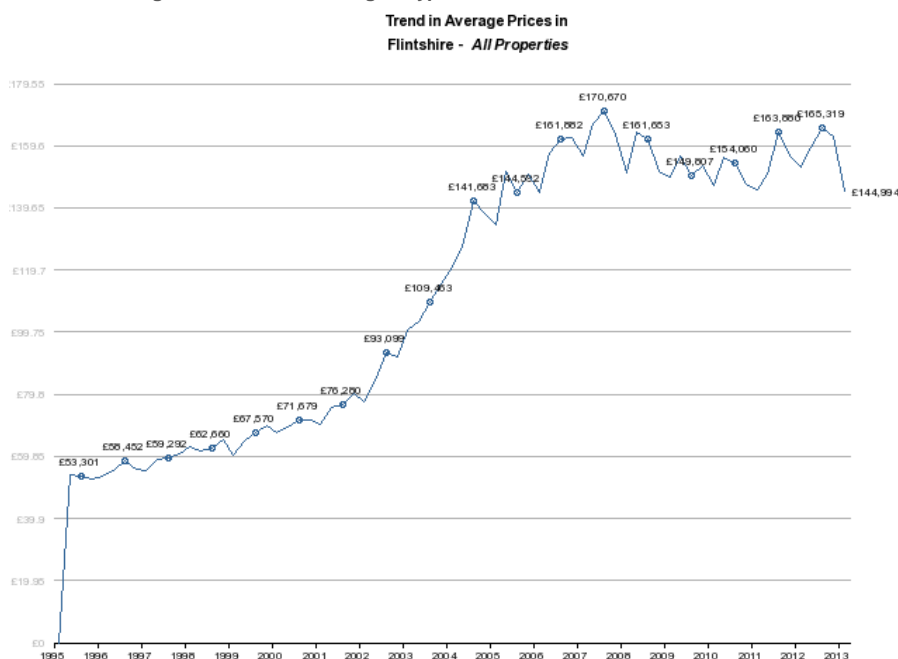
Social Housing

As of 31st March 2015, there were 10,279 dwellings within the social housing sector in the area, 158 for every 1,000 households, compared to the all-Wales level of 175). The general need for three-bedroomed social housing is higher (65%) than the all-Wales figure (48%). Overall less than 8% of stock is in one-bedroomed accommodation. Since 1996 over 1,600 social housing properties have been sold under right-to-buy schemes. Although some stock has been replaced, it has fallen short of a direct one-for-one replacement. Overall this has depleted the stock available to meet social housing need.

The private rented sector comprises 12% of Flintshire's housing stock and has grown significantly (175%) over the last 25 years. By 2030, predictions show there will be an oversupply in Flintshire of sheltered housing places and under supply of residential care, nursing home and housing with care across the area (Flintshire LDP Preferred Strategy).

Figure L-1 Average House Prices in Flintshire from 1995-2013 Source: Proviser

Percentage of Households Living in Type of Accommodation



In 2011 there were 63,781 properties in Flintshire, 37.6% of these were detached, 41.4% were semi-detached and 13.9% were terraces. Compared to 2001 this is an increase of 0.1% for detached housing, a fall of 0.1% and 0.6% for semi-detached and terraced housing, respectively. Compared to the rest of Wales, Flintshire has a higher percentage of detached and semi-detached housing, +9.88% and +9.6% respectively. The majority of this is made up by their being considerably more terraced housing nationally than in Flintshire, almost double, at 27.7%.

No. of Houses in Multiple Occupation (HMOs)

A household's accommodation (a household space) is defined as being in a shared dwelling if it has accommodation type 'part of a converted or shared house', not all the rooms (including bathroom and toilet, if any) are behind a door that only that household can use and there is at least one other such household space at the same address with which it can be combined to form the shared dwelling. In 2012-13 there were 90, ca. 0.14% of all households, known Houses in Multiple Occupancy (HMOs) with 200 predicted for the whole of Flintshire. This figure represents a considerable increase over recent years, being a rise of 78 properties since 2001 where it was just 12. This figure is still much lower than the 1% of Welsh properties which are HMOs.

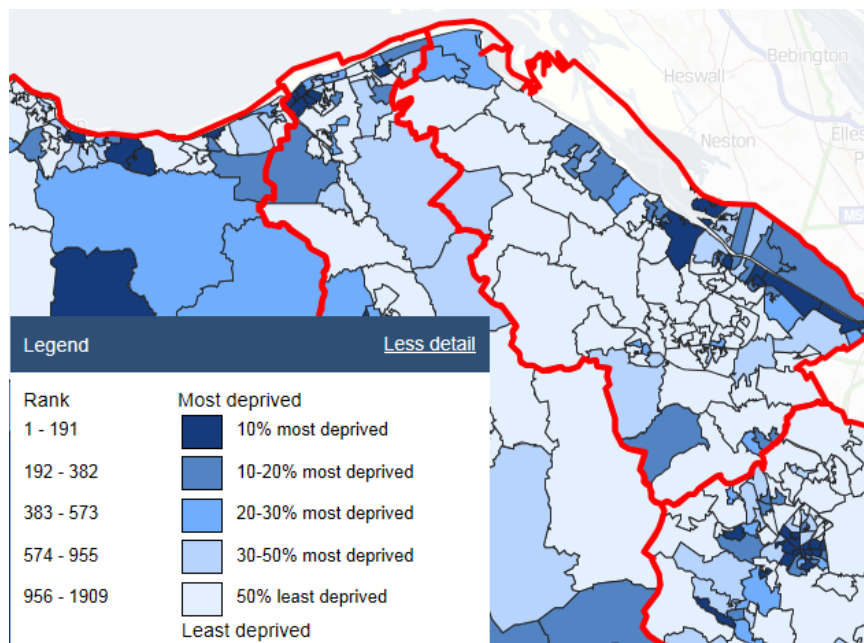
Proportion of Vacant Housing

The number of vacant houses in Flintshire has fallen significantly over the past decade. Figures for 2012-13 show 177 properties were vacant in the area, this represents 0.28% of the total housing stock. This is a fall of 1574 vacant properties (2.52%) since 2001. Wales has also seen a considerable reduction in the amount of its housing stock which is vacant. In 2001 it was ca. 4% of all the stock and in 2012-13 it was only 0.32%.

Number and Distribution of LSOAs Within Bottom 10% Most Deprived Housing

Figure L-2 shows the deprivation levels of the LSOAs in Flintshire with regard to housing.

Figure L-2 Housing Deprivation Map for Flintshire



Source: WIMD

Flintshire has 6 LSOAs which are ranked in the bottom 10% of housing deprivation, they are: Queensferry, Shotton Higher 2, Saltney Mold Junction, Flint Oakenholt 2, Shotton East and Connah's Quay Central 1. This represent 6.5% of those in the LA and 0.3% of all the LSOAs in Wales. This is a reduction of 3 LAs in the bottom 10% for housing deprivation compared to 2005.

Additional Affordable Housing Provision

In 2013-14, there 89 new affordable properties provided in Flintshire. This shows an increase of 32% from 2007-2008. In Wales nationally there were 2,416 affordable houses provided. This represent an increase of 30% from 2007-2008.

Evolution of the Baseline

Since the property price boom in Flintshire around 2002 / 3 prices have somewhat stagnated. With the housing market now back on the rise across Wales and the rest of the UK it is likely that prices in Flintshire will begin to rise in coming years.

Housing deprivation is reducing in the area and with the current trend the remaining 6 LSOAs will begin to move out of the bottom 10% for housing deprivation.

There are much fewer vacant properties in Flintshire than in recent years, so too in Wales, but the amount of those with multiple occupancy is rising. With pressures on wages across the UK it is likely that these trends will continue.

Key Sustainability Issues and Opportunities

Issues

- There is a high percentage of LSOAs in the bottom 10% of housing deprivation for Flintshire.
- There is a shortage in the amount of affordable housing provided and there is a continuing need for affordable housing in the County.
- The number of HMOs is rising in the area.

Opportunities

- Opportunities should be sought to provide housing that meets local needs including the provision of affordable housing.
- To lift more LSOAs out of the bottom 10% for housing deprivation.

Data Gaps and Uncertainties

- House price / earnings affordability ratio.
- Number of people accepted as homeless.
- Affordable dwellings completed as percentage of all new housing completions.
- Percentage development type distribution / housing densities per hectare.

M DEPRIVATION AND LIVING ENVIRONMENT

Overview of Baseline Conditions

Relevant SA Objectives

1. To reduce crime, disorder and fear of crime
<ul style="list-style-type: none">▪ To reduce levels of crime▪ To reduce the fear of crime▪ To reduce levels of anti-social behaviour▪ To reduce burglary rates▪ To encourage safety by design
5. To improve sustainable access to basic goods, services and amenities for all groups
<ul style="list-style-type: none">▪ Ensure that public transport services meet all people's abilities and needs▪ Ensure that highways infrastructure meets people's needs (including walking and cycling routes)▪ Promote the use of sustainable travel modes and reduce dependence on the private car▪ Improve access to cultural and recreational facilities, including Welsh culture and heritage▪ Maintain and improve access to essential services and facilities, including in rural areas▪ Improve access to open space▪ Conserve and enhance opportunities for public access to the countryside and coast
6. To build strong and cohesive communities
<ul style="list-style-type: none">▪ Provide similar life opportunities for people from different backgrounds that develop strong, positive relationships between people in the workplace, schools and within neighbourhoods▪ Reduce inequalities experienced by people with protected characteristics – age/disability/gender reassignment/race/religion and belief/sex/sexual orientation▪ Ensure children who have any kind of disability can lead full and independent lives▪ Ensure children can live to a standard that is good enough to meet their physical and mental needs▪ Ensure children can develop healthily, and have access to good quality health care, clean water, nutritious food and a clean environment
8. To provide employment opportunities across the County and promote economic inclusion
<ul style="list-style-type: none">▪ To increase local employment opportunities across the County▪ To improve access to jobs▪ Maximise traineeship and apprenticeship opportunities▪ To reduce levels of child and fuel poverty within the County
9. To maintain and improve the quality of life in rural areas
<ul style="list-style-type: none">▪ To support rural diversification▪ To encourage ICT / broadband links in rural areas.

The following baseline indicators have been used to characterise deprivation and living environment conditions across the County:

- Recorded crime rates / 1000 for key offences (ONS)

- Safe for children to play outside in local area (statswales.wales.gov.uk)
- Feeling of safety walking in the local area after dark (ONS)
- Number and distribution of LSOAs in bottom 10% most deprived for physical environment (WIMD)
- Number and distribution of LSOAs in bottom 10% of most deprived in terms of access to services (WIMD)
- Number and distribution of LSOAs within bottom 10% most deprived in terms of overall deprivation (WIMD)
- Number of LSOAs within the bottom 10% most deprived within the child index (WIMD)
- Number of households in fuel poverty (Flintshire County Council)

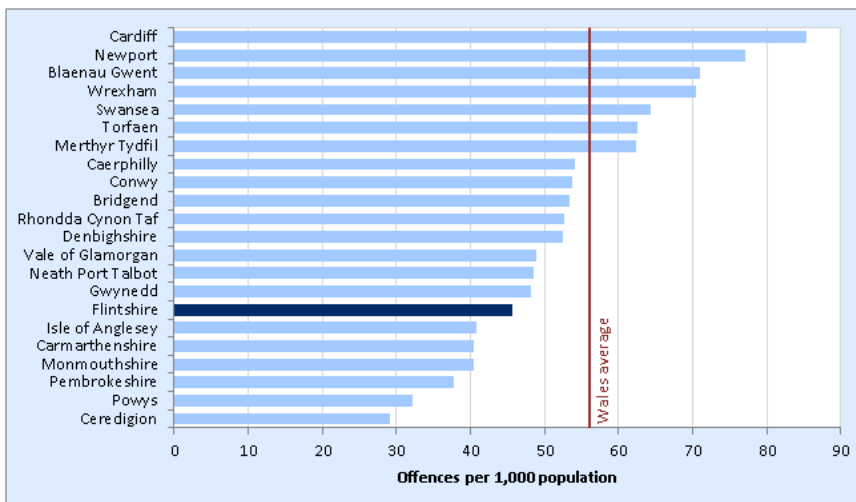
Recorded Crime Rates / 1000 for Key Offences

Latest figures for 2013-2014 show the total crime rate per 1000 population / households in Flintshire was 46 per 1000 for headline offences. Broken down in key crime statistics the crime rates compared to the change from 2009 / 10 figures are as follows (Source ONS):

- Violence against the person – 9 / 1000 (-4.7)
- Sexual offences – 1 / 1000 (+0.3)
- Robbery – 0 / 1000 (-0.1)
- Burglary – 7 / 1000 (+5)
- Theft including a motor vehicle – 3 / 1000 (data unavailable)

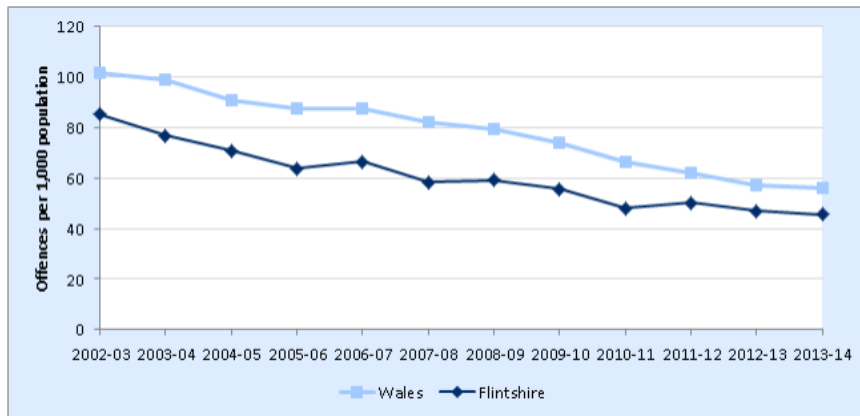
The above figures show violent crime in Flintshire for 2013 / 14 fell compared to 5 years ago but sexual offences and burglary rates have both increased. Robbery rates are negligible. Figure M-1 shows the crime recorded per 1000 population in Flintshire compared to the national average and the other Welsh LAs. Figure M-2 shows the overall crime rate in the County compared to the overall average.

Figure M-1 Crime Rate per 1000 Population in Flintshire Compared to the Welsh Average and Other LAs, 2013-2014



Source: ONS

Figure M-2 Total Recorded Crime Rate in Flintshire and Nationally, 2002-03 – 2013-14



Source: ONS

It can be seen from the two figures above that Flintshire currently has as a crime rate 10 percentage points lower than the average for Wales and the overall crime rate has been falling year on year for the past decade, in line with the national average, but remaining lower than this average every year.

Safe for Children to Play Outside in Local Area

The proportion of Flintshire residents who feel it safe to let their children play outside is a useful indicator of the general feeling of safety in an area. In 2014, 69% of people considered it safe to allow their children to play outside, whereas 21% did not and 10% were undecided. Compared to the national average this is 4% higher for the percentage of people who thought it safe to let their children play outside and 4% lower for the people who disagreed it was safe (stats.wales.gov.uk).

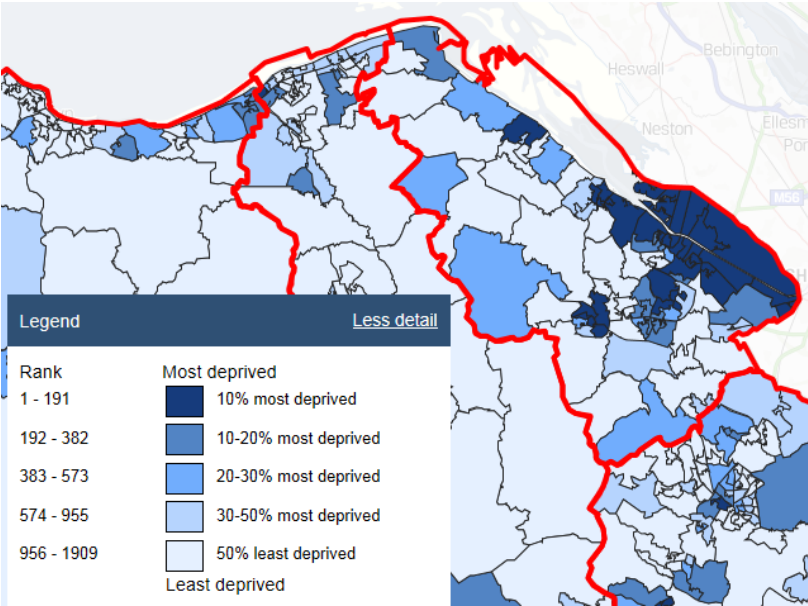
Feeling of Safety Walking in Local Area After Dark

Statistics from 2014 showed that 75% of Flintshire residents felt safe walking in the LA after dark. This is 4% lower than the average for all LAs across Wales (ONS).

LSOAs in Bottom 10% Most Deprived for Physical Environment

Figure M-3 shows the deprivation levels of the LSOAs in Flintshire with regard to physical environment.

Figure M-3 Physical Environment Deprivation Map for Flintshire



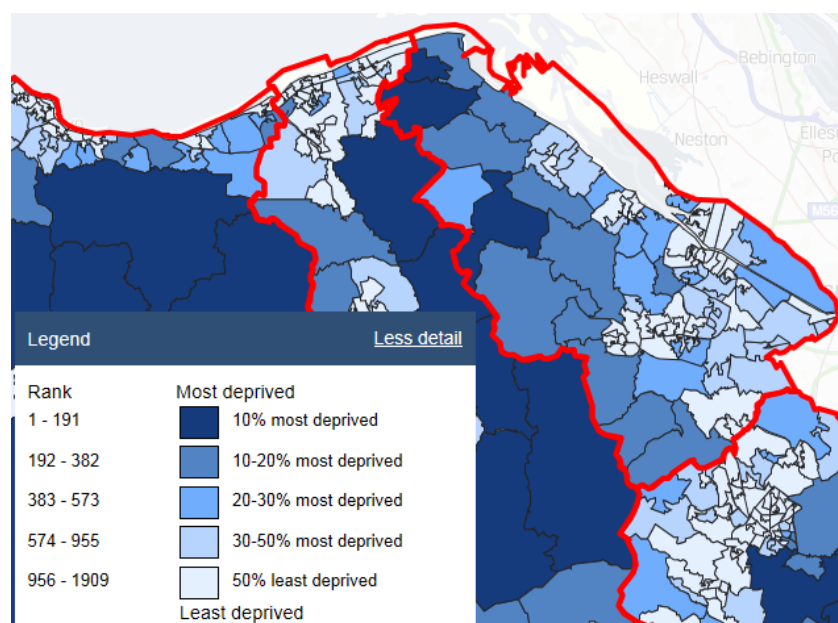
Source WIMD

The purpose of this domain is to measure factors in the local area that may impact on the wellbeing or quality of life of those living in an area. The indicators are: Air Concentrations, Air Emissions, Proximity to Waste Disposal and Industrial Sites, Flood Risk. Flintshire has 32 of its LSOAs in the bottom 10% most deprived for physical environment. This represents 34.85% of the LSOAs in the County and 1.7% of all those in Wales. Compared to 2005 this is an increase of 20 LSOAs in the bottom 10% most deprived for this indicator (WIMD). It can be seen in Figure M-3 that physical environment deprivation is prevalent across Flintshire, but is particularly a problem over in the eastern part of the County around Deeside.

LSOAs in Bottom 10% of Most Deprived in Terms of Access to Services

Figure M-4 shows the deprivation levels of the LSOAs in Flintshire with regard to access to services.

Figure M-4 Access to Services Deprivation Map for Flintshire



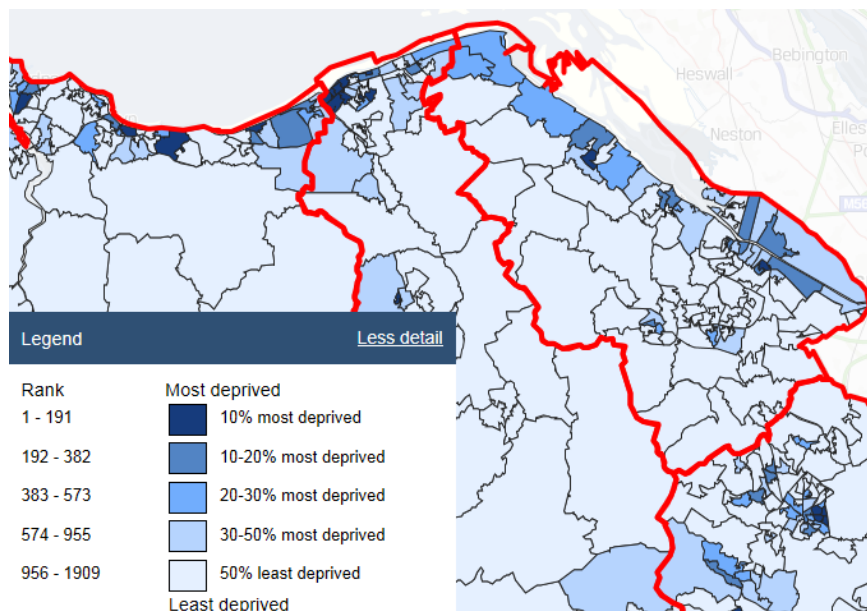
Source: WIMD

Latest figures show that three of Flintshire's LSOAs rank in the bottom 10% for access to services. This represents 3.3% of the LSOAs in the County and 0.2% of those nationally. This is one less LSOA than in 2005. The current LSOAs in the bottom 10% for access to services are: Trelawnyd and Gwaenysgor, Caerwys and Gronant (WIMD). Figure M-4 shows that the western side of the County is more deprived in terms of access to services than the east. Although there are only three LSOAs in the bottom 10% most deprived, much of the western portion of Flintshire is in the bottom 10-20%.

Number and Distribution of LSOAs within Bottom 10% Most Deprived for Overall Deprivation

Figure M-5 shows the overall deprivation levels of the LSOAs in Flintshire.

Figure M-5 Overall Deprivation Map for Flintshire



Source: WIMD

There currently two Flintshire LSOAs in the bottom 10% for overall Welsh deprivation, which considers all various aspects of deprivation, many of which have been discussed in this report. These two LSOAs are Shotton Higher 2 and Holywell Central and represents 2.2% of the LSOAs in the County and 0.1% of those in Wales. This is the same number as in 2005, but with Holywell Central replacing Greenfield 1 (WIMD).

Child Poverty

Between 2010-2013, 11% of children and young people in Flintshire were living in severe poverty (Child and Working-Age Poverty from 2010 to 2013 Institute for Fiscal Studies 2012).

In 2010-2011 16% of 0-19 year olds in Flintshire were living in relative income poverty (households at or below 60% of median income) (Households Below Average Income An analysis of the income distribution 1994/95 – 2010/11).

In 2011, 4.3% of LSOAs were in the bottom 10% for the WIMD child index and 11% were in the bottom 20%. The child index is the official measure of relative deprivation for small areas in Wales for children and is made up of the following seven separate domains:

- Income
- Education
- Health
- Access to Services

- Community Safety
- Housing
- Physical Environment

Table M-1 shows the percentage of LSOAs in the 10 most deprived of all the LSOAs in Wales.

Table M-1 Percentage of Flintshire LSOAs in the Bottom 10% for the Child Index and its Domains - 2011

Child Index	Income	Education	Health	Access to Services	Community Safety	Housing	Physical Environment
4.3	4.3	2.2	4.3	3.3	4.3	8.7	23.9

Table M1 shows that in 2011, 23.9% of LSOAs in Flintshire were in the bottom 10% most deprived for physical environment within the child index. This was the second most deprived local authority for this domain with Newport being the most deprived with 43.6% of its LSOAs in the bottom 10%. It is noted that many Flintshire residents live in proximity to waste or industrial sites.

Fuel Poverty

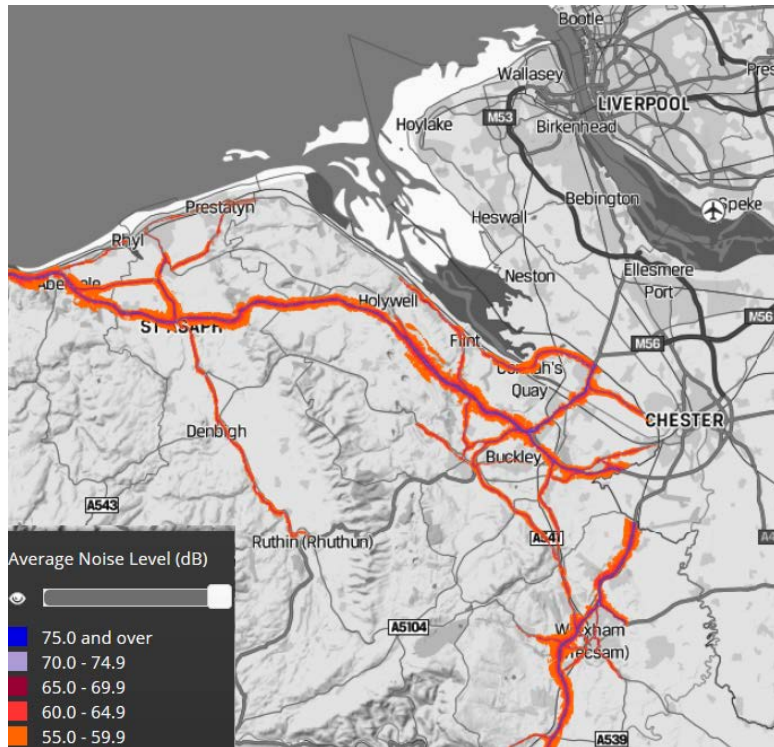
In 2010 15% of the homes and 8,200 households in Flintshire were shown by the Stock Condition Survey to be in Fuel Poverty (Flintshire Local Housing Strategy 2012 – 2017).

In 2012/2013, 363 Council homes receiving energy efficiency measures and in 2013/2014, 87 Council properties were improved, including 16 solid wall insulations, 70 loft insulations and one cavity wall insulation (Flintshire Improvement Plan Progress Year End 2013/2014).

Noise

The Welsh Government has produced a series of maps which show noise levels within Wales. Figure M-6 shows noise levels from the busiest roads within Flintshire.

Figure M-6 Average Road Noise Levels within Flintshire



Source: Welsh Government

These roads include:

- The A55
- The A548
- The A494
- The A550
- The A541
- Mold Road

The figure shows that the areas directly adjacent to these busy road networks possess the highest average noise levels at 75dB and over. Moving further away from these roads, the average noise levels begin to reduce to between 60 – 69dB.

Evolution of the Baseline

- Figures show that the overall crime rate is declining in Flintshire and has been over recent years. This is a trend which is likely to continue.

- There has been a significant increase in the amount of LSOAs which are in the bottom 10% for deprivation for physical environment.
- Earning in the County have been steadily increasing in line with the national average over recent year's current figures place it above the national average. This will likely continue with the recent economic recovery in the UK.
- Although incomes have been rising the number of JSA claimants has also increased quite significantly and probably represents the impact if the recent recession which hit economies across Wales.

Key Sustainability Issues and Opportunities

Issues

- There is a high percentage of LSOAs in the bottom 10% of physical environment deprivation for Flintshire.
- Sexual offences and burglary rates have both increased.
- There are declining town centres within the County e.g. within Flint.
- There are areas within the County with isolated or deprived communities.
- 23.9% of LSOAs are in the bottom 10% most deprived making Flintshire the second most deprived local authority for physical environment within the child index.

Opportunities

- Opportunities should be sought to lift more LSOAs out of the bottom 10% for physical environment deprivation.
- The fall in crime rates should be continued.
- There is a need to reduce fear of crime within the County.
- Opportunities should be sought to reduce causes or contributors to inequality within local communities.
- Opportunities should be sought to identify priority areas within the County for child deprivation in order to better facilitate improvements.
- The number of homes receiving energy efficiency measures within the County should be increased.

Data Gaps and Uncertainties

- Percentage of residents who say that they feel fairly safe or very safe outside during the day and after dark.
- Percentage of residents who say that they feel overall levels of crime and disorder had declined over the past 12 months.
- Alcohol related crime.
- Satisfaction with the County as a place to live.
- Percentage of residents finding it easy to access key local services within their neighbourhood.

N Transportation

Overview of Baseline Conditions

Relevant SA Objectives

5. To improve sustainable access to basic goods, services and amenities for all groups

- Ensure that public transport services meet people's needs
- Ensure that highways infrastructure meets people's needs (including walking and cycling routes)
- Promote the use of sustainable travel modes and reduce dependence on the private car
- Maintain and improve access to essential services and facilities, including in rural areas
- Improve access to open space
- Conserve and enhance opportunities for public access to the countryside and coast
- Improve access to cultural and recreational facilities, including Welsh culture and heritage

The following baseline indicators have been used to characterise conditions across the County:

- Distance Travelled to work (ONS)
- Journey to work by mode (Neighbourhood Statistics).
- Road Condition (Welsh Government)
- Car or Van availability
- People killed and seriously injured on roads (Welsh Government)

The main road network of Flintshire can be seen on Figure N-1. The key major road in the County is the A55. The A483 / A55 / A494 corridor is of vital importance to the region bringing in people and trade, acting as a catalyst for wider economic growth (North Wales Joint Local Transport Plan). Shotton station acts as an interchange between train services on the coastal line and on the Wrexham – Bidston line and with local bus services in the Deeside area.

Flintshire is located on the North Wales Coastline (Anglesey to Chester). One of the major railway stations in the area is Flint station. In 2012-13 there were 270,682 entries and exits through Flint station (Welsh Government).

The Hawarden Airport is a public airport located near Hawarden in Flintshire. Although there have been scheduled services to Hawarden in past years, there are currently no public scheduled passenger flights to the airport; most flights are chartered, or corporate, but the airport has frequent air freight flights. A number of privately owned light aircraft are based at Hawarden and police aircraft also operate from here.

Mostyn is a small village in Flintshire which lies on the estuary of the River Dee which once served as a port from which ferries used to sail. Today, manufactured wings for the Airbus A380 aircraft leave Mostyn after travelling down the River Dee from the Airbus wing factory at Broughton approximately 15 miles downstream from Mostyn. Mostyn has also been the construction base for North Hoyle, Burbo Bank, Rhyl Flats and Gwynt y Môr offshore windfarms.

Figure N-1 Overview of Flintshire

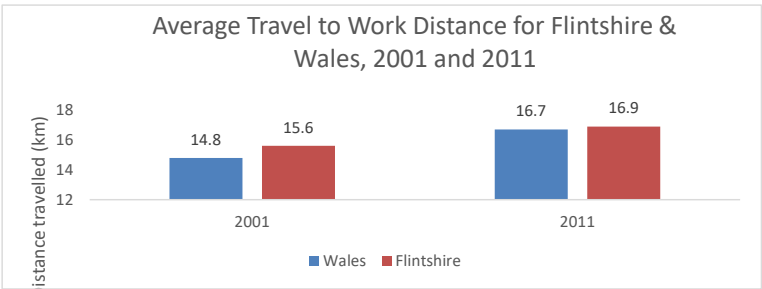


Source Street Map

Distance Travelled to work

Figure N-2 show the average distance which those in Flintshire and Wales travelled to reach their place of work in 2001 and 2011.

Figure N-2 Overview of Flintshire



Source ONS

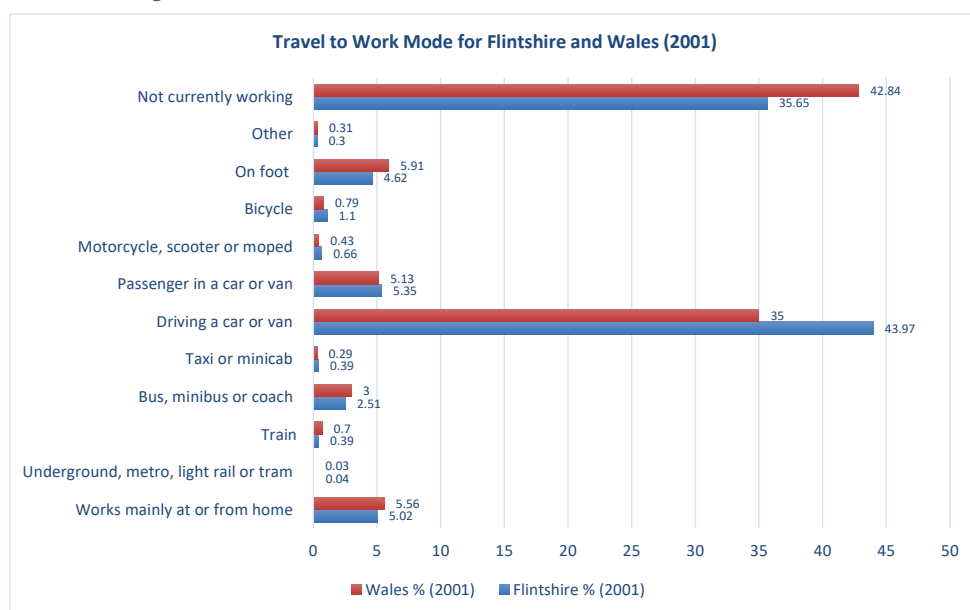
It can be seen in Figure N-2 that the average distance travelled to work in Flintshire has risen by 1.3 km (8.2%) between 2001 and 2011. This is a slower growth in average travel distance compared to the average for the rest of Wales over the same time period, which was 1.9km

(12.8%). Nevertheless Flintshire still had a higher average travel to work distance in 2011 compared to the Welsh average by 0.2km.

The 2011 Census also recorded significant cross border commuter flows amounting to one million journeys per month. Significant daily flows are estimated to be 24,000 people coming in to work in North Wales to Chester and Cheshire to Merseyside and to Greater Manchester and 20,000 commuting from North Wales / Flintshire to work outside of the County.

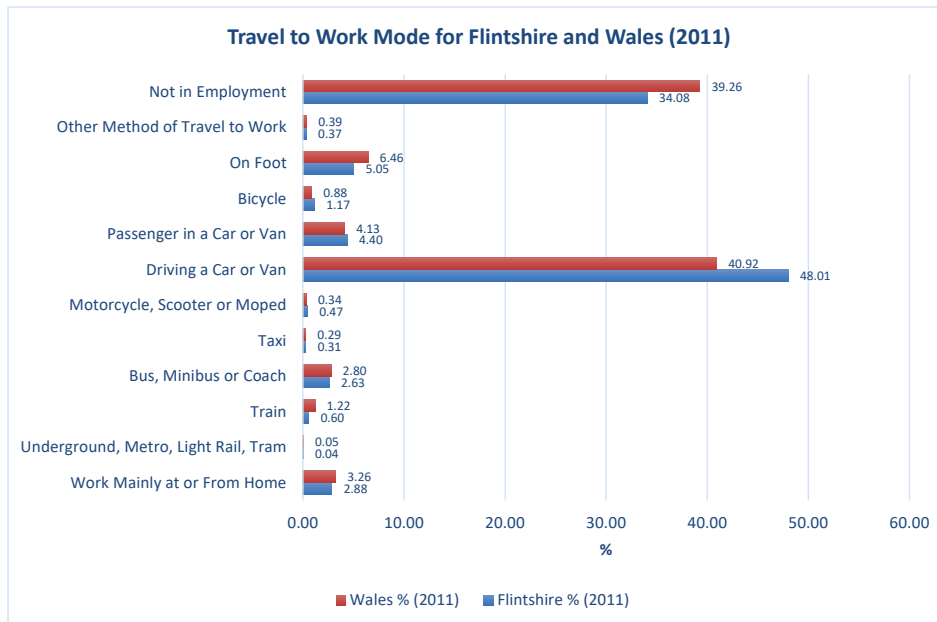
Figure N-3 shows the mode of transport people used to get to work in 2001 and Figure N-4 shows the mode of transport for 2011, across the County and nationally.

Figure N-3 Travel to Work Method for Flintshire and Wales, 2001



Source: ONS

Figure N-4 Travel to Work Method for Flintshire and Wales, 2011



Source: ONS

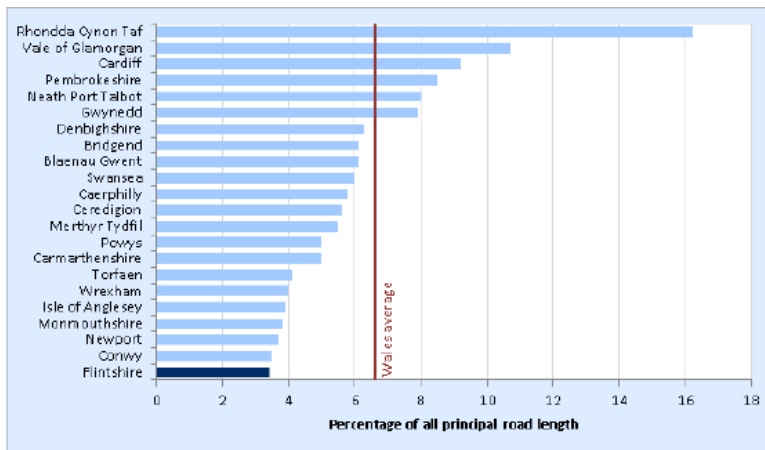
Figures N-3 and N-4 shows that commuting to work in either a van or car is the by far the most common method in both Wales and Flintshire. Between 2001 and 2011 the number of people driving to work in Flintshire rose 4.4%, nationally it was 5.92%. The number of people driving was higher than the national average in both periods, currently around 7%.

The number of Flintshire residents travelling to work by sustainable methods has risen over the 10 year period. However those walking or cycling is still lower than the national average. Those using the train has increased notably across Wales and in Flintshire, whereas those working from home has fallen markedly for both areas.

Road Conditions

Figure N-5 below shows the number of Principal A roads in poor condition across the Welsh authorities. This is the percentage of the surveyed length of LA owned A roads that are classed as in poor condition (above the RED threshold and in need of planned maintenance within a year). It is derived from road condition surveys which use road surface scanning equipment.

Figure N-5 Number of Principal A roads in poor condition, 2010-11



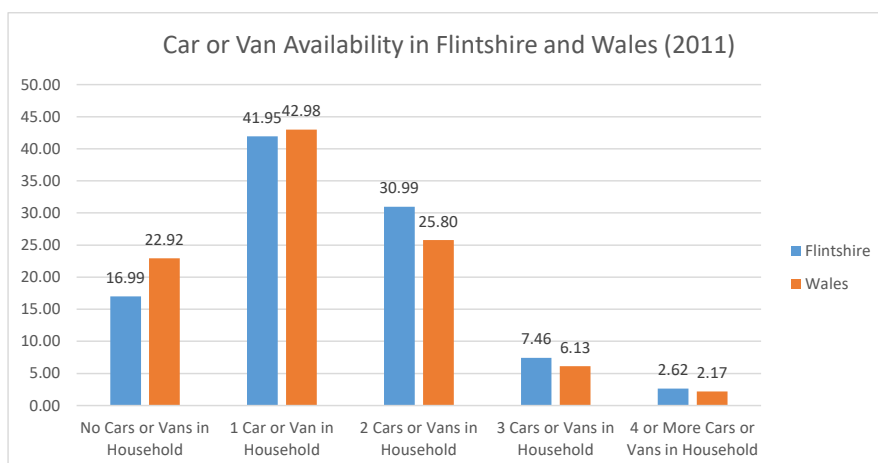
Source Welsh Government

Figure N-5 shows that Flintshire had the lowest number of Principal A roads in poor condition across all the LAs in Wales in 2010 / 11. This provides an indicator of the road network in the County off being in good condition.

Car or Van Availability

Figure N-6 show the access people in Flintshire and across Wales have to either a car or a van.

Figure N-6 Car or Van Availability in Flintshire and Wales, 2011



Source ONS

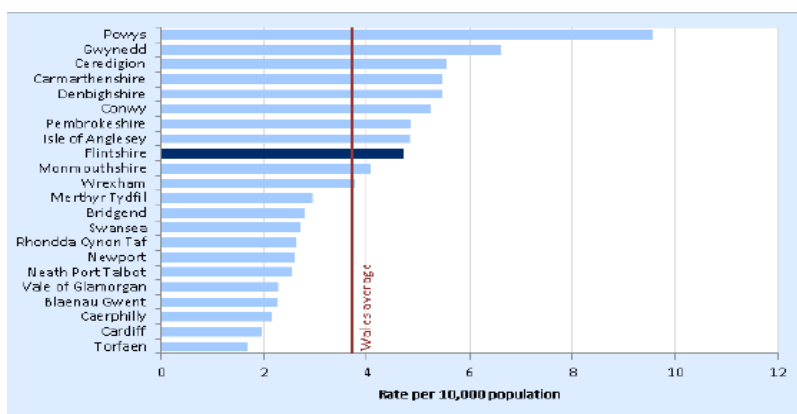
It can be seen by looking at Figure N-5 that the 5.93% more households in Flintshire have access to a vehicle than compared to the rest of Wales. It also shows that of those households there is a

greater number which have access to two or more vehicles; particularly those with access to two, which was 5.19% higher.

People Killed or Seriously Injured on Roads

Figure N-7 shows the rate per 10,000 of people being killed or seriously injured on Flintshire's roads between 2011-2013. Figure N7 shows the trend from 2000 to 2013.

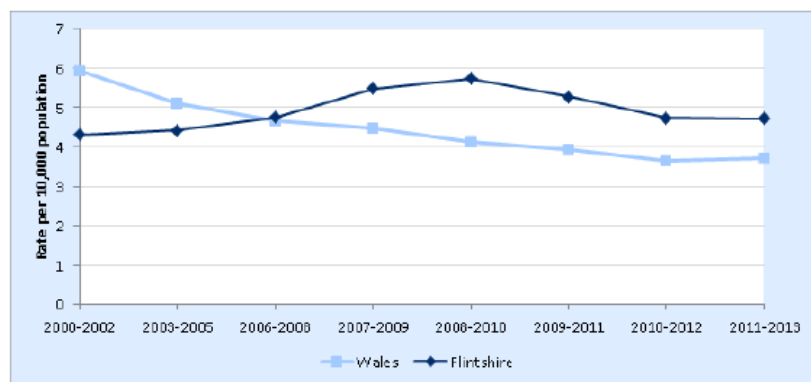
Figure N-7 People Killed and Seriously Injured on Roads, 2011-13



Source ONS

Figure N-7 shows that between 2011 and 2013 there were more than the national average of people killed on Flintshire's roads by 1 per 10,000.

Figure N-8 People Killed and Seriously Injured on Roads, 2000 - 2013



Source ONS

Figure N-8 shows that pre 2006-2008 the average number of fatalities or serious injuries on Flintshire's roads was below the national average. It then rose to a peak in 2009 and began declining to 2013.

Evolution of the Baseline

Figures suggest that Flintshire residents, as well as across Wales, will continue to work travel in increasing numbers via car or van and continue to travel further afield. Those using sustainable transport methods looks likely to continue climbing, albeit at a slower rate than that of the car.

Those involved in serious road accidents has been falling since 2008-10 and if continued will once again fall below the national average.

Key Sustainability Issues and Opportunities

Issues

- There is an increased dependence on travel by car and increasing usage of cars/vans to get to work.
- There is concern in populated areas about transport and accessibility to key services including hospitals.
- The use of sustainable transport methods to get to work in Flintshire is below the national average.
- There is an increasing distance people are travelling to get to work.
- There are a high number of deaths/serious injuries on Flintshire's roads compared to the national average.

Opportunities

- Opportunities should be sought to reduce car/van transport and increase the use of greener more sustainable modes of transport.
- Opportunities should be sought to develop road infrastructure that supports economic growth.
- Opportunities should be sought to reduce the distance people are travelling to work.
- Opportunities should be sought to improve road condition and safety within Flintshire.

Data Gaps and Uncertainties

- Percentage of dwellings approved and located within 400m of a regular transport service.

O WELSH LANGUAGE

Overview of Baseline Conditions

Relevant SA Objectives

18. To encourage the protection and promotion of the Welsh Language
<ul style="list-style-type: none">▪ Contribute to an increase in the number of Welsh language speakers across Flintshire▪ Contribute to an increase in the proportion of Welsh language speakers who are fluent across Flintshire▪ Contribute to an increase in the number of people who speak Welsh daily and who can speak more than just a few words of Welsh▪ Raise the visibility and prominence of the Welsh language

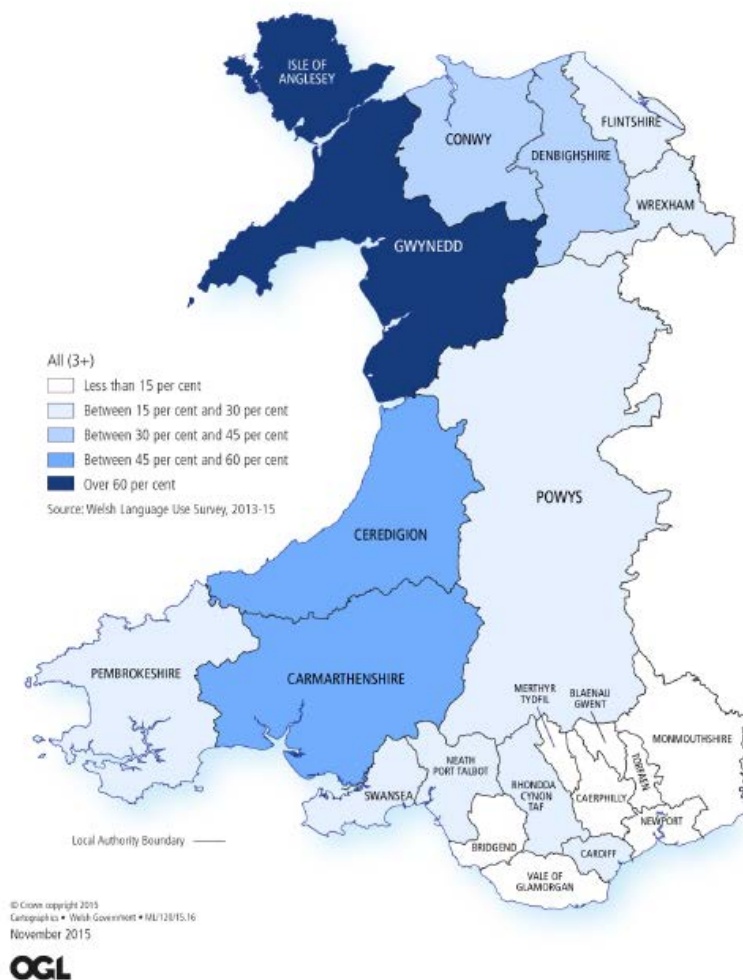
Evolution of the Baseline

The historic decline in use of the Welsh language has been halted and has now been on a general upward trend since the early 1990s. This is, in part due to Welsh entering the national curriculum and being a compulsory subject in schools. However, levels of fluency are still low and there are large regional variations.

The Welsh language use survey is funded jointly by Welsh Government and the Welsh Language Commissioner. It provides information about Welsh speakers' use of the Welsh language. The most recent survey covers 2013 – 2015. According to the Welsh Language Use Survey 2013-15, 24% of people aged three and over were able to speak Welsh. The percentage of Welsh speakers decreased with age; it was at its highest amongst the 3 to 15 age group, 41%, and at its lowest amongst the 45 to 64 age group, 18%.

The percentage of people able to speak Welsh also varies between local authority areas. Figure O-1 presents the percentage of people able to speak Welsh by local authority area. In Flintshire this equates to between 15-30% of the residents.

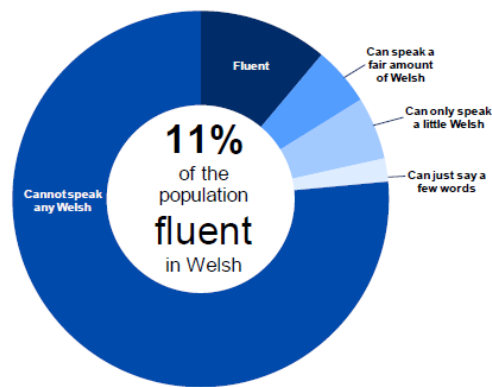
Figure O-1: Percentage of people who are able to speak Welsh by local authority area



Source: Welsh Language Use in Wales (2013-2015)

Adults and young people aged three and over were asked as part of the Welsh Language Use Survey 2013-15 to best describe their ability to speak Welsh. Figure O-2 presents the results of the question on fluency as a percentage of the whole population.

Figure O-2: percentage of people who speak Welsh by fluency



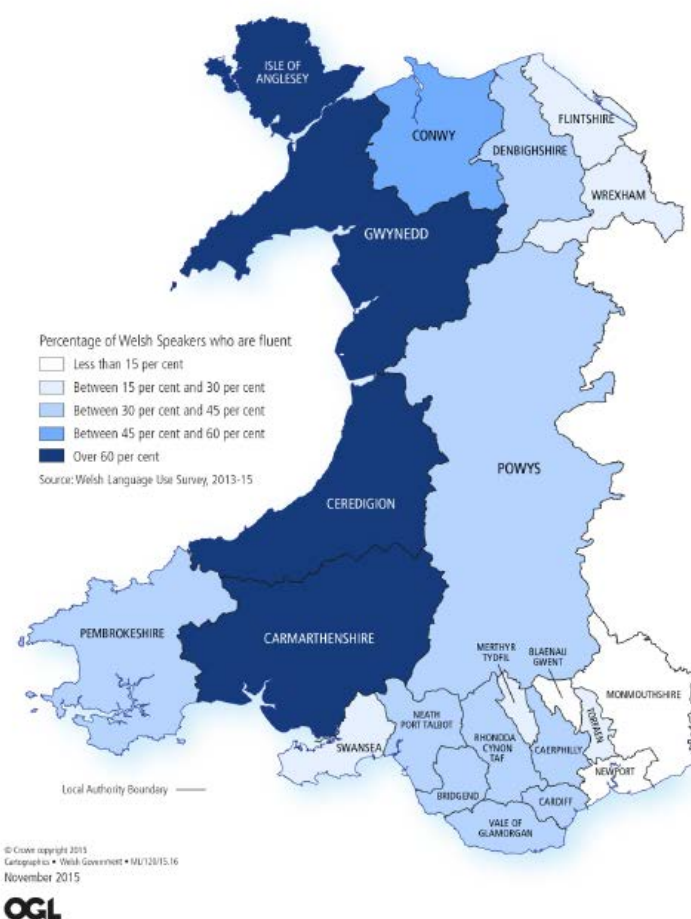
Source: Welsh Language Use in Wales (2013-2015)

11% of all people aged three and over living in Wales were able to speak Welsh fluently. This represents around 318,800 people. 12% of people stated that they could speak Welsh but not fluently. Both the percentage and the number of people who stated that they are fluent Welsh speakers have remained relatively constant since 2004-06. 12% of all people aged three and over were able to speak Welsh fluently in 2004-06, which represents 317,300 people.

The percentage of people who were fluent in Welsh tend to decrease with age, from 15% of the 3 to 15 age group to 9% of the 45 to 64 age group. The percentage of people aged 65 and over who were fluent was slightly higher than the percentage of the 30 to 44 and 45 to 64 age groups (Welsh Language Use in Wales (2013-2015)).

Fluency also varies according to local authority areas. Figure O-3 presents the percentage of Welsh speakers who were fluent based on local authority area. In Flintshire this equates to between 15-30% of the population.

Figure O-3: percentage of people who speak Welsh by fluency in authority area



Source: Welsh Language Use in Wales (2013-2015)

When comparing the data for Flintshire within the Welsh Language Use in Wales (2013-2015) survey between 2004-6 and 2013-15, it is clear that there has been an increase in the people who report they are fluent in Welsh but there is also an increase in the number who are not fluent.

Key Sustainability Issues and Opportunities

Issues

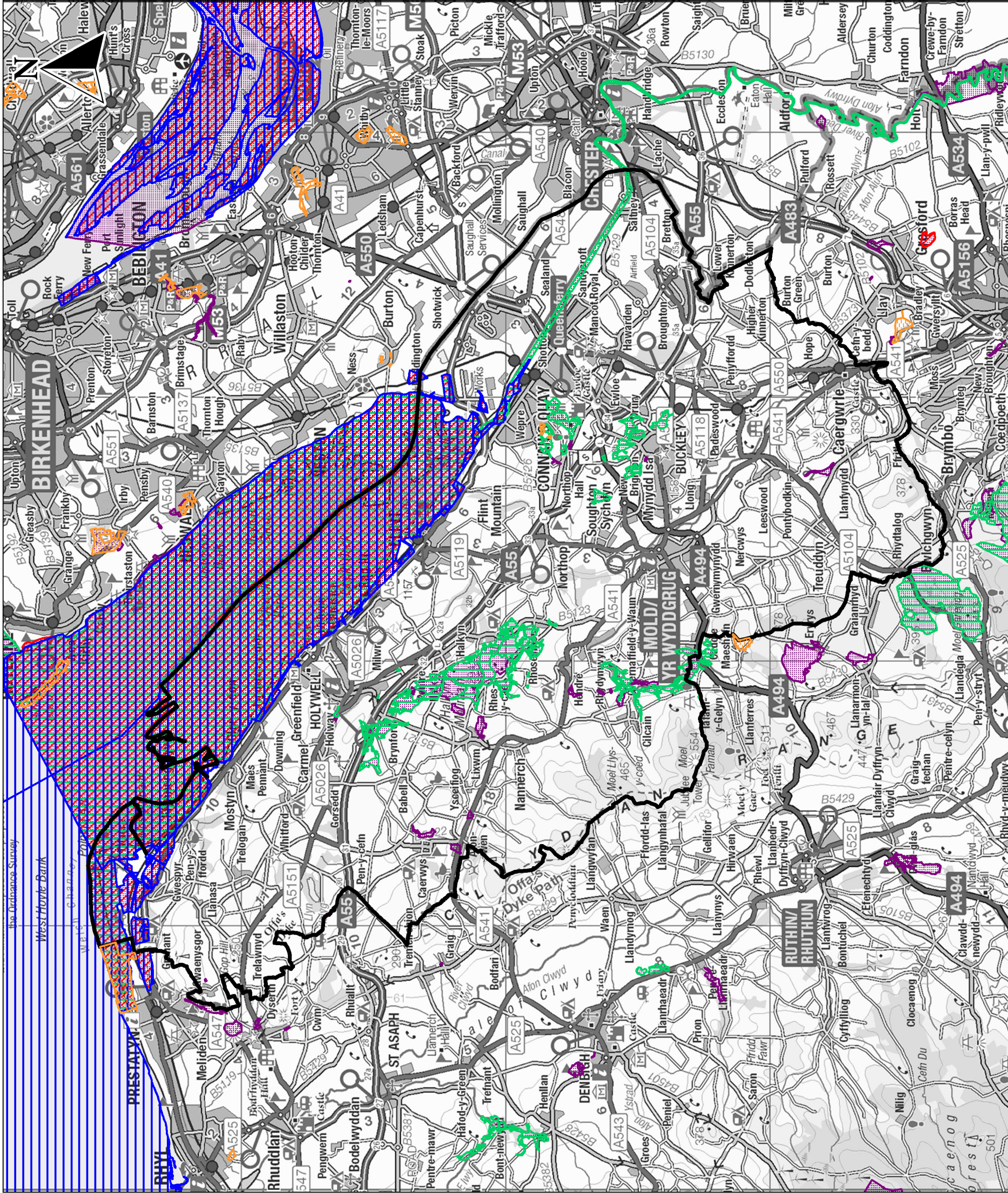
- Fluency in Welsh in Flintshire appears to be increasing, though the rate of rise in non-fluency is faster, suggesting an overall decline of Welsh speakers within the County.

Opportunities

- Opportunities to increase exposure to the Welsh language should be sought.

Data Gaps and Uncertainties

- No data gaps identified.



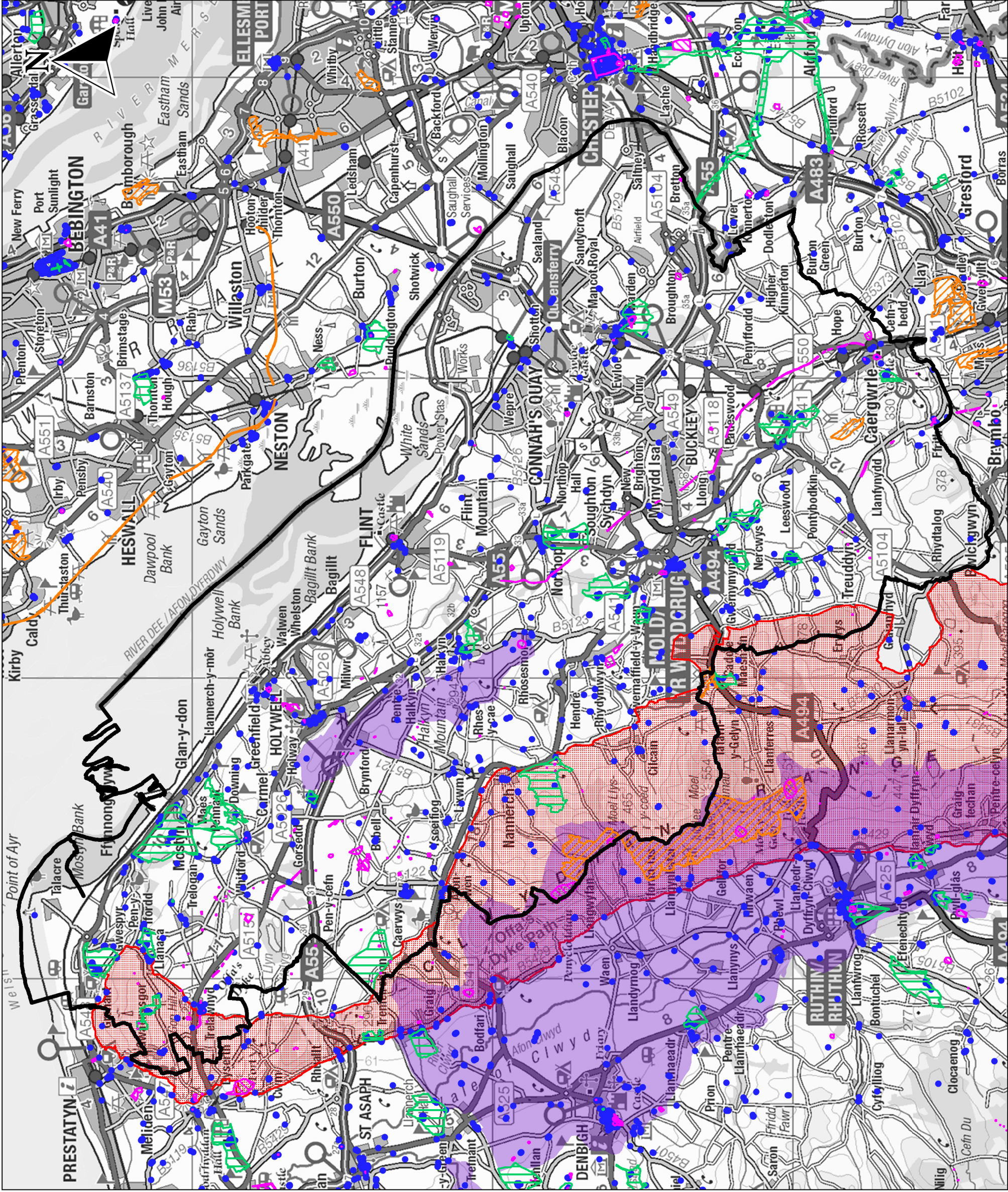
Key

- Flintshire County Boundary
- Ramsar Site
- Special Protection Area
- Special Area of Conservation
- Site of Special Scientific Interest
- Local Nature Reserve

CYNGOR Sir y Fflint Flintshire COUNTY COUNCIL

ARCADIS

Figure 1 Ecological Designated Sites

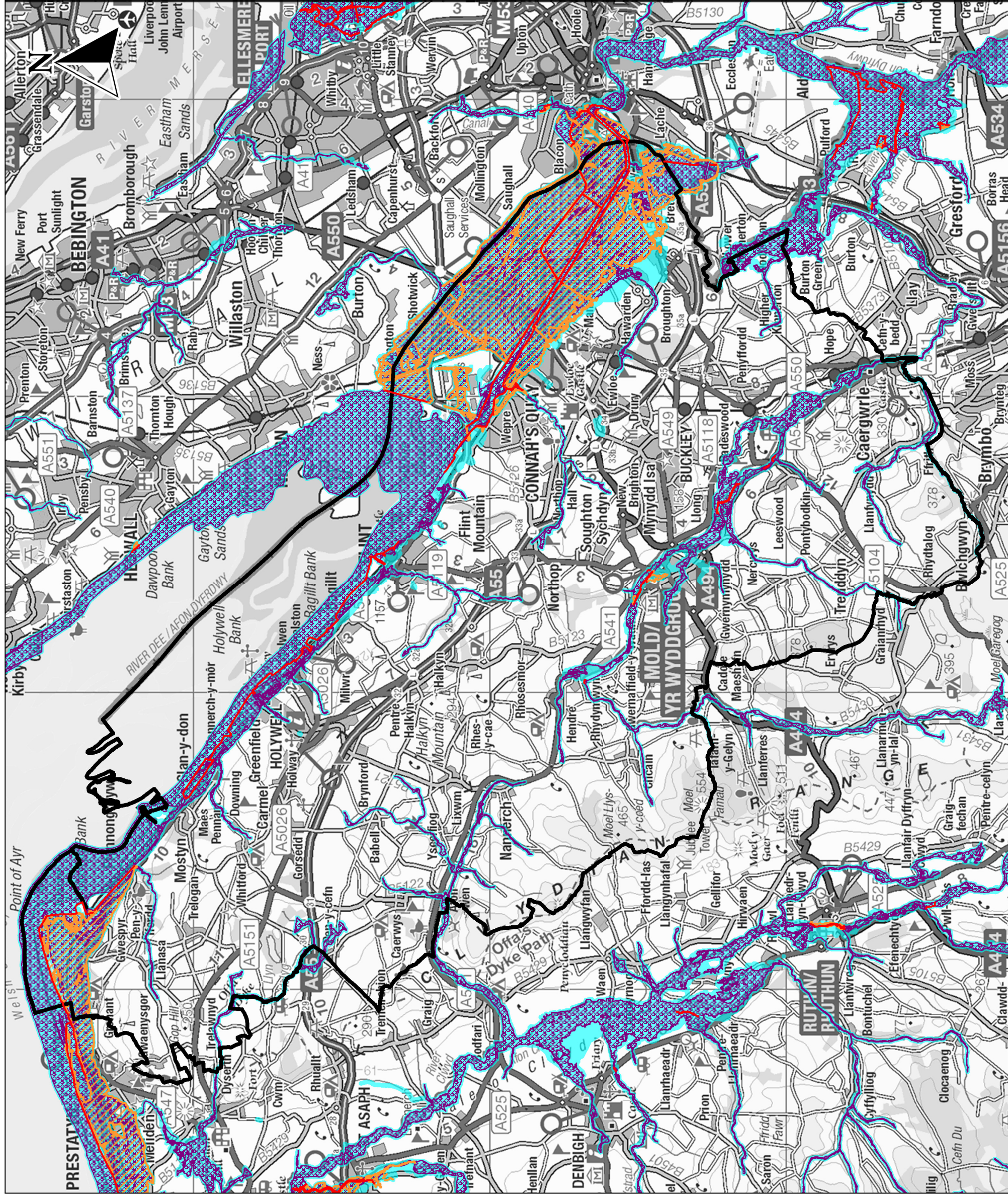


Key

	Flintshire County Boundary
	Listed Building
	Scheduled Monument
	Registered Historic Park and Garden
	Area of Outstanding Natural Beauty
	Country Park
	Historic Landscape



Figure 2 Heritage Assets and Landscape Features



Key



Figure 3 Flood Risk

Table D-1 – STR1: Strategic Growth and STR2: The Location of Developments

IIA Objective Topic	STR1: Strategic Growth and STR2: The Location of Developments			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+/- S/M/L I R M	STR1, the preferred strategic policy on growth for Flintshire is predominantly employment-led and identifies that this driver comes from wanting to secure Flintshire's future as an economic hub and secure its recovery. The policy aims to exceed the number of homes from the requirement which is a significant positive for the IIA housing objective. STR2 sets the scene in where such growth and subsequent housing should be located.	STR1 and STR2 have been assessed together, as they rely heavily upon each other to set the tone of growth and location of that growth within Flintshire.	+ S/M/L I R M
2. Education	+/- S/M/L I R M		Whilst crime is more than just a planning issue, it is possible to help avoid areas becoming a crime target through careful design and security measures.	+ S/M/L I R M
3. Health	+/- S/M/L I R M		STR6 (Services, Facilities and Infrastructure) and its supporting text would help to mitigate this uncertainty, to exemplify more clearly that investment in housing will be introduced at a rate that will ensure that relevant public services infrastructure availability can also be ensured.	+ S/M/L I R M
4. Housing	++ S/M/L D I R H	Commitments by STR2 for the increased availability of affordable housing may attract more young people to the area or result in more young people being able to stay in their communities. This will address the growing demographic imbalance, which is a concern for Flintshire's long term economic growth. All new housing development on greenfield sites has potential to create a new target for crime and there is an argument to say that areas that are well connected by road can be targeted for burglary. However, the option also includes a focus of growth in areas in need of regeneration such as in Holywell, Flint and Deeside which currently exhibit the highest levels of crime deprivation in the county. In particular, Shotton and Flint are both Main Service Centres that have been identified for growth under the policy, and currently rank in the bottom 10% of ISOAs for education and community safety deprivation, indicating a need for further service provisions in the area. Further, in the Deeside area, where four LSOAs fall into the bottom 10% for most deprived for community safety. Growth-led regeneration in these areas may help reduce crime levels.	In assessing STR1 and STR2 together, it is apparent that where STR1 gives an expectation of the quantum of development to be provided within Flintshire, STR2 shows where that development should be directed to and its relevant proportions to defined tiers of settlement as well as Principal Employment Areas. This level of detail will be useful as the detailed policies are developed for the next stages of the Local Plan. This should also be considered in light of STR3A and STR3B which gives clearer direction on what quantum of development Flintshire would find acceptable at its two strategic sites - Northern Gateway and Warren Hall.	++ S/M/L D I R H
5. Access	+ S/M/L I R M			+ S/M/L D R M
6. Social Cohesion	+/- S/M/L I R M			+ S/M/L I R M

IIA Objective Topic	STR1: Strategic Growth and STR2: The Location of Developments			
	Score	Commentary	Mitigation potential	Residual Score
		<p>such development will be small scale and within existing settlement boundaries. The table within the policy's supporting text seeks to identify those areas so as to ensure that development is proportionate to these areas, but does not consider how access to public services will be achieved. By listing out the settlements within these tiers, the policy could be ignoring other areas of the county that do have services and capacity which hence could be more sustainable. Some of these non-listed settlements may have affordable housing needs that will not be met, limited access to health care and educational facilities or would benefit from regeneration investment. Consequently, both positive and negative effects have been assigned to these objectives demonstrating only partial success in achieving the required benefits.</p> <p>Whilst the concept of development on transport links would, in theory, be positive for the access objective, it is not as beneficial as it might be. It relies on some mainly strategic transport links. For example, the A55(T) and A494 are intended to be strategic roads not necessarily to be relied on for local journeys and there are limitations with the capacity of the rails system at present. However, this is balanced against transport hubs being proposed in Main Service Centres, which should minimise the need/distance to travel and encourage means such as walking, cycling and public transport as a priority rather than by private car.</p> <p>The current wording of the policy does not account for how it will assist the introduction of new developments into pre-existing communities, therefore it is unclear how this policy will affect social cohesion. However, the policy has been written to acknowledge that large-scale development would only be acceptable in areas such as Main Service Centres where the infrastructure already exists to be able to support such a quantum, and with proportionate allowances made within smaller towns and villages (Local Service Centres/Sustainable Settlements and so forth). Social cohesion in smaller, rural settlements (Defined/Undefined Villages) may pose more of a negative impact if appropriate housing types are not carefully controlled and monitored though could also be positive in the sense of encouraging rural viability.</p>		
7. Economy	++ S/M/L D/I R H	STR1 identifies that Flintshire's economic growth needs to be considered in the context of the Mersey Dee Alliance and the North Wales Economic Ambition.	A strong consideration of rural service viability, infrastructure provision and appropriate rural	++ S/M/L D R H

IIA Objective Topic	STR1: Strategic Growth and STR2: The Location of Developments			
	Score	Commentary	Mitigation potential	Residual Score
8. Employment	++ S/M/L D R M	Given that the preferred policy is focussed on economic development, this scores very positively against the economy and employment IIA objectives. STR1 promotes a significant amount of new employment land to provide for 8-10,000 new jobs. This performs very positively against the economy and employment IIA objectives. STR2 also identifies how significant development will be in the Principal Employment Areas and the strategic allocations at The Northern Gateway and Warren Hall, both of which seek to located homes and jobs nearby.	employment needs should be considered in the development of the refined approach to rural development.	++ S/M/L D R M
9. Rural Life	+/- S/M/L I R M	<p>Commitments by STR2 for the increased availability of affordable housing may attract more young people to the area or result in more young people being able to stay in their communities. This will help to address the growing demographic imbalance, which is a concern for Flintshire's long term economic growth. Deeside Plan 2017 identifies the need to lower Flintshire's dependency ratio as of high importance in creating a prosperous sub-regional economy. Small affordable housing schemes in rural areas will help to ensure rural areas, such as the undefined villages listed in the policy, continue to grow sustainably, helping to give rise to rural diversification, stop economic stagnation and ensure a continued or even growing rural service viability. The small-scale investments proposed in rural areas meet Flintshire's Regeneration Strategy 2009-2020.</p> <p>The Main and Local Service Centres are located near to transport links which will be beneficial for commuting to employment opportunities in the county and beyond (e.g. Cheshire and Wrexham). This is both beneficial to economic growth and inward investment potential as well as encouraging proximity to jobs as many of the employment centres also sit along key transport corridors (notably those in Deeside, Mold, Broughton etc.). Furthermore, growth is proposed in areas of higher employment and income deprivation (mainly along the coast including main settlements such as Holywell and Flint) which can both help encourage economic investment in those areas. This is a significant positive for the local economy and will be met with the inclusion of the two strategic sites – Northern Gate and Warren Hall. Similarly, the provision for rural growth is inconsistent and does not give a real consideration to rural needs as a whole unless such villages lie on a transport corridor though overall, the aim of the policy will be increase rural viability.</p>	STR2's identification of the Principal Employment Areas should ensure that the detailed policies to be developed at the next stages of the Local Plan adequately consider both current and future economic growth.	+ S/M/L D R M

IIA Objective Topic	STR1: Strategic Growth and STR2: The Location of Developments			
	Score	Commentary	Mitigation potential	Residual Score
		It is important to acknowledge that growth needs to be sustainable and proportionate to the existing and proposed facilities available over the long term, particularly in rural areas. If such centres do not have sufficient services to support a larger population that would result in increased car travel. Those rural areas not near transport hubs, could suffer over the lifetime of the plan. Local businesses in these rural areas in particular may suffer and the disparity between rural and urban economic prosperity could enlarge. Overall, this is considered to be more negative than positive for the rural life objective despite some rural development being included as it is considered that this is likely to be inappropriate.		
10. Biodiversity	-- S/M/L I R L	STR1 focusses on providing a significant number of jobs, 223ha of employment land and 7,645 new homes. This policy does not highlight specifically where those sites would be located, but acknowledges the Deeside area as being particularly significant in terms of employment and economic development, as well as those areas that are currently well-connected. STR2 states that development will be focussed around existing developments, though it is likely that such sites will mainly be greenfield sites. As such, at this strategic level and based on the precautionary principle, this has been assessed as a significant negative. This approach is similar to that taken by the HRA and will be refined as the more detailed policies are chosen. The two policies promote a wide spread of development across the county in line with the strategic transport corridors, with STR2 providing for levels of sustainable development that would be acceptable in various defined settlement sizes This would result in a large amount of development along the coastline, in the Deeside area, in Mold/Buckley, in settlements along the Cheshire border and in some rural areas. Many of these broad areas coincide with or are adjacent to designated nature conservation areas, notably the European level designations within the Dee Estuary and in and around Buckley. Whilst it is not anticipated that development would directly affect these designations, at this level of detail and given that the majority of these sites would be greenfield, there is a risk that these designations may be indirectly affected and this uncertainty is also considered within the HRA. STR2 also includes for rural development, including potentially	Opportunities should be sought to ensure that new development incorporates good design to minimise adverse effects on landscape / townscape and the setting of heritage assets. Opportunities should also be sought to ensure all development encourage biodiversity enhancements. Therefore, the goals outlined in STR4 and STR13 are important for this policy. This implementation of policy STR4 will help to highlight that the new housing developments will be built in a sustainable manner, seeking to limit their impact upon water usage, flood risk, air quality and energy use. A strong consideration of the effects on heritage, water quality and flood risk should be made in the development of the refined approach to rural development and the policy wording of STR10 and STR14 is important in realising this vision. At this strategic level, there is a high degree of uncertainty in how effects on the ground will be felt, but it is	0
11. Land/ townscape	- S/M/L D I R L			0
12. Heritage	- S/M/L D I R L			0
13. Water	- S/M/L I R M			0
14. Flooding	- S/M/L I R M			0
15. Air	+/- S/M/L I R M			- L I R M
16. Energy	- S/M/L D R M			- S/M/L D R M

IIA Objective Topic	STR1: Strategic Growth and STR2: The Location of Developments			
	Score	Commentary	Mitigation potential	Residual Score
17. Natural resources	- S/M/L D IR M	<p>some in the AONB (Cadole) which needs to be considered in a sensitive manner to ensure no loss of landscape character and biodiversity. STR3A – The Northern Gateway lies adjacent to the River Dee SSSI and SAC, and this will need to be developed in such a way as to ensure the site isn't affected. STR3B – Warren Hall has no immediate European site designations but ensuring the site could promote biodiversity in its development. There is low certainty in this at this strategic level.</p> <p>The wide spread of development also has the greatest potential to result in cumulative effects on landscape character and potentially historic landscape. Although STR2 has developed a settlement hierarchy that reflects new housing development volumes in proportion to the existing settlement size and availability of services/facilities, it is not known at this stage how much development would occur in each settlement and this could have a negative impact on landscape character, particularly cumulatively. On a precautionary basis, a negative effect has been assigned to the landscape objective.</p> <p>Heritage assets are spread throughout the county's settlements so whilst there are known concentrations in areas such as Holywell and Flint, it is not possible at this stage to say how the policy could affect them, whether directly or indirectly through effects on setting. Note that effects on heritage assets can be best addressed at the local level where there is more site specificity. Nevertheless, this approach to does mean that a large number of settlements will receive some form of growth irrespective of how sensitive they are in terms of heritage assets or historic character. Consequently, a negative score has been assigned on a precautionary basis but with low certainty.</p> <p>A large amount of development in this policy is located in settlements by the coast or to rivers leading to an increased risk of water pollution. However, it should be feasible to minimise these risks and mitigate them through careful planning, design and environmental management at the site-specific level although this option does promote a larger amount of development in these areas than some other options. Similarly, the policy proposes a large amount of development in or close to areas of Flood Zone 2, notably in the Deeside area. It is recognised that large parts of Deeside are protected by flood defences although other areas are not afforded specific protection and may coincide with some of the proposed</p>	likely that they can be mitigated locally and by the detailed policies, as sites come forward.	- S/M/L D IR M

IIA Objective Topic	STR1: Strategic Growth and STR2: The Location of Developments			
	Score	Commentary	Mitigation potential	Residual Score
		<p>growth areas under this option. As such, on a precautionary basis, a negative effect is assigned to the flood risk objective.</p> <p>The county does not have a significant air quality problem. By promoting all new development by transport corridors this should theoretically maximise the use of bus and train services which should in turn limit the use of the private car. However, conversely by locating so much development by roads (primarily strategic roads) car use for many will in fact be preferable so could cancel out any benefits. The A55(T) and A494 are intended to be strategic roads not necessarily to be relied on for local journeys and there are limitations with the capacity of the rails system at present. The emphasis should be on minimising the need/distance to travel and encourage means such as walking, cycling and public transport as a priority rather than by private car. At this level both positive and negative effects have been assigned to air quality and greenhouse gas emissions to reflect this mixed effect.</p> <p>Similarly, the amount of growth proposed will lead to an increase in energy use, waste production and natural resource use. Nonetheless, by encouraging development near to existing including larger settlements, the policy means that some larger sites are likely to come forward which increases the viability of providing schemes such as district heating, combined heat and power and development with strong sustainable design credentials. Similarly, the focus of development near to the largest settlements increases the likelihood of using brownfield land, although it is recognised that overall the majority of growth will still need to be on greenfield sites.</p>		
18. Welsh Language	+/- M/L I IR L	<p>Given STR2, an increased housing availability in growing economic areas, such as Deeside, may attract individuals/families from outside of Flintshire and Wales which may dilute Welsh speakers in the county. Conversely it could ensure Welsh speakers stay in the area as more affordable housing, resulting in a reduction to the house price and average wage gap, means it is financially viable for them to stay in Flintshire.</p>	Unclear on mitigation at this stage.	? M/L I IR L

Table D-2 – STR3A – Northern Gateway

IIA Objective Topic	STR3A: Strategic Sites (Northern Gateway)			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+ S/M/L I R M	The policy identifies the Northern Gateway development as of strategic importance to the sustainable growth of Flintshire. Its primary focus on housing development, employment opportunities and development along sustainable transport routes, highlights its alignment with the housing and access IIA objectives and Planning Policy Wales. A proportion of this site will be built as affordable housing as required by existing planning condition	The outline planning permissions granted for part of the strategic site seeks to redevelop the former RAF Sealand to provide an employment-led mixed use development. The applications discuss how crime and disorder will be designed out as part of that masterplan but does not go into any level of detail as all matters are reserved. The policy should highlight its connection to STR6 (Services, Facilities and Infrastructure) to exemplify more clearly that localised housing growth will be at a sustainable rate with any public service infrastructure that may be needed. This is particularly important for health, community safety and the physical environment as the site will be located in Sealand 2 which is in the bottom 10% of LSOAs for deprivation in all of these areas.	+ S/M/L I R M
2. Education	+/- S/M/L I R M			+ S/M/L I R M
3. Health	+ S/M/L I R M			+ S/M/L I R M
4. Housing	+ S/M/L D I R H			++ S/M/L D I R H
5. Access	+ S/M/L D R M			+ S/M/L D R M
6. Social Cohesion	? S/M/L I R L	<p>All of the strategic site has been granted permission in outline and though final parameters have not been agreed as yet, the applications involve 725 new homes and up to 223,000m² employment space on the northern (Praxis site) and 600 dwellings and 130,700 m² employment space on the southern (Pochin) site. The site also involves infrastructure improvements relating to access and flood defence works. The redevelopment of previously developed land in an area of relatively high crime deprivation suggests this regeneration could help to reduce crime levels in the long-term. Providing on-site access to open space may also lead to healthier lifestyles.</p> <p>The current masterplan for the strategic site at the Northern Gateway proposes employment space to the north and bounded by existing employment space, with residential and mixed-use residential towards the south of the site, alongside existing homes. A riverside green space corridor and flood mitigation measures are located along the southern boundary of the site with the R.Deer.</p> <p>In the planning application's sustainability statement provisions have been made for cycle storage areas, both residential and commercial. Such elements could be explored further to encourage a strategic direction is given with regard to promoting healthy living, and by extension social cohesion.</p> <p>Overall the redevelopment of a brownfield site should be seen as positive for the surrounding area.</p>		? S/M/L I R M

IIA Objective Topic	STR3A: Strategic Sites (Northern Gateway)			
	Score	Commentary	Mitigation potential	Residual Score
		<p>IIA objectives for education should be seen to be partially met by the extension of Sealand CP school facilities,.</p> <p>At this stage, it is unclear how the site will affect social cohesion. Providing access to shops and other retail could improve the area for current residents and encourage cohesion though given that all matters have been reserved for the planning permission, this is of low certainty and unknown.</p>		
7. Economy	++ S/M/L D/I R H	<p>The Northern Gateway will promote economic development and increase employment opportunities. The Northern Gateway is particularly aligned with the Deeside Plan 2017, via the combination of 1,300 new homes and 100 hectares of employment land. Further, the site will reduce the necessity to travel long distances for employment opportunities; a target of the West Cheshire – Northern East Wales Sub Regional Spatial Strategy 2006. Up to 350,000m² employment space, accesses will be provided, and predominantly, this will be B8 uses (storage and distribution), and some B1 (office) and B2 (industry) will be created on part of the strategic site. This type of employment is likely to suit the existing level of skill in the county. The site will not impact on the rural life objective and at this strategic level, it is unclear how any indirect benefits may be felt on rural communities.</p>	<p>The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this one in order to provide greater clarity on mitigation.</p>	++ S/M/L D/I R H
8. Employment	++ S/M/L D R M			++ S/M/L D R M
9. Rural Life	0		<p>Policy wording could be improved by highlighting that due to the site creating new access routes, local existing communities will have increased access to services and facilities created as a result of the development</p> <p>The remainder of the plan has made provision for rural services and employment uses which should help balance this out.</p>	0
10. Biodiversity	+/- S/M/L I R L	<p>All of the Northern Gate site has been granted outline planning permission, though the specific detail of this, in the form of reserved matters, is not yet known. With the exception of the derelict site of RAF Sealand, the rest of the site is greenfield/agricultural land and the building on this could have a negative impact on landscape and biodiversity without appropriate mitigation. The site has a masterplan associated with it, which suggests a green infrastructure network but the details of this are currently not known,</p> <p>The renovation of the John Summers Grade II listed building will have a beneficial effect on heritage assets although its setting should also be considered.</p>	<p>The Northern Gateway development will be constructed on what is a mix of a disused airfield and agricultural land, reducing the amount of habitat available in the area if not appropriately mitigated.</p>	0
11. Land/ townscape	+/- S/M/L D I R L			0
12. Heritage	+ S/M/L D I R L		<p>Opportunities should be sought to ensure that new homes incorporate good design to minimise adverse effects on landscape / townscape and the setting of heritage assets.. Acknowledgement of the goals</p>	+ S/M/L D I R L
13. Water	- S/M/L I R M			+/- S/M/L I R M
14. Flooding	++ S/M/L D R M			++ S/M/L D R M

IIA Objective Topic	STR3A: Strategic Sites (Northern Gateway)			
	Score	Commentary	Mitigation potential	Residual Score
15. Air	- S/M/L I R M	<p>Further, in the absence of mitigation, the resulting increase in population could also lead to an increase in land take (though part of the site is brownfield, RAF Sealand) water use, energy use, waste production and natural resource use. However, a comprehensive mitigation programme has been developed as part of the masterplan to help minimise these impacts though this isn't part of the outline permission approval.</p> <p>The policy aims to introduce a sustainable drainage/flood management solution at the Northern Gateway site. This explicitly meets the IIA objectives for encouraging the inclusion of flood mitigation and management options and complies with the recommendations in Flintshire's Local Flood Risk Management Strategy 2013. This is particularly important as NRW identifies this site at risk of flooding so the inclusion of a flood management system into the design of the site is extremely beneficial in its long-term sustainability.</p>	outlined in STR4 and STR13 are important for this policy.	+/- S/M/L I R M
16. Energy	- S/M/L D R M		<p>The policy should be read in accordance with STR4 as it will help to highlight that the new infrastructure developments will be built in a sustainable manner, seeking to limit their impact upon water usage, flood risk, air quality and energy use. A question still remains with regard to the remaining element of the Northern Gateway site.</p> <p>The policy wording could be strengthened with regard to specific inclusion of sustainable design measures that would be acceptable on this site.</p>	+/- S/M/L D R M
17. Natural resources	- S/M/L D I R M			+/- S/M/L D I R M
18. Welsh Language	0	<p>Increased housing availability in areas offering employment opportunities could attract individuals/families from outside of Flintshire and Wales which may dilute Welsh speakers in the county. Conversely it could ensure Welsh speakers stay in the area as more affordable housing, resulting in a reduction to the house price and average wage gap, means it is financially viable for them to stay in Flintshire. However, with this site so close to the border with England, a neutral impact is more likely.</p>		0

Table D-3 – STR3B Warren Hall

IIA Objective Topic	STR3B: Strategic Sites (Warren Hall)			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	- S/M/L I R M	<p>The policy identifies the Warren Hall development as of strategic importance to the sustainable growth of Flintshire. Its primary focus on housing development, employment opportunities and development of sustainable transport route scores positively on the housing and access objectives, and is also aligned with the Planning Policy Wales (2016).</p> <p>The site is currently greenfield so new development could be a target for crime. There is one GP surgery in Broughton itself. Due to the level of uncertainty around detailed design aspirations for the site, the IIA objectives on crime and health have been scored negatively.</p> <p>The policy states that about 300 new homes, including affordable homes, will be provided here, together with sustainable transport links to nearby settlements such as Broughton being provided. This scores positively against the housing and access objectives.</p> <p>At this strategic stage, it is unclear how the Warren Hall development will affect social cohesion.</p>	<p>A mixed use development as proposed at Warren Hall will increase the local population of Broughton. As such, it's important that the policy should highlight its connection to STR6 (Services, Facilities and Infrastructure) to exemplify more clearly that localised housing growth will be at a sustainable rate with any public service infrastructure that may be needed such as traffic demands on the current junction or schools/healthcare facilities infrastructure..</p> <p>With appropriate design in place for the site, following STR4, crime is likely to be of little concern and mitigated to neutral.</p>	0
2. Education	? S/M/L I R M			+ S/M/L I R M
3. Health	- S/M/L I R M			0
4. Housing	++ S/M/L D R H			++ S/M/L D R H
5. Access	+ S/M/L D R M			+ S/M/L D R M
6. Social Cohesion	? S/M/L I R M			? S/M/L I R M
7. Economy	++ S/M/L D/I R H	<p>The site will promote economic development and increase employment opportunities via its commitment to developing 35ha of employment land, including a hotel and leisure centre. Placing homes and jobs close together could benefit other local businesses and promote investment in and around Broughton, a significant positive for the economy objective.</p> <p>Further, the Warren Hall development is located near to existing key employers within Flintshire, such as Airbus UK and could reduce the necessity to travel long distances for employment. .</p> <p>However, the site has only localised benefits to Broughton itself, although unlikely to positively impact upon rural areas, it is recognised that this is not the focus of this particular policy, and that the settlement hierarchy as discussed in STR2 will provide a more sustainable rural investment for Flintshire.</p>	<p>The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this one in order to provide greater clarity on mitigation such as STR5 and STR6 in order to ensure that</p>	++ S/M/L D/I R H
8. Employment	+ S/M/L D R M			+ S/M/L D R M
9. Rural Life	0			0

IIA Objective Topic	STR3B: Strategic Sites (Warren Hall)			
	Score	Commentary	Mitigation potential	Residual Score
10. Biodiversity	+/- S/M/L I R L	The settlement expansion proposed by this policy could have a negative influence upon the biodiversity and land/townscape in the area due to the development on greenfield land unless mitigated as part of the planning permission and through other policies in the Preferred Strategy. The current masterplan for the site considers green infrastructure throughout the development, and aims to retain Gravelhole Wood although its setting will be changed. The nearest designated site is to the west, around Buckley, therefore both positive and negative impacts could be seen on the biodiversity and land/townscape objectives.	Opportunities should be sought to ensure that new homes incorporate good design to minimise adverse effects on landscape / townscape and the setting of heritage assets. Opportunities should also be sought to consider if the development can provide anet gain in biodiversity. Therefore, acknowledgement of the goals outlined in STR4 and STR13 are important for this policy. The policy proposes a landscaping strategy and the detail of this will help to mitigate for the change from greenfield land.	0
11. Land/ townscape	+/-S/M/L D I R L			0
12. Heritage	+/- S/M/L D I R M			0
13. Water	- S/M/L I R M			+/- S/M/L I R M
14. Flooding	- S/M/L I R M			+ S/M/L D R M
15. Air	- S/M/L I R M	Although the Warren Hall site is not identified as a site that is a risk of flooding the increased urbanisation of the area could increase the amount of surface run off in the area if not appropriately mitigated. The site is located on a strategic transport route, and it is likely that this will lead to an increase in traffic, therefore negatively impacting on the air quality objective.	This policy should highlight that it should be read in accordance with STR14 as it will help to highlight that the new infrastructure developments will be built in a sustainable manner, seeking to limit their impact upon water usage, flood risk, air quality and energy use. A transport plan will be key to ensure that sustainable transport links are sustained into the future and that the impact on air quality is minimised and opportunities to explore on site energy generation should be explored further.	+/- S/M/L I R M
16. Energy	- S/M/L D R M			+/- S/M/L D R M
17. Natural resources	- S/M/L D I R M			Further, prior to mitigation the resulting development and associated increase in population (residential and employment) is also likely to lead to an increase in water use, energy use, waste production and natural resource use. However, a comprehensive mitigation programme would help to reduce this impact that promotes recycled material and innovative low carbon design and sustainable energy use should help.

IIA Objective Topic	STR3B: Strategic Sites (Warren Hall)			
	Score	Commentary	Mitigation potential	Residual Score
18. Welsh Language	0	Increased housing availability in areas offering employment opportunities will attract individuals/families from outside of Flintshire and Wales which may dilute Welsh speakers in the county. Conversely it could ensure Welsh speakers stay in the area as more affordable housing, resulting in a reduction to the house price and average wage gap, means it is financially viable for them to stay in Flintshire. The site is only 8km from Chester, therefore it could dilute the language and culture further.		0

Table D-4 – STR4 Principles of Sustainable Development and Design

IIA Objective Topic	STR4: Principles of Sustainable Development and Design			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+ S/M/L I R M	<p>The preferred strategic policy's approach to sustainable development and design predominately outlines the factors (architectural, environmental, social and spatial) that should be incorporated in all new development.</p> <p>The policy wording states that development will be safe and adaptable which is positive for the IIA objective on crime. Although the policy seeks to ensure capacity and availability of infrastructure, it is uncertain whether this includes health care or educational provision - a neutral impact on the education objective.</p> <p>The protection of open space and outdoor recreation areas promoted by this policy meet the well-being goals for a healthier Wales and a Wales of cohesive communities. This is due to ensuring communities have easy access to areas for physical activity and socialising, as championed by the Green Space Framework Strategy for Flintshire 2013.</p> <p>Housing and access IIA objectives are met by this policy as it outlines that considerations for housing density that must be taken into consideration to ensure a sustainable development and design process in the county.</p> <p>The policy will also increase/maintain areas of green space in which community social cohesion can thrive. The protection of parks and playing fields should be expected to improve the standard of living for children in the area and ensure they can develop in a healthy environment</p>	<p>The policy, in part viii, states that all new development needs to ensure there is capacity and availability of infrastructure to serve them. Infrastructure isn't limited to buildings and roads, but also services and amenities that a community needs such as shops and schools.</p>	+ S/M/L D R M
2. Education	0			0
3. Health	+ S/M/L I R H			+ S/M/L I R H
4. Housing	+ S/M/L D R M			+ S/M/L D R M
5. Access	+ S/M/L I R M			+ S/M/L I R M
6. Social Cohesion	+ S/M/L I R M			++ S/M/L I R M
7. Economy	0	<p>Although the policy briefly mentions positive economic contributions, which often result in increased employment, there is likely to be a neutral impact on the objectives relating to economy and employment overall.</p> <p>The provisions for sustainable development and good design principles extend to all areas in Flintshire, including those in rural locations. As such, a positive impact on rural development, though not necessarily its economy, is likely to be seen within the county.</p>	<p>Policy wording identifies how it will promote sustainability for heritage, environmental and resource usage. Detailed policies should consider if there are rural-specific elements to consider throughout the next stages of the Local Plan..</p>	0
8. Employment	0			0
9. Rural Life	+ S/M/L D R M			+ S/M/L D R M

IIA Objective Topic	STR4: Principles of Sustainable Development and Design			
	Score	Commentary	Mitigation potential	Residual Score
10. Biodiversity	++ S/M/L D R L	<p>The conservation of ecologically sensitive areas and green spaces as outlined in the policy will help to ensure that the IIA objectives for both biodiversity and landscape are met. The policy will implement the protection of habitats and wildlife corridors, provide opportunities for people to access wildlife and promote ecological sensitive designs. Areas that should be taken into consideration under this policy should be the Clwydian Range and Dee Valley AONB, Basingwerk Abbey and Bailey Hill, for example.</p> <p>The well-being goal for a global responsible Wales is met by the policy via its approach for implementing sustainable solution for water and natural resources usage, air emissions, flooding and energy efficiency.</p> <p>Further, IIA objectives for heritage are met by the policy as provisions to protect and enhance heritage assets such as Listed Buildings and Historic Landscapes are explicitly outlined. By encouraging the protection of such sites, Welsh culture can also be protected.</p>	<p>The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this one in order to provide greater clarity on mitigation. In particular, this policy should be read in conjunction with STR13 on Natural and Built Environment, Green Networks and Infrastructure.</p>	++ S/M/L D R L
11. Land/ townscape	++ S/M/L D R L			++ S/M/L D R L
12. Heritage	++S/M/L D R L			++S/M/L D R L
13. Water	++ S/M/L D R M			++ S/M/L D R M
14. Flooding	+ S/M/L D R M			+ S/M/L D R M
15. Air	+ S/M/L D R M			+ S/M/L D R M
16. Energy	++ S/M/L D R M			++ S/M/L D R M
17. Natural resources	+S/M/L D R M			+S/M/L D R M
18. Welsh Language	? S/M/L I R L	<p>The policy's aim to seek the protection of heritage sites in the area may increase the interest in Welsh heritage. This could benefit uptake of the Welsh language though this is uncertain and of low probability. Overall, protection of the Welsh language is not a key aim of this policy.</p>	<p>The policy could be extended to also cover Welsh language as a sustainability theme^[AW1].</p>	+ S/M/L I R M

Table D-5 – Transport and Accessibility

IIA Objective Topic	STR5: Transport and Accessibility			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+/- S/M/L I R M	<p>The dominating influence of this policy is on the upgrade and improvement of access throughout Flintshire, meeting the IIA access objective and is in line with West Cheshire – North East Wales Sub Region Spatial Strategy 2006. The Deeside Plan itself identifies that the key to ensuring the sustainable economic growth of the area will heavily rely on investment in transport infrastructure, such as improvements to the A494 and A55 road network, rail improvements and bus service improvements into the area.</p> <p>Both positive and negative impacts may occur with regard to the crime objective, as new interchanges can be targets for crime whereas improvements in existing infrastructure could reduce this prevalence.</p>	<p>New transport interchanges may be targets for crime, but other policies within the Local Plan, particularly those around ensuring good design and creating safe spaces, should ensure that with mitigation this will have a positive impact.</p> <p>This policy will provide an indirect benefit for investment in transport infrastructure as the focus for the plan is on town centres being developed, and ensuring that there could be an improved access to social spaces.</p>	+ S/M/L I R M
2. Education	+ S/M/L I R M			+ S/M/L I R M
3. Health	+ S/M/L D/I R M			++ S/M/L D/I R M
4. Housing	+ S/M/L I R M			+ S/M/L I R M
5. Access	++ S/M/L D R H			++ S/M/L D R H
6. Social Cohesion	+ S/M/L I R M	<p>The policy suggests alternative modes will be developed throughout the lifetime of the plan, but this does include the continued use of the car. Reliance on private cars and vans is a particular issue rising in Flintshire, this is predominately due to employment, with it estimated 24,000 people commuting into Flintshire and 20,000 from within Flintshire to areas such as Chester and Merseyside.</p> <p>Indirect benefits to health within Flintshire should be expected via the active travel options, increased walking and cycling route availability, promoted by this policy. Further, indirectly air quality may be improved under this policy via reducing the reliance on private car use, resulting in beneficial health impacts.</p> <p>Housing will indirectly experience positive impacts under this policy as the improved access will boost the viability of living in areas further from economic centres.</p> <p>IIA objective for social cohesion should be seen to be met under this policy as it highlights that improved access will be granted to the elderly community, leading to more social opportunities for the community.</p>		+ S/M/L I R M
7. Economy	++ S/M/L I R M			+ S/M/L I R M

IIA Objective Topic	STR5: Transport and Accessibility			
	Score	Commentary	Mitigation potential	Residual Score
8. Employment	++ S/M/L I R M	In line with Flintshire's Improvement Plan 2012-2017, the increased access to economic centres that this policy will apply will offer more employment opportunities and thus sustainable economic growth. It should also be seen to meet 'a prosperous Wales' well-being goal. The policy is very clear about the benefits that rural communities will experience as a result of its implementation, most notably their access to services which will help mitigate against social exclusion.	The Deeside Plan highlights that the aspirations of young people in the region do not match the range of employment available, however, improvements in access to employment centres in Flintshire will mitigate this. This indirect benefit to young professionals should be identified in policy wording.	++ S/M/L D R M
9. Rural Life	+ S/M/L D R M			++ S/M/L D R M
10. Biodiversity	+/- S/M/L D R L	New development has the potential to adversely affect the environment and biodiversity assets but other policies within the Local Plan would seek to ensure that this is mitigated as far as possible, and especially within protected areas. There could be benefits to creating and expanding on the county's existing green infrastructure networks though this is not clearly mentioned within the policy text. This could affect the landscape objective as well as the biodiversity objective.	Opportunities should be sought to ensure that transport infrastructure incorporates good design to minimise adverse effects on landscape / townscape and the setting of heritage assets. Networks other than road and rail, such as green, have been considered. At this strategic level, it's unclear how heritage will be impacted, especially in relation to understanding and recording below ground information. Therefore, the policies on protecting heritage assets (STR10 and STR13) should be read in conjunction with this one in order to minimise the risk.	+ S/M/L D R L
11. Land/ townscape	+/- S/M/L D R L			+/- S/M/L D R L
12. Heritage	? S/M/L I R L	New infrastructure (roads, carparks etc) could increase pollution run-off into watercourses, and the location of such new sites need to be carefully managed to ensure that neither river/sea flooding nor surface water flooding do not become issues, especially in the face of a changing climate. The reduction in emissions as a result of a more sustainable transport network could have a direct effect on air quality, energy efficiency and natural resources usage, meaning the policy is helping to the well-being goals; a healthier Wales and a globally responsible Wales. However, the policy also includes, and plans for, continued car and HGV use therefore both positive and negative impacts can be expected though it is positive that Flintshire does not have any declared AQMAs within the county. Similarly, this can be seen in energy and natural resource use in terms of land take, energy use from vehicles and construction of new sites or to increase capacity.	It is a target of the North Wales Joint Local Transport Plan 2015 that transport infrastructure will be built considering resilience in its design, especially regarding extreme weather. This consideration for resilient infrastructure will improve its outlook on sustainable flood management.	? S/M/L I R L
13. Water	- S/M/L D R M			+ S/M/L D R M
14. Flooding	- S/M/L D R M			+ S/M/L D R M
15. Air	+/- S/M/L D R M			++ S/M/L D R M
16. Energy	+/- S/M/L D R M			+ S/M/L D R M
17. Natural resources	+/- S/M/L D R M			+ S/M/L D R M

IIA Objective Topic	STR5: Transport and Accessibility			
	Score	Commentary	Mitigation potential	Residual Score
		The impacts upon the county heritage is currently unclear due to the potential for impacts on buried archaeological assets and the potential for new transport infrastructure to affect heritage assets indirectly as well as directly		
18. Welsh Language	? S/M/L I IR L	There could be an uncertain impact on this objective. Improving accessibility and transport within Flintshire and with its neighbours could potentially dilute the language further by increasing the cross-border travel but this is uncertain.	Unclear what mitigation could be proposed at this stage.	? S/M/L I IR L

Table D-6 – STR6 – Services, Facilities and Infrastructure

IIA Objective Topic	STR6: Services, Facilities and Infrastructure			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	? S/M/L I R L	The preferred strategic policy on services, facilities and infrastructure addresses multiple IIA objectives. Firstly, it advocates the construction of more affordable housing meeting the IIA objectives for housing given the increased availability of housing for independent living. The policy lacks a clear indication on how it will address improvements in health services. However, it does promote open space and green infrastructure which may benefit healthy lifestyles. The IIA objective for access will be achieved by the implementation of this policy and further meet requirements set out in the Wales Transport Strategy (2006). Investment in local community facilities and green spaces as proposed by the policy should result in building cohesion with a community as identified by the Community Cohesion Strategy for Wales. This is a priority for eastern Flintshire as 34.8% of the county's LSOAs fall in the bottom 10% for access to the physical environment.	The policy could more accurately meet the housing targets of the IIA for improving housing in deprived areas by including commitments that a proportion of the affordable housing will be constructed in those areas most at need, also meeting 'a more equal Wales' well-being goal. Clarity that the services stated in the policy include the health services and which will allow for it to meet the IIA objectives to improve health care access. The policy could be strengthened by changing iii) Education facilities to iii) Education and health facilities to address this.	? S/M/L I R L
2. Education	++ S/M/L D R H			++ S/M/L D R H
3. Health	+ S/M/L I R M			+ S/M/L D R M
4. Housing	+ S/M/L D R M			+ S/M/L D R H
5. Access	+ S/M/L D R H			+ S/M/L D R H
6. Social Cohesion	+ S/M/L I R M			+ S/M/L I R M
7. Economy	+ S/M/L I R M	The Deeside Plan outlines that a mix of services and infrastructure is required for sustainable economic growth. This policy will help provide this with a broad range of investments and land uses in the Deeside area and within Flintshire as a whole. Improved and new services, particularly around education, telecom/broadband and transport improvements, will help ensure that positive impacts will be felt towards Flintshire's economy and employment. The rural life IIA objective regarding the need for improved broadband connectivity will be accomplished under the implementation of this scheme due to its commitment to invest in telecommunications and broadband.	The requirement for investment in telecommunications and broadband services under this policy, currently doesn't ensure that it will occur in rural areas. The policy could therefore be improved to state that areas at most need should be at the forefront in gaining new and improved services, which includes rural areas.	+ S/M/L I R M
8. Employment	+ S/M/L I R M			+ S/M/L I R M
9. Rural Life	+ S/M/L D R M			+ S/M/L D R H

IIA Objective Topic	STR6: Services, Facilities and Infrastructure			
	Score	Commentary	Mitigation potential	Residual Score
10. Biodiversity	+/- S/M/L D R M	<p>The conservation of ecologically sensitive areas and green spaces as outlined in the policy will help to ensure that the IIA objectives for both biodiversity and landscape are met. The policy will implement the protection of habitats and wildlife corridors, provide opportunities for people to access wildlife and promote ecological sensitive designs. However, new infrastructure may also adversely affect the natural and built environment if developed inappropriately. Therefore, in the absence of mitigation, both positive and negative scores have been assigned.</p> <p>The policy is committed to investment into improved water management, including supply, drainage and treatment. The IIA objectives for water and flooding under this policy should therefore be seen to be met.</p> <p>There can be both positive and negative impacts under this policy with regard to air quality. Public transport improvements can improve local air quality but new highways could lead to an increase in number of cars instead. The policy should therefore be seen to achieve promoting a globally responsible Wales and a health Wales.</p> <p>There is a neutral impact on energy and natural resource objectives.</p>	<p>The potential for negative effects to some of these objectives may be mitigated through the provisions of other policies in the plan. The policy supporting text could be expanded to mention what the Council's position on topics such as 'ecological mitigation', 'water management', 'Welsh Language' could be at this level. Currently the focus is on ensuring CIL can meet these requirements and as CIL is a clear focus for how new development will ensure services and facilities can be maintained, it is recommended that this be mentioned in the policy text itself.</p>	+ S/M/L D R M
11. Land/ townscape	+/- S/M/L D R M			+ S/M/L D R M
12. Heritage	+/- S/M/L D R M			0
13. Water	+ S/M/L D R M			+ S/M/L D R M
14. Flooding	+ S/M/L D R M			+ S/M/L D R M
15. Air	+/- S/M/L I R M			+ S/M/L I R M
16. Energy	0			0
17. Natural resources	0			0
18. Welsh Language	+ S/M/L D R M	<p>The policy actively pursues the promotion of the Welsh language and highlights its importance but doesn't highlight how this will achieve this goal. It is however only briefly outlined in the introduction of the policy, without any information for how it will address its implementation.</p>	<p>The policy's effect on promoting the Welsh language could be improved by highlighting by what means the Council will ensure this is protected and encouraged and how CIL payments can help with this.</p>	++ S/M/L D R H

Table D-7 – STR7 – Economic Development, Enterprise and Employment

IIA Objective Topic	STR7: Economic Development, Enterprise and Employment			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+ S/M/L I R M	<p>Positive effects can be seen in relation to the crime objective – ensuring economic growth and jobs has potential to reduce crime.</p> <p>The policy wording highlights it will invest in educational facilities and vocational training, meeting the IIA objective requirements for education.</p> <p>An indirect link between the objective on health and employment exists (mental health can be improved by work) and therefore, the policy aiming to create 8-10,000 jobs in key sectors that are relevant to Flintshire's existing skills base can be seen as positive.</p> <p>The focus of this policy is on economic development and providing employment within Flintshire, and ensuring that key strategic sites enable these aspirations to be met. As a result, there is an indirect positive effect on the IIA housing objective with regard to this. The investment in housing will further address the diminishing availability of housing in Flintshire, allowing for new positions of employment to be filled more readily as the county's economy grows.</p> <p>The policy recognises that the Main Service Centres will be locations for employment is a positive impact on the access objective.</p> <p>The policy supports the provision of broadband and other connectivity means, and recognises that the rural economy needs to be diversified. This could have a positive impact on social cohesion goals by helping to reduce isolation.</p>	<p>The policy could be improved by including wording to highlight that the economic growth generated by the developments proposed by this policy will in the long term generate revenue that can be redistributed into public services.</p> <p>Provisions under this policy address the needs of the whole of Flintshire's demographic groups, this should be highlighted in the wording of the policy.</p>	+ L I R L
2. Education	+ S/M/L I R M			+ S/M/L I R M
3. Health	+ S/M/L I R L			+ L I R L
4. Housing	+ S/M/L I R M			+ S/M/L D I R M
5. Access	+ S/M/L D I R M			+ S/M/L D I R M
6. Social Cohesion	+ S/M/L I R M			+ S/M/L I R M
7. Economy	++ S/M/L D R M	<p>This policy identifies that Flintshire's economic growth needs to be considered in the context of the Mersey Dee Alliance and the North Wales Economic Ambition. Given that the preferred policy is focussed on economic development, this scores highly positively against the economy and employment IIA objectives.</p>	No mitigation proposed.	++ S/M/L D R M
8. Employment	++ S/M/L D R M			++ S/M/L D R M
9. Rural Life	++ S/M/L I R M			++ S/M/L I R M

IIA Objective Topic	STR7: Economic Development, Enterprise and Employment			
	Score	Commentary	Mitigation potential	Residual Score
		In terms of rural issues, this policy recognises that both Flintshire's urban and rural areas have roles to play in delivering the strategic growth policy, and seeks to promote rural diversification aligned with the Flintshire Regeneration Strategy 2009-2020 targets. Furthermore, the policy identifies the need for the widespread improvements to broadband across the county which will meet the IIA objectives for rural life.		
10. Biodiversity	- - S/M/L I R L	The policy focusses mainly upon enabling economic development and job creation. Whilst the two strategic sites are referenced, the policy does not aim to be location specific about where this new development may be beyond the role of the main centres. Locations can otherwise be inferred through the overall settlement strategy. However, given that for many environmental factors, it is important to know the locations of the proposals in order to make an assessment, a worst-case scenario has been assumed for this policy that implies a potential adverse effect on all the objectives in the absence of mitigation, albeit with low certainty. Other policies in the plan may be able to mitigate for this.	The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this one in order to provide greater clarity on mitigation, particularly in ensuring that the impacts relating to increased development on the environment are sensitively managed through the other strategic policies to achieve a mixed impact overall. Opportunities should be sought to ensure that new developments incorporate good design to minimise adverse effects on landscape / townscape and the setting of heritage assets. Opportunities should also be sought to ensure development results in a net gain in biodiversity. Therefore, acknowledgement of the goals outlined in STR4, STR13 and STR14 are important for this policy. A significant amount of new development across Flintshire is being promoted to ensure economic growth and employment. With mitigation regarding air quality, energy and natural resources, using STR4 and STR14, amongst others, this can mitigate for some of the negative	+/- S/M/L I R M
11. Land/ townscape	- S/M/L D I R L			+/- S/M/L D I R M
12. Heritage	- S/M/L D I R L			0
13. Water	- S/M/L I R L			+/- S/M/L I R M
14. Flooding	- S/M/L I R L			+/- S/M/L I R M
15. Air	- S/M/L I R L			+/- S/M/L I R L
16. Energy	- S/M/L D R L			+/- S/M/L D R L
17. Natural resources	- S/M/L D I R L			+/- S/M/L D I R L

IIA Objective Topic	STR7: Economic Development, Enterprise and Employment			
	Score	Commentary	Mitigation potential	Residual Score
			<p>though an adverse impact on new developments can still be expected.</p> <p>This policy promotes the Northern Gateway development which has a flood management scheme as a part of its design, this should be noted under this policy to identify that it meets the IIA objectives for flooding and will build on the work done on the Flintshire Local Flood Risk Management Strategy 2013</p>	
18. Welsh Language	? M/L I IR L	The policy aims to stimulate economic growth in Flintshire which may attract individuals/families from outside of Flintshire and Wales. This could dilute Welsh speakers in the county. Conversely it could also ensure Welsh speakers stay in the area as more affordable housing, resulting in a reduction to the house price and average wage gap, means it is financially viable for them to stay in Flintshire.	Unclear what the mitigation could be at this stage.	? M/L I IR L

Table D-8 – STR8 – Employment Land Provision

IIA Objective Topic	STR8: Employment Land Provision			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+/- S/M/L I R L	New employment development could be a target for crime, particularly if it is currently an undeveloped site (ie on greenfield) though the policy also discusses expanding existing employment areas and the reuse of buildings. This can lead to both positive and negative effects on the crime objective if regeneration occurs on degraded or underused sites. New employment opportunities can lead to an indirect positive impact on education if apprenticeships and training schemes are included. There is likely a positive impact on the access objective as the policy seeks to not only ensure that current employment land remains as employment land but also expand existing Principal Employment Areas and provide new sites. This should help to ensure that there are areas throughout Flintshire where people can access employment opportunities. There is no clear link between this policy and the objectives on health, housing or social cohesion.	This policy should highlight that it should be read in accordance with STR6 as it will help to highlight that the developments proposed will be built with proportional investment in services to ensure the growth is sustainable. Ensuring that good design principles are followed (contained within STR4) should ensure that developments can be designed to be safe and help mitigate against crime. Indirect benefits to education should be highlighted as a part of STR8 as the policy will promote highly skilled employment opportunities which training and capacity building will be needed in the local area to fill employment positions. Benefits to access will also be achieved also under this policy which should be highlighted. Developments such as outlined in STR3A and STR3B have improvements to the transport network integrated into the policy to accommodate the increase in employment opportunities they will provide. This should also be seen as an indirect benefit to STR8 and its direction on employment land development.	+ S/M/L I R L
2. Education	+ S/M/L I R M			+ S/M/L I R M
3. Health	0			0
4. Housing	0			0
5. Access	+ S/M/L D I R M			+ S/M/L D I R M
6. Social Cohesion	0			0

IIA Objective Topic	STR8: Employment Land Provision			
	Score	Commentary	Mitigation potential	Residual Score
7. Economy	++ S/M/L D R M	<p>This policy identifies that Flintshire's economic growth needs to be considered in the context of the Mersey Dee Alliance and the North Wales Economic Ambition. Given that the preferred policy is focussed on economic development, this scores highly positively against the economy and employment IIA objectives. STR1 states that the plan will make provision for its 223ha of employment, and given the projected employment growth for Flintshire this equates a minimum need to 2030 of 28.5ha overall, which shows a significant surplus of land in the county. A significant proportion of this will be met by STR3A and STR3B which considers appropriate use classes for the skills level of Flintshire (B1, B2 and B8 uses etc) and seeks to protect existing allocations and areas, such as Greenfield Business Park for similar.</p> <p>In terms of rural issues, this policy recognises that both Flintshire's urban and rural areas (by identifying that land and sites outside settlement boundaries/allocated sites can also deliver employment) have roles to play in delivering the strategic growth policy, and seeks to promote rural diversification aligned with the Flintshire Regeneration Strategy 2009-2020 targets.</p>	<p>It is unclear from the policy where Principal Employment Areas are located and the policy can be strengthened with the inclusion of this information, perhaps similar as to STR2 and its table.</p>	++ S/M/L D R M
8. Employment	++ S/M/L D R M			++ S/M/L D R M
9. Rural Life	+ S/M/L I R M			+ S/M/L I R M
10. Biodiversity	-- S/M/L I R L	<p>The policy focusses mainly upon enabling economic development by ensuring that existing employment sites remain and new sites are declared. The two strategic sites are referenced, as are existing allocations and the Principal Employment Areas. With the exception of greenfield land within STR3A and STR3B, it is uncertain what other proportion of greenfield land may be lost due to employment uses within existing sites. It is also noted that some brownfield sites may also be biodiverse. Given that for many environmental factors, a worst-case scenario has been assumed for this policy that implies a potential adverse effect on all the objectives in the absence of mitigation, albeit with low certainty. Other policies in the plan may be able to mitigate for this.</p>	<p>Opportunities should be sought to ensure that new infrastructure developments incorporate good design to minimise adverse effects on landscape / townscape and the setting of heritage assets. Opportunities should also be sought to ensure development results in a net gain in biodiversity. Therefore, acknowledgement of the goals outlined in STR4 and STR13 are important for this policy.</p> <p>The policy should make the connection to STR4: Sustainable Development and Design, to ensure that the 1.9 ha per year</p>	+/- S/M/L I R M
11. Land/ townscape	- S/M/L I R L			+/- S/M/L I R M
12. Heritage	0			0
13. Water	- S/M/L I R M			+/- S/M/L I R M
14. Flooding	- S/M/L I R M			+/- S/M/L I R M
15. Air	- S/M/L I R M			+/- S/M/L I R M

IIA Objective Topic	STR8: Employment Land Provision			
	Score	Commentary	Mitigation potential	Residual Score
16. Energy	- S/M/L D R M	That said, there is still potential for cumulative effects to occur as a result of the overall increase in development, notably for biodiversity, landscape, heritage. air quality, water use and natural resource use.	increase in employment land uptake needed will be constructed in a sustainable manner.	+/- S/M/L D R M
17. Natural resources	- S/M/L D IR M			+/- S/M/L D IR M
18. Welsh Language	? M/L I IR L	The policy provides land to help stimulate economic growth which may attract individuals/families from outside of Flintshire and Wales. This could dilute Welsh speakers in the county. Conversely it could also provide jobs for local people and ensure Welsh speakers stay in the area.	Unclear what the mitigation could be at this stage.	? M/L I IR L

Table D-9 – STR9 – Retail Centres and Development

IIA Objective Topic	STR9: Retail Centres and Development			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+/- S/M/L I R L	The policy states that town and district centres will be preferred location for retail and other associated uses (leisure/office/social etc). This has potential to increase opportunities for crime in these areas although a greater footfall and vibrancy can also increase levels of passive and active surveillance. There is no clear impact on the education objective.	The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this one in order to provide greater clarity on mitigation such as STR4 relating to good design. Such good design can include increasing opportunities for surveillance and as such provide safer retail and leisure spaces.	+S/M/L I R L
2. Education	0			0
3. Health	+ S/M/L I R L			+ S/M/L I R L
4. Housing	0	The IIA objective for health under this policy should be seen to be achieved due to its provisions in the supporting text to include health facility developments within the overall investments in town centres and also indirectly through the potential to increase walking and cycling as town centres are most accessible via sustainable means. IIA objectives for access will be achieved by the implementation of this policy and further meet requirements set out in the Wales Transport Strategy (2006). There are 3 LSOAs in the bottom 10% for access to services in Flintshire such as Trelawnyd and Caerwys, therefore, investments in access to retail/town centres is an important factor in addressing the problem. Caerwys centre development should be viewed as particularly important investment for this policy as Caerwys falls within one of the three LSOAs previously mentioned for access to services deprivation. Investment in local retail centres as proposed by the policy will provide a space for community interaction and social activity which will result in a positive outcome for social cohesion through the county. This can be seen clearly in the plans outlined for Broughton Retail Park that will aim to act as the 'heart' of the community. The policy should therefore be seen to be in compliance with the Community Cohesion Strategy for Wales and promote a Wales of cohesive communities.	This policy should be read in accordance with STR 6 as it will help to highlight that the infrastructure developments proposed will be built with proportional investment in services to ensure the growth is sustainable.	0
5. Access	+ S/M/L D I R M			+ S/M/L D I R M
6. Social Cohesion	++ S/M/L D R L			++ S/M/L D R L

IIA Objective Topic	STR9: Retail Centres and Development			
	Score	Commentary	Mitigation potential	Residual Score
7. Economy	+ S/M/L D R M	This policy identifies that Flintshire’s economic growth should also take into account the retail sector to give balance to its economic model, acknowledging that Broughton Retail Park performs a greater role than just as a retail park. Given that the preferred policy is focussed on economic development, this scores highly positively against the economy and employment IIA objectives. Some of the local centres identified by the policy for regeneration are located in rural areas (such as Caerwys village centre) which will improve the area’s access to services. This policy should therefore be seen to comply with the Flintshire Regeneration Strategy 2009-2020 and as a result have a positive impact upon rural life although this is considered to only be a minor aspect of this policy and will not affect all villages.	Further to the localised improvements in service availability improvements in transport infrastructure (STR5) will be developed in accordance with the investment in the retail centres to assure rural communities will have access to the same resources. This benefit could be highlighted in policy wording.	+ S/M/L D R M
8. Employment	+ S/M/L D R M			+ S/M/L D R M
9. Rural Life	+ S/M/L I R M			+ S/M/L D R M
10. Biodiversity	0	Given that development will be focused in existing town centres, there is a neutral impact on the biodiversity objective.	The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this one in order to provide greater clarity on mitigation, particularly in ensuring that the impacts relating to increased development on designated sites, land/townscape, heritage and water are sensitively managed through the other strategic policies. Opportunities should be sought to ensure that new infrastructure developments incorporate good design to minimise adverse effects on landscape / townscape and the setting of heritage assets. Opportunities should also be sought to ensure development results in a net gain in biodiversity. Therefore, acknowledgement of the goals outlined in STR13 are important for this policy. STR14 should be considered in	0
11. Land/ townscape	+ S/M/L D I R L	The regeneration of town centres and alike is expected to lead protection and enhancement of townscape character and quality in Flintshire. The policy will achieve this by offering a wider variety of facilities and services to a larger population than previously due to enhanced transportation connectivity thus helping Flintshire achieve a more equal Wales. It seeks to avoid new out of town development which could adversely affect more rural environments.		+ S/M/L D I R L
12. Heritage	+/- S/M/L D I R L	Parts of Flint, Mold and Shotton lie within areas at risk of flooding and development, particularly new infill development, needs to consider such locations and whether this needs to be mitigated but on a precautionary basis, this has been scored adversely.		+ S/M/L D I R L
13. Water	- S/M/L I R M			+/- S/M/L I R M
14. Flooding	- S/M/L I R M			+/- S/M/L I R M
15. Air	+/- S/M/L I R M	There could be both positive and negative impacts arising from focussing development in town centre locations on the heritage objective. Bringing buildings back into reuse could be seen as positive although the setting of listed buildings could be affected by intensification of development. Town centres are often the most accessible areas for public transport, walking or cycling so could help reduce traffic movements and emissions. However, if overall growth of retail opportunities is expected it is still		+/- S/M/L I R M
16. Energy	- S/M/L D R M			+/- S/M/L D R M
17. Natural resources	+/- S/M/L D I R M			+/- S/M/L D I R M

IIA Objective Topic	STR9: Retail Centres and Development			
	Score	Commentary	Mitigation potential	Residual Score
		<p>expected that some vehicle movements will also increase to meet demand hence both negative and positive impacts on the IIA air objective.</p> <p>Further, the land uptake to boost economic opportunities will also lead to an increase in water use, energy use, waste production and natural resource use. However, given these are primarily town centre uses it is not expected that new greenfield land would be used.</p>	<p>protecting areas at risk of flooding, particularly in light of a changing climate.</p> <p>The policy should make the connection to STR4: Sustainable Development and Design, to ensure that the 1.9 ha per year increase in employment land uptake needed will be constructed in a sustainable manner.</p>	
18. Welsh Language	+ M/L I R L	<p>There is a potential benefit for the Welsh language objective. A concentration of a variety of uses in town centre locations would contribute to the vibrancy and viability of such areas, which could in turn expose a larger percentage of Flintshire residents to other Welsh language speakers. This could in turn create opportunities to provide bilingual services.</p>		+ M/L I R L

Table D-10 – STR10 – Tourism, Culture and Leisure

IIA Objective Topic	STR10: Tourism, Culture, and Leisure			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	0	Community health may indirectly benefit under this policy as provisions to promote recreation centres and protect green spaces is in accordance with the Good Health Good Care in Flintshire (2011-2014) targets. As demonstrated under the Green Space Framework Strategy for Flintshire (2013) improved access to recreation centres and green spaces is expected to boost community cohesion. IIA objectives for access are achieved as the policy is to promotes accessibility to areas of cultural or recreational value. There is no clear link between the policy and the crime and housing objectives though a promotion of cultural activities and spaces could provide some minor educational benefits.	No mitigation proposed.	0
2. Education	+ S/M/L I R L			+ S/M/L I R L
3. Health	+ S/M/L I R H			++ S/M/L I R H
4. Housing	0			0
5. Access	+ S/M/L I R M			++ S/M/L I R M
6. Social Cohesion	+ S/M/L I R M			++ S/M/L I R M
7. Economy	++ S/M/L D R M	Flintshire recognise the importance of tourism to the local economy (£238.7 million in 2015) and this policy seeks to nurture this important sub economy. The provisions for ecological protection and investment in tourism in Flintshire under this policy therefore score positively against the IIA objectives for economy and employment, and acknowledges that tourism needs to hold a year-round appeal. This policy is important for the diversification of the rural economy in Flintshire and thus should be seen as significant in achieving the IIA objectives for rural life.	No mitigation proposed.	++ S/M/L D R M
8. Employment	+ S/M/L D R M			+ S/M/L D R M
9. Rural Life	++ S/M/L D R H			++ S/M/L D R H
10. Biodiversity	+ S/M/L D R M	The conservation of ecologically sensitive areas and AONBs, such as the Clywdian Range, as outlined in the policy will help to ensure that the IIA objectives for both biodiversity and landscape are met. The policy seeks conserve and enhance habitats and wildlife corridors, provide opportunities for people to access wildlife and promote environmentally sensitive	The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this one in order to provide greater clarity on mitigation, particularly in ensuring that the impacts	+ S/M/L D R M
11. Land/ townscape	+ S/M/L D R M			+ S/M/L D R M

IIA Objective Topic	STR10: Tourism, Culture, and Leisure			
	Score	Commentary	Mitigation potential	Residual Score
12. Heritage	+ S/M/L D R L	<p>infrastructure designs, which is in compliance with the Greenspace Framework Strategy for Flintshire (2013) and Flintshire's Coastal Park Green Infrastructure Action Plan 2011.</p> <p>Further, IIA objectives for heritage are met by the policy as provisions to protect and enhance heritage assets, such as the heritage rich towns of Mold and Holywell due to the influence on tourism in the county.</p> <p>However, it will be important to ensure these features are not adversely affected by excessive visitor pressure.</p> <p>There are likely to be indirect positive impacts on the water, flooding, air, energy and natural resource objectives as the policy is largely conservation focussed and aims to focus on minimising negative impacts associated with tourism as much as possible.</p>	<p>relating to increased development/access on designated sites, land/townscape, heritage and water are sensitively managed through the other strategic policies such as STR13.</p> <p>The policy should be read in conjunction with STR4: Sustainable Development and Design, to ensure that investments into tourism infrastructure are constructed in a sustainable manner.</p>	+ S/M/L D R M
13. Water	+ S/M/L I R M			+ S/M/L I R M
14. Flooding	+ S/M/L I R M			+ S/M/L I R M
15. Air	+ S/M/L I R M			+ S/M/L I R M
16. Energy	+ S/M/L I R M			+ S/M/L I R M
17. Natural resources	+ S/M/L I R M			+ S/M/L I R M
18. Welsh Language	? S/M/L I R M	<p>By ensuring the protection and enhancing of areas of Wales for its natural or historic value, this could indirectly benefit the promotion of Welsh language. A large proportion of these parts of Flintshire are in rural areas and by diversifying the rural economy, existing Welsh speakers could be encouraged to stay in the area.</p>	<p>The policy could therefore be improved by highlighting the importance of maintaining Welsh culture as well as its historic and environmental spaces.</p>	+ S/M/L I R M

Table D-11 – STR11 – Provision of Sustainable Housing Sites

IIA Objective Topic	STR11: Provision of Sustainable Housing Sites			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	+/- S/M/L I R M	All new housing development on greenfield sites has potential to create a new target for crime and there is an argument to say that areas that are well connected by road can be targeted for burglary. However, the option also includes a focus of growth in areas in need of regeneration such as in Holywell, Flint and Deeside which currently exhibit the highest levels of crime deprivation in the county. Growth-led regeneration can also lead to a reduction in crime. As a result, there are both positive and negative impacts likely to be seen as a result of this policy. The preferred strategic policy on provisions for sustainable housing sites in Flintshire is focused upon providing diverse and affordable housing throughout Flintshire to meet required needs. The policy also discusses a mix of housing units, specific housing needs (eg elderly, supported accommodation) and appropriate densities that can be supported by existing communities. The policy aims to exceed the number of homes in the requirement which is a significant positive on the IIA housing objective. The policy clearly states that new housing within Flintshire will be directed to sustainably located, economically viable and deliverable sites and that specific physical and social infrastructure may need to be improved or provided in order for this to happen. At this strategic level, the policy can therefore be seen to have a positive impact on the IIA objectives for education, health and access. An indirect positive benefit of this may likely be seen in the objective on social cohesion as the policy seeks to ensure that any new housing development is fully integrated within existing communities.	No mitigation is proposed.	+ S/M/L D R M
2. Education	+ S/M/L I R M			+ S/M/L D R M
3. Health	+ S/M/L I R H			++ S/M/L I R H
4. Housing	++ S/M/L D R M			+ S/M/L D R M
5. Access	+ S/M/L I R M			+ S/M/L I R M
6. Social Cohesion	+ S/M/L I R M			+ S/M/L I R M
7. Economy	+ S/M/L I R M	Under the current wording of the policy economic IIA objectives are met, as the housing proposed in intended to support sustainable economic growth. The policy will have indirect benefits on employment objectives, due to providing housing in areas outlined for economic growth.	No mitigation is proposed.	+ S/M/L I R M
8. Employment	+ S/M/L I R M			+ S/M/L I R M
9. Rural Life	+ S/M/L D R H			+ S/M/L D R H

IIA Objective Topic	STR11: Provision of Sustainable Housing Sites			
	Score	Commentary	Mitigation potential	Residual Score
		The IIA rural life objective is achieved under this plan, identifying that proportional investment is required in rural areas to ensure sustainable growth throughout the county. This helps in promoting a more equal Wales.		
10. Biodiversity	- S/M/L I R L	The policy, at this strategic level, does not identify specific locations for new housing development which brings uncertainty onto what impacts are likely to be across Flintshire in relation to its designated sites for biodiversity. The policy states that housing will be environmentally integrated and sustainably located. As a precautionary measure, a minor negative impact has therefore been assigned when you consider that a lot of development will be located along the coastline (where a number of designated sites are located).	Opportunities should be sought to ensure development results in a net gain in biodiversity, with more specific guidelines established to ensure that protected sites are not infringed on. STR13 should be referred to in conjunction with this policy.	0
11. Land/ townscape	- S/M/L D I R L			0
12. Heritage	- S/M/L D I R L			0
13. Water	- S/M/L I R M			0
14. Flooding	- S/M/L I R M			0
15. Air	+/- S/M/L I R M			0
16. Energy	- S/M/L D R M	Heritage assets are spread throughout the county's settlements so whilst there are known concentrations in areas such as Holywell and Flint, it is not possible at this stage to say how the policy could affect them, whether directly or indirectly through effects on setting. Consequently, a negative score has been assigned on a precautionary basis but with low certainty.	Opportunities should be sought to ensure that new infrastructure developments incorporate good design to minimise adverse effects on landscape / townscape and the setting of heritage assets. The policy should make the connection to STR4: Sustainable Development and Design, to ensure that investments in housing are constructed in a sustainable manner and to minimise impacts on natural resources, energy, air etc, though an inherent conflict remains in terms of new construction.	- S/M/L D R M
17. Natural resources	- S/M/L D I R M			- S/M/L D I R M
		A large amount of development is located in settlements by the coast or to rivers leading to an increased risk of water pollution. However, it should be feasible to minimise these risks and mitigate for them through careful planning, design and environmental management at the site-specific level although this option does promote a larger amount of development in these areas than some other options.		
		The county does not have a significant air quality problem. The emphasis should be on minimising the need/distance to travel and encourage means such as walking, cycling and public transport as a priority rather than by private car. At this level both positive and negative effects have been		

IIA Objective Topic	STR11: Provision of Sustainable Housing Sites			
	Score	Commentary	Mitigation potential	Residual Score
		<p>assigned to air quality and greenhouse gas emissions to reflect this mixed effect as the policy recognises that housing development should be sustainably located though an increase in development could have a negative impact on local air quality.</p> <p>The amount of growth will lead to an increase in energy use, waste production and natural resource use. Nonetheless, by encouraging development near to existing including larger settlements, this means that some larger sites are likely to come forward and which increases the viability of providing schemes such as district heating, combined heat and power and development with strong sustainable design credentials.</p>		
18. Welsh Language	? M/L I IR L	<p>The policy aims to stimulate economic growth in Flintshire which may attract individuals/families from outside of Flintshire and Wales. This could dilute Welsh speakers in the county. Conversely it could also ensure Welsh speakers stay in the area as more affordable housing, resulting in a reduction to the house price and average wage gap, means it is financially viable for them to stay in Flintshire.</p>	Unclear what the mitigation could include at this stage.	? M/L I IR L

Table D-12 – STR12 – Provision for Gypsies and Travellers

IIA Objective Topic	STR12: Provision for Gypsies and Travellers			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	? S/M/L I R M	<p>With the primary focus of the policy being to address provision for gypsies and travellers, the policy contributes strongly to the IIA objective on housing with reference to ‘all groups’ and needs.</p> <p>It is unclear from the wording of the policy how crime, education, health and access will be influenced via the implementation of this policy as this would be greatly influenced by the location of the provision.</p>	<p>The policy doesn’t currently address how sites will be determined and by what criteria locations for sites will be determined. Such criteria that identifies good access to amenities, schools and healthcare as mitigation could ensure a positive impact achieved for this policy and create social cohesion.</p> <p>A more explicit clarification is recommended that investment in these sites will also cover the communities access to education and health services. STR6 should therefore be mentioned as it will help to ensure sustainable access to facilities for these communities on top of improvements in accommodation availability.</p> <p>Further, the policy is closely aligned with the Flintshire Regeneration Strategy (2011); this should be added to key evidence.</p> <p>The policy could also identify showpeople as a distinct group separate to that of gypsies and travellers.</p>	+ S/M/L I R M
2. Education	? S/M/L I R M			+ S/M/L I R M
3. Health	? S/M/L I R M			+ S/M/L I R M
4. Housing	+ S/M/L D R M			+ S/M/L D R M
5. Access	? S/M/L I R M			+ S/M/L I R M
6. Social Cohesion	? S/M/L I R M			+ S/M/L I R M
7. Economy	0	There is no direct link given in the policy for how it will seek to meet the IIA objectives for economy, employment and rural life.		0
8. Employment	0			0
9. Rural Life	0			0

IIA Objective Topic	STR12: Provision for Gypsies and Travellers			
	Score	Commentary	Mitigation potential	Residual Score
10. Biodiversity	- S/M/L I R L	<p>Site expansion proposed under this policy although small in scale in comparison to other policies under the preferred strategy will still require increased land take. No criteria have currently been set for how these sites will be selected, as such the impact is currently unknown. As no locations have been identified, a precautionary negative impact has been assigned to IIA objectives on biodiversity, land/townscape and heritage.</p> <p>Under the current wording of the policy it is not clear how site development will affect IIA objectives for water, air, energy and natural resources. A precautionary negative impact has been assigned to the flooding objective as this is location-dependent and no strategic site criteria have been identified.</p>	<p>The policy doesn't currently address how sites will be determined and by what criteria locations for sites will be determined. Such criteria need to ensure that designated sites are protected, and how impacts on land/townscape, heritage and flooding are considered.</p>	0
11. Land/ townscape	- S/M/L I R L			0
12. Heritage	- S/M/L I R L			0
13. Water	? S/M/L I R M		<p>The policy should include a commitment that sites will be managed in accordance with STR13 to boost the site's positive impacts upon biodiversity and land/townscape.</p>	0
14. Flooding	- S/M/L I R L			0
15. Air	? S/M/L I R M		<p>The policy could make the connection to STR4 and STR14 to highlight that the sites will be built to incorporate sustainable designs, limiting its impacts on IIA objectives on water, air, energy, flooding and natural resources.</p>	0
16. Energy	? S/M/L I R M			0
17. Natural resources	? S/M/L I R M			0
18. Welsh Language	? S/M/L I R L	<p>It is currently uncertain what Welsh language proficiency exists within the various groups within the travelling community and as such an uncertain impact has been assigned.</p>		? S/M/L I R L

Table D-13 – STR13 – Natural and Built Environment, Green Networks and Infrastructure

IIA Objective Topic	STR13: Natural and Built Environment, Green Networks and Infrastructure			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	0	<p>STR13 is focused upon the protection and improvement of a wide range of natural and built assets that add to the biological, cultural and aesthetic value of the county. Further, the policy is set out to appropriately address a healthier Wales under the well-being goals.</p> <p>Improvements to meet Flintshire's health objective could be achieved with this policy protecting the county's green areas and green infrastructure connectivity. With only one third of the county meeting recommended physical activity levels, the increase in accessibility to parks will promote increased activity levels as outlined in 'A Green Space Framework Strategy for Flintshire 2013'.</p> <p>The policy will also offer/maintain areas of green space in which community social cohesion can thrive. The protection of parks and playing fields should be expected to improve the standard of living for children in the area and ensure they can develop in a healthy environment.</p>	<p>The other policies within the Flintshire's Preferred Strategy should be read in conjunction with this in order to provide greater clarity on mitigation.</p> <p>The policy could be improved by including a commitment for the equal distribution of green space investments across Flintshire's settlements proportional to its population, ensuring everyone has access to green space. This is a particularly sensitive issue in Flintshire as 32 LSOAs that are in the bottom 10% for physical environment deprivation, with most of the LSOAs in this category being located in close proximity to the county's economic hubs.</p>	0
2. Education	0			0
3. Health	+ L D/I R M			+ L D/I R M
4. Housing	0			0
5. Access	+ S/M/L D R L			+ S/M/L D R L
6. Social Cohesion	+ S/M/L I R L			+ S/M/L I R L
7. Economy	+ S/M/L I R M	<p>There is no direct link given in the policy for how it will seek to meet the IIA objectives for employment and economy but maintaining a high quality built and natural environment has potential to encourage inward investment into Flintshire, particularly with regard to tourism. There is an uncertain link between this policy and the rural life objective in that opportunities to protect the natural and historic environment of Flintshire may present opportunities to support rural life yet increased protection for such areas could also limit the continued economic success of rural areas.</p>	No mitigation is proposed.	+ S/M/L I R M
8. Employment	0			0
9. Rural Life	? S/M/L I R M			? S/M/L I R M
10. Biodiversity	++ S/M/L I R L		No mitigation is proposed.	++ S/M/L I R L

IIA Objective Topic	STR13: Natural and Built Environment, Green Networks and Infrastructure			
	Score	Commentary	Mitigation potential	Residual Score
11. Land/ townscape	++ S/M/L D I R L	This policy should be seen as highly influential in ensuring that biodiversity within Flintshire is protected. The proposed land use options (parks, open spaces, playing fields, woodlands, allotments and gardens) will provide habitats capable of sustaining increased biodiversity, including the potential for increases in local species protected by law. The conservation of ecologically sensitive areas and AONBs as outlined in the policy will help to ensure that the IIA objectives for both biodiversity and landscape are met. The policy will implement the protection of habitats and wildlife corridors, provide opportunities for people to access wildlife and promote ecological sensitive infrastructure designs, which is in compliance with the Greenspace Framework Strategy for Flintshire (2013) and Flintshire's Coastal Park Green Infrastructure Action Plan 2011.		++ S/M/L D I R L
12. Heritage	++ S/M/L D R L			++ S/M/L D I R L
13. Water	+ S/M/L I R M			+ S/M/L I R M
14. Flooding	++ S/M/L D R M			++ S/M/L I R M
15. Air	+ S/M/L I R M			+ S/M/L I R M
16. Energy	0			0
17. Natural resources	+S/M/L D R M	The protection of these green spaces and enhanced green infrastructure could also have indirect positive outcomes for water, flooding, air quality and natural resources objectives. The additional green space could increase infiltration compared to urbanised areas which are associated with increased flood risk.		+ S/M/L D R M
18. Welsh Language	+ S/M/L I R M	The policy's aim to seek the protection of heritage assets may assist people to connect with Welsh heritage, culture and language.	The policy could therefore be improved by making specific mention of Welsh cultural heritage.	+ S/M/L I R M

Table D-14 – STR14 – Climate Change and Environmental Protection

IIA Objective Topic	STR14: Climate Change and Environmental Protection			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	0	This policy has indirect positive benefits against the health IIA objective. Through its efforts to improve air quality and limit environmental contamination the policy will help to contribute towards a healthier Wales and meet health objectives set out in the IIA framework. There is no direct link between this policy and the other social IIA objectives.	No mitigation proposed.	0
2. Education	0			0
3. Health	+ S/M/L I R M			+ S/M/L I R M
4. Housing	0			0
5. Access	0			0
6. Social Cohesion	0			0
7. Economy	- S/M/L I R L	Measures to minimise the impact by businesses on climate change could be costly to them, which could be a negative impact on Flintshire's economic ambition.	No mitigation proposed.	- S/M/L I R L
8. Employment	0			0
9. Rural Life	0			0
10. Biodiversity	+ S/M/L D R M	Efforts by the policy to protect against greenfield site loss and limit environmental damage, via improving brownfield land usage, should be seen to have a positive effect for Flintshire's biodiversity IIA objective, though it is worth noting that brownfield sites can also be biodiverse spaces. Avoiding greenfield sites as well as mitigating for air and light pollution could have a positive impact on Flintshire's land/townscape. Its implementation is also influential in meeting the well-being goals of a resilient and a globally responsible Wales.	No mitigation proposed.	+ S/M/L D R M
11. Land/townscape	+ S/M/L D R M			+ S/M/L D R M
12. Heritage	0			0
13. Water	++ S/M/L D R M			++ S/M/L D R M
14. Flooding	++ S/M/L D R M			++ S/M/L D R M

IIA Objective Topic	STR14: Climate Change and Environmental Protection			
	Score	Commentary	Mitigation potential	Residual Score
15. Air	++ S/M/L D R M	There are currently no expected impacts of policy implementation on Flintshire's heritage.		++ S/M/L D R M
16. Energy	++ S/M/L D R M			++ S/M/L D R M
17. Natural resources	++ S/M/L D R M	The focus of this policy is to tackle the growing concerns surrounding climate change and once the policy is implemented it should have significant positive effects for water, flooding, air, energy and natural resources as measured by the IIA objectives. This will be achieved under the policy via flood management schemes, investment in sustainable water and energy supplies and energy efficient infrastructure designs.		++ S/M/L D R M
18. Welsh Language	0	There is no direct link between this objective and the policy.	No mitigation proposed.	0

Table D-15 – STR15 – Waste Management

IIA Objective Topic	STR15: Waste Management			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	0	There is no direct link between the policy and the IIA objectives on crime, education, health, housing, access and social cohesion.	No mitigation is proposed.	0
2. Education	0			0
3. Health	0			0
4. Housing	0			0
5. Access	0			0
6. Social Cohesion	0			0
7. Economy	+ S/M/L D R M	The development of new waste facilities has potential to benefit the county's economy.	No mitigation is proposed.	+ S/M/L D R M
8. Employment	0	There is no significant link given in the policy for how it will seek to meet the IIA objectives for employment and rural life.		0
9. Rural Life	0			0
10. Biodiversity	+ S/M/L I R M	The implementation of STR15 will indirectly meet the IIA biodiversity and land/townscape objectives as new waste sites will be located towards existing and allocated sites suitable for such activities, therefore minimising need for greenfield land and in areas of land/townscape interest.	References to Parc Adfer in the policy supporting text are predominately aimed towards its economic benefit and not its environmental benefits. Wording should be added into the policy to highlight how the construction of Parc Adfer will have a beneficial impact on energy recovery and also limit natural resources usage. Other waste sites should also be identified in the supporting text, rather than just relying on Parc Adfer even	+ S/M/L D R M
11. Land/ townscape	+ S/M/L I R M	There are currently no expected impacts of policy implementation on Flintshire's heritage or flooding objectives. The policy's provision to protect the environment with regard to existing waste management facilities may have benefits to the water (pollution) and air (pollution) objectives.		+ S/M/L D R M
12. Heritage	0			0
13. Water	+ S/M/L D R M			+ S/M/L D R M
14. Flooding	0			An uncertain impact could be seen on the air objective – providing newer facilities such as Parc Adfer could minimise lots of smaller operators but

IIA Objective Topic	STR15: Waste Management			
	Score	Commentary	Mitigation potential	Residual Score
15. Air	+ S/M/L D R M	<p>delivery of waste to one strategic site for north Wales could also mean increased road traffic in delivering waste to the site.</p> <p>Direct benefits to energy and natural resources usage will come as a result of the implementation of this policy, and will promote Flintshire's drive towards a globally responsible Wales. This is due to investment Parc Adfer which will not only generate energy via the incineration of non-recyclable materials but as an indirect effect also result in less natural resources being used in the county. These benefits are not, however, highlighted in the policy.</p>	though it is recognised as a strategic site for north Wales.	+ S/M/L D R M
16. Energy	+ S/M/L D R M			+ S/M/L D R M
17. Natural resources	+ S/M/L D R M			++ S/M/L I R M
18. Welsh Language	0	There is no direct link between this objective and the policy.		0

Table D-16 – STR16 – Strategic Planning for Minerals

IIA Objective Topic	STR16: Strategic Planning for Minerals			
	Score	Commentary	Mitigation potential	Residual Score
1. Crime	0	There is no direct link between the policy and the IIA objectives on crime, education, health, access and social cohesion. The policy seeks to not only protect minerals and their future exploitation within Flintshire, but also to provide buffer zones and ensure that the impact of such quarrying is minimised as far as possible on the surrounding community. As such a neutral impact is likely seen over the course of the Local Plan if detailed mitigation is provided, particularly in relation to health and reducing exposure to airborne dust and noise. An uncertain impact, at this strategic level, is likely on the housing objective given the uncertainties around viability of certain areas and whether housing need can be met without sterilising mineral resource.	The policy seeks to meet additional needs through the extension of an existing quarry in Flintshire. This includes need apportioned to Wrexham at the strategic level. This would have a far lesser impact on the community when compared to the development of a new quarry.	0
2. Education	0			0
3. Health	0			0
4. Housing	? S/M/L I R L			0
5. Access	0			0
6. Social Cohesion	0	It is feasible that some development allocations may conflict with minerals safeguarding areas. In these cases, this policy will require prior extraction. If this cannot be done it may make a development site unviable – this will need to be explored at the Deposit LDP stage. There is, therefore, a small uncertainty regarding the impacts on the housing ISA objective at this stage.	<p>The use of quarry buffer zones will ensure that adequate distances are maintained between quarrying site/s and residential development, thereby reducing conflict.</p> <p>Detailed mitigation and site-specific criteria should be identified as part of the next stages of the LDP which will reduce the uncertainties on housing need against sterilisation of resources.</p>	0
7. Economy	+ M/L I R M	The policy states that Flintshire's mineral resource will be protected from sterilisation by ensuring that new development is directed away from identified areas or ensure that these are extracted prior to other development where feasible. This should ensure a long-term positive impact to Flintshire's economy and continued employment for those in the industry. There will always be a balance between various interests on development land and this will need to be considered for all sites, irrespective of development type.	The policy supporting text could include that investment in mineral extraction will help support rural economy's in Flintshire, helping to achieve a more equal and prosperous Wales.	+ M/L I R M
8. Employment	+ M/L I R M			+ M/L I R M
9. Rural Life	+ S/M/L I R M			+ S/M/L D R M

IIA Objective Topic	STR16: Strategic Planning for Minerals			
	Score	Commentary	Mitigation potential	Residual Score
		<p>The employment benefits would be realised by supporting existing quarries (where appropriate to do so) and by maintaining the supply of minerals.</p> <p>The rural life IIA objective is also met indirectly via the continuing quarrying activity, due to quarrying locations being in predominately rural areas such as the currently active quarries Cefn Mawr and Maes Mynan. This is seen as a positive for the economy in rural areas.</p>		
10. Biodiversity	+/- S/M/L D R M	<p>Quarrying activity can have a positive impact on biodiversity through exposure of strata which provides habitat for species that would otherwise be absent as a result of ecological succession. It can also enhance geodiversity through exposure of different rock types however it also removes current land and its biodiversity value. Quarrying is a lengthy process and as such the restoration of such sites is only years down the line.</p> <p>Both positive and negative impacts can be seen with this policy across the range of environmental IIA objectives. The policy seeks to continue and support Flintshire's minerals extraction in order to meet demand from other development for minerals and aggregate. This point cuts across all non-mineral development but also ensures that the environmental impact of such development is reduced as much as possible.</p> <p>The increased attention given to site selection will ensure that impacts to both the ecological and built environment in Flintshire is minimised with respect to the biodiversity and landscape objectives. Extensions to existing sites are being proposed but the policy can ensure that impacts on sites of importance are minimised as much as possible.</p> <p>Mineral extraction can only occur where minerals are found in the ground and for some types of aggregate this means within floodplains. The impact on the flooding objective is therefore both positive and negative in the sense that minerals extraction, if not managed correctly, could increase the risk of flooding to property but could also improve it as pits could be used as flood storage areas. It's unlikely that mineral extraction would be allowed in the flood plain given the requirements of national policy. However, given</p>	<p>STR16 should acknowledge that heritage site impacts should also be assessed alongside environmental and settlement impacts when selecting new quarrying sites.</p> <p>Mineral extraction has environmental impacts associated with its practice. A commitment under the policy in line with STR4 should be included to promote sustainable design and development to be incorporated into current and future practice where possible that will help protect environmental assets. As a result, IIA objective for biodiversity, land/townscape, water and air should be seen to be met more positively.</p> <p>Restoration of existing sites as well as new sites and extensions can help ensure that quarrying does not have an adverse impact on biodiversity, or the landscape. The policy seeks to maximise the use of secondary and recycled aggregate. Policy STR15 seeks to minimise the production of waste, which would include at the development stage.</p>	+/- S/M/L D R M
11. Land/ townscape	+/- S/M/L D R M			+/- S/M/L D R M
12. Heritage	+/- S/M/L D R M			+/- S/M/L I R L
13. Water	+/- S/M/L D R M			+/- S/M/L D R M
14. Flooding	+/- S/M/L D R M			+/- S/M/L D R M
15. Air	+/- S/M/L D R M			+/- S/M/L D R M
16. Energy	+/- S/M/L D R M			+/- S/M/L D R M
17. Natural resources	+ S/M/L D R M			+/- S/M/L D R M

IIA Objective Topic	STR16: Strategic Planning for Minerals			
	Score	Commentary	Mitigation potential	Residual Score
		<p>the nature of quarries working below the water table is more likely to be an issue which could result in off-site flooding if not appropriately managed and planned for.</p> <p>Although the policy advocates the continued extraction of natural resources, it also seeks to address a more efficient use of these resources and lower the county's reliance on them. Overall, the policy should be seen to positively impact upon IIA air, energy and natural resource objectives and mark steps towards a globally responsible Wales.</p>	Although a separate policy can potentially reduce demand for raw materials by ensuring waste is thought about at an early stage of the development, minimising the production of waste in the first place and ensuring that materials are reused wherever possible.	
18. Welsh Language	0	There is no direct link between this objective and the policy.	No mitigation proposed.	0