

IPSWICH LOCAL PLAN REVIEW 2018 - 2036 INTERIM SUSTAINABILITY APPRAISAL REPORT

Strategic Environmental Assessment and
Sustainability Appraisal

JANUARY 2019

Incorporating

EC HARRIS
BUILT ASSET
CONSULTANCY

 Hyder

CONTACTS

JOSEPH EVANS
Environmental Consultant

Arcadis.
1st Floor
2 Glass Wharf
Bristol
BS2 0EL

Version control

Version	Date	Author	Draft & changes
01-10027318-F-SA of the Ipswich LPR_1	12/11/2018	JE	First Draft (assessment of LPR Changes only)
01-10027318-F-SA of the Ipswich LPR_2	14/12/2018	JE	Second Draft (all proposals in LPR documents assessed)
10027318-ARC-XX-XX-RP-TC-0001-02-LPR-SA	07/01/2019	JE	Third draft following comments from MH
10027318-ARC-XX-XX-RP-TC-0001-03-LPR-SA	14/01/2019	JE	Final draft following comments from MH

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Abbreviations

AA	Appropriate Assessment
AAP	Area Action Plan
AMR	Annual Monitoring Report
AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
BHS	Biological Heritage Site
CO ₂	Carbon Dioxide
cSAC	Candidate Special Area of Conservation
DEFRA	Department for Environment Food and Rural Affairs
DCLG	Department of Communities and Local Government
dpa	Dwellings per annum
DPD	Development Plan Document
dph	Dwellings per hectare
EA	Environment Agency
EEFM	East of England Forecasting Model
ELNA	Economic Land Need Assessment
ELSA	Economic Land Supply Assessment
EZ	Enterprise Zone
FEA	Functional Economic Area
FZ	Flood Zone
GP	General Practitioner
HRA	Habitats Regulations Assessment
IMD	Index of Multiple Deprivation
ISPA	Ipswich Strategic Planning Area
LDS	Local Development Scheme
LPA	Local Planning Authority
LPR	Local Plan Review
LWS	Local Wildlife Site
MHCLG	Ministry of Housing, Communities and Local Government
MW	Megawatts
NE	Natural England
NO _x	Nitrogen Oxides
NPPF	National Planning Policy Framework
NPPG	National Planning Policy Guidance
NTS	Non-Technical Summary
OAN	Objectively Assessed Need
pSPA	Potential Special Protection Area
RAMS	Recreational Disturbance Avoidance and Mitigation Strategy
RIGS	Regionally Important Geological/Geomorphological Site
RSPB	Royal Society for the Protection of Birds
SA	Sustainability Appraisal
SANGs	Suitable Alternative Natural Greenspaces
SAC	Special Area of Conservation
SCI	Sites of Community Importance
SCS	Sustainable Community Strategy
SEA	Strategic Environmental Assessment
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
SuDS	Sustainable (urban) Drainage System

Non-Technical Summary

Introduction and Background

- i. In February 2017, Ipswich Borough Council (the Council) adopted the Local Plan 2011 – 2031. The Council is now preparing a review of the Local Plan, which will replace the Adopted Plan and will look ahead to 2036. The process commenced with consultation on the Issues and Options between August and October 2017, which was accompanied by a Sustainability Appraisal (SA) Scoping Report. The Council has now prepared their Preferred Options version of the Local Plan Review (LPR). The LPR Preferred Options is presented in two documents:
 - Core Strategy and Policies DPD Review Preferred Options; and
 - Site Allocations and Policies (incorporating IP-One AAP) DPD Preferred Options.
- ii. The Core Strategy document presents the Council's preferred approach for a Vision and Objectives for the Borough by 2036. It also proposes policies related to the Council's strategy for the Borough. The Site Allocations and Policies document presents a range of site-based policies. This report is an Interim SA Report that provides an appraisal of the likely sustainability impacts of the LPR, to accompany the Preferred Options Consultation.

What is a Sustainability Appraisal?

- iii. A SA is a process for assessing the social, economic and environmental impacts of a plan and it aims to ensure that sustainable development is at the heart of the plan-making process. It is a legal requirement under planning law¹. The law states that the SA must also comply with requirements of the European Strategic Environmental Assessment (SEA) Directive. For the purpose of readability, this report, which is an Interim SA/SEA Report, is referred to as the Interim SA Report.
- iv. 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 feeds into the plan-making process to assist the Council with their decision-making process on how best to prepare the LPR, who will also be considering other evidence documents alongside the SA. This involves the ongoing appraisal of the LPR and making recommendations to help steer its direction to avoid potentially adverse consequences. This is particularly important when considering alternative strategy options. Consultation with statutory bodies (Natural England, Historic England and Environment Agency) and the public is also required at key stages.

Scope of the Appraisal

- v. The first part of a SA is the Scoping Report which:
 - Reviews other relevant programmes, plans and strategies that have an influence on sustainability;
 - Details the characteristics of the current environmental baseline in Ipswich;
 - Identifies key sustainability issues in the Borough; and
 - Sets out a Sustainability Appraisal Framework for assessing policy options and the overall effect of the plan (Task A4).
- vi. The Scoping Report was prepared in March 2017 by the Council. It was then consulted on between 18th August and 30th October 2017 with, as a minimum, the three statutory consultees of Natural England, the Environment Agency and Historic England. The Scoping

¹ SA is required by Section 19 of the Planning and Compulsory Purchase Act 2004 <http://www.legislation.gov.uk/ukpga/2004/5/section/19>. It also incorporates the requirements of European Directive 2001/42/EC

Report was finalised for February 2018 in light of responses received during the consultation window.

Policy context

- vii. A comprehensive review of other plans and programmes at a national, regional, county and local level was undertaken. The contents, objectives and relationships of these plans and programmes to the LPR was also reviewed to ensure these are taken into account during the SA Process. An example of a relevant plan/programme includes the National Planning Policy Framework. The full list of the identified plans and programmes, and their relevance to SA, is provided in Appendix A of this report as well as in the February 2018 SA Scoping Report.

Characteristics of Ipswich and key sustainability issues and opportunities

- viii. Among the important decisions considered during the Scoping Report was the baseline data, quantity of data and how should it be used in order to carry out SA. Data related to the existing economic, social and environmental characteristics of Ipswich was compiled within the Scoping Report, in order to provide the evidence base from which sustainability issues and opportunities could be identified. The key sustainability issues and opportunities that were subsequently identified related to the themes of: Population, Housing, Health and Wellbeing, Education, Water, Air, Material Assets, Climatic Change, Flooding, Coasts and Estuaries, Biodiversity, Cultural Heritage, Landscape, Economy, Transport & Connectivity and Digital Infrastructure. The baseline data and key sustainability issues are presented in the SA Scoping Report (February 2018).

The SA Framework

- ix. The SA Framework comprises 19 SA Objectives that have been derived from the policy context, baseline data and key sustainability issues and opportunities. Each proposal in the LPR is assessed for its likely impacts on each SA Objective, which is largely achieved by using the Guide Questions listed in the SA Framework for each SA Objective. The SA Framework, which is presented in its entirety in the main body of this report, as well as within the February 2018 Scoping Report, includes the following SA Objectives:
 1. To reduce poverty and social exclusion;
 2. To meet the housing requirements of the whole community;
 3. To improve the health of the population overall and reduce health inequalities;
 4. To improve the quality of where people live and work;
 5. To improve levels of education and skills in the population overall;
 6. To conserve and enhance water quality and resources;
 7. To maintain and where possible improve air quality;
 8. To conserve and enhance soil and mineral resources;
 9. To promote the sustainable management of waste;
 10. To reduce emissions of greenhouse gases from energy consumption;
 11. To reduce vulnerability to climatic events and flooding;
 12. To safeguard the integrity of the coast and estuaries;
 13. To conserve and enhance biodiversity and geodiversity;
 14. To conserve and where appropriate enhance areas and assets of historical and archaeological importance;
 15. To conserve and enhance the quality and local distinctiveness of landscapes and townscapes;
 16. To achieve sustainable levels of prosperity and growth throughout the plan area;
 17. To maintain and enhance the vitality and viability of town and retail centres;
 18. To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services; and
 19. To ensure that the digital infrastructure available meets the needs of current and future generations.

What has been assessed in the SA?

- x. Essentially, every proposal in the LPR has been assessed for its compatibility with, or likely impacts on, each SA Objective. The proposals in the LPR include the following:
 - A Vision for Ipswich;
 - Objectives, the achievement of which would deliver the vision;
 - Strategic options, including the amount of development that should take place in Ipswich (including residential development and economic development) as well as the spatial strategy that should be employed to deliver this amount of development;
 - Core Strategy Policies;
 - Development Management Policies; and
 - Site policies (including policies that determine the specific types and quantities of development that should take place at specific locations in the Borough).
- xi. In order to satisfy the requirements of the SEA Directive and the SEA Regulations, as well as to be legally compliant in light of relevant case law, the Council have had to consider reasonable alternatives to each of the proposals in the LPR. Each of the reasonable alternatives considered by the Council has also been considered for its likely sustainability impacts using the SA Framework.
- xii. When identifying and describing effects in SEA, the following effect characteristics are accounted for:
 - Whether the effects are positive or negative;
 - The magnitude and spatial extent of effects;
 - The probability, duration, frequency and duration of effectiveness;
 - The cumulative nature of effects;
 - The transboundary nature of effects; and
 - The value and vulnerability of that which is being affected.
- xiii. Based on the assessment results, this Interim SA Report also provides recommendations for either enhancing a proposal's positive impacts, or measures for avoiding or reducing likely adverse effects.

Appraisal results

Vision and Objectives

- xiv. The Core Strategy Review document presents a Vision for the Borough by 2036. It also sets out twelve Strategic Objectives in order to realise this Vision. The Vision and Strategic Objectives were assessed for their compatibility with the SA Framework. On the whole, the Council's Vision and Strategic Objectives proposed for the LPR were found to be highly compatible with the SA Framework and would be expected to help ensure the LPR delivers socially, economically and environmentally sustainable land-uses and development until 2036.

Strategic Options

Quantity of growth

- xv. The SA provides an appraisal of the likely sustainability impacts of different options for the amount of development that should take place in Ipswich, including:
 - Preferred Approach (Policy CS7 (homes) and Policy CS13 (jobs)): **8,622 homes and 15,580 jobs**;
 - Alternative Scenario A: 11,420 homes and 19,040 jobs;
 - Alternative Scenario B: 25,837 dwellings and 32,376 jobs; and
 - Alternative Scenario C: 30,143 dwellings and 32,376 jobs.
- xvi. The Preferred Approach, which proposes the provision of 8,622 homes and 15,580 jobs, is the scenario pursued in the Preferred Options LPR through Policies CS7 and CS13.

- xvii. The results of these assessments are presented in their entirety in the appendices of this Interim SA Report.
- xviii. Generally speaking, it was considered that the lower the quantity of development being considered, the more feasible it would be to avoid adverse impacts on biodiversity, landscape, climate change, waste, natural resources, cultural heritage, social exclusion and air quality. This is mostly because fewer sites would be required for development and there would, therefore, be less scope for direct harm to sensitive assets as well as more limited cumulative effects on the ecological network or the local landscape character, for example. Avoiding adverse impacts on natural environment objectives, and achieving positive impacts, may therefore be more feasible under the Preferred Approach or Alternative Scenario B than it would be under Alternative Scenarios B and C.
- xix. However, Alternative Scenarios B and C offer some advantages. Alternative Scenarios B and C would facilitate an economic transformation in the Borough. They would be likely to help significantly tackle rates of deprivation and contribute towards a more prosperous and sustainable local economy as well as make a greater contribution towards vital and vibrant town centres. Alternative Scenario C would go further than Alternative Scenario B and deliver significant infrastructure projects that could lead to a range of economic and social benefits. However, this additional economic growth under Alternative Scenarios B and C would be highly likely to result in major adverse natural environmental impacts.

Spatial distributions

- xx. In order to deliver development through the LPR, the Council is considering a range of different spatial distribution options. Given the tightly drawn boundary around the Borough, the range of spatial options available to the Council is limited. Six different options for delivering the desired growth have been identified:
- **Spatial Option 1:** Higher-density urban regeneration;
 - **Spatial Option 2:** Increased development beyond the Borough boundary;
 - **Spatial Option 3:** Changing the use of existing land in the Borough to housing;
- Spatial Options 4, 5 and 6 were options that applied to the administrative area of Suffolk Coastal District Council. These are as follows:
- **Spatial Option 4:** Continuation of existing approach;
 - **Spatial Option 5:** Focus on Ipswich and A14 transport corridor; and
 - **Spatial Option 6:** A12 transport corridor and dispersed rural focus.
- xxi. The results of these assessments are presented in their entirety in the appendices of this report.
- xxii. Higher density urban regeneration poses a risk of leading to a large portion of new residents being exposed to major sources of noise, air and light pollution such as that associated with road traffic. Higher density developments can also reduce the quality of the living environment. At the same time, it is an effective means of making an efficient use of land, situating residents in proximity to jobs, services, facilities and public transport modes as well as avoiding adverse impacts on sensitive natural landscapes or important wildlife areas.
- xxiii. Options of situating a large portion of development outside the Borough or within the corridor of main roads has the opposite effect. It would situate residents in proximity to the countryside and within lower density developments, away from areas of high pollution. However, adverse impacts on the natural environment are more difficult to avoid in these locations whilst residents would have to travel longer distances to access jobs, services and facilities and would be likely to have a relatively high reliance on personal car usage for doing so given the more limited access to public transport modes here.

Core Strategy Policies

- xxiv. The Core Strategy LPR document presents a range of Core Strategy Policies related to: the Spatial Approach, Live, Work, Learn, Play and Infrastructure. Each of these has been assessed in detail in the appendices of this report. The results of the assessments of core strategy policies identified largely positive impacts for all SA Objectives. Where opportunities were identified for enhancing positive or adverse effects, or avoiding or minimising adverse effects, recommendations were made.

Development Management Policies

- xxv. The Core Strategy LPR Document also presents policies in order to enable the Council to manage development in the Borough and ensure it is sustainable. Where development proposals do not accord with these policies, they are less likely to be granted permission by the Council. Each of these has been assessed in detail in the appendices of this report. The results of the assessments of development management policies identified largely positive impacts for all SA Objectives. Where opportunities were identified for enhancing positive or adverse effects, or avoiding or minimising adverse effects, recommendations for achieving this were made.

Site Policies

- xxvi. The Site Allocations and Policies LPR Document presents 15 site policies, within which various sites in the Borough are allocated for certain types and quantities of development. Each site allocation has been assessed in detail for its likely sustainability performance, the full results of which are presented in their entirety in the appendices of this report. Overall, a highly diverse mix of likely impacts were identified. Where opportunities were identified for enhancing positive or adverse effects, or avoiding or minimising adverse effects, recommendations for achieving this were made.

Cumulative effects

Cumulative effects of all proposals in the LPR

- xxvii. The policies and site allocations proposed in the LPR were assessed on an individual basis, in detail, in the appendices of this report. However, these sites and policies would not be adopted in isolation. The effects of policies and sites would combine to result in cumulative effects across the Borough. An assessment of the likely cumulative effects of sites and policies in combination was also carried out in this report.
- xxviii. Major positive cumulative effects of all proposals in the LPR in combination with each other were identified for SA Objectives: to reduce poverty and social exclusion; to meet the housing requirements of the whole community; to improve levels of education and skills in the population overall; to achieve sustainable levels of prosperity and growth throughout the plan area; to encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services; and to ensure that the digital infrastructure available meets the needs of current and future generations.
- xxix. Minor adverse cumulative effects of all proposals in the LPR in combination with each other were identified for SA Objectives: to improve the quality of where people live and work; to conserve and enhance water quality and resources; to maintain and where possible improve air quality; to conserve and enhance soil and mineral resources; to promote the sustainable management of waste; to reduce emissions of greenhouse gases from energy consumption; to reduce vulnerability to climatic events and flooding; and to conserve and enhance the quality and local distinctiveness of landscapes and townscape.

Cumulative effects of proposals in the LPR with development in neighbouring authorities

- xxx. Following the assessment of cumulative effects caused by all LPR proposals in combination, an assessment of the cumulative effects of proposals in the LPR in combination with development planned in neighbouring authorities was also carried out.

- xxxi. Major positive cumulative effects of all proposals in the LPR in combination with development plans in neighbouring authorities were identified for SA Objectives: to meet the housing requirements of the whole community; to achieve sustainable levels of prosperity and growth throughout the plan area; and to maintain and enhance the vitality and viability of town and retail centres.
- xxxii. Minor adverse cumulative effects of all proposals in the LPR in combination with development plans in neighbouring authorities were identified for SA Objectives: to improve the quality of where people live and work; to improve levels of education and skills in the population overall; to conserve and enhance water quality and resources; to maintain and where possible improve air quality; to conserve and enhance soil and mineral resources; to promote the sustainable management of waste; to reduce emissions of greenhouse gases from energy consumption; to reduce vulnerability to climatic events and flooding; to conserve and enhance biodiversity and geodiversity; and to conserve and enhance the quality and local distinctiveness of landscapes and townscape.
- xxxiii. It is important to note that likely effects are complex, and effects summarised as ‘positive’ or ‘adverse’ often involve a mixture of both positive and adverse effects. SA adopts a precautionary approach that dictates that, where there is uncertainty of an overall effect, adverse effects should be highlighted.

Mitigation

- xxxiv. The assessment of proposals in the Ipswich LPR has identified the likely significant effects, including those that are positive and adverse. Where adverse effects were identified, recommendations have been made to help avoid or minimise these effects. Where positive effects have been identified, recommendations have been made to enhance these effects where feasible. Recommendations are included within the policy and sites assessments in the appendices of this report.
- xxxv. The most frequent measure recommended throughout the assessments has been the development of a coherent, high-quality and connected GI network extending throughout and beyond the Borough. This network could include all forms of GI such as parks, hedgerow and mature trees. The GI network should be designed and managed in a way that:
- Helps to ensure it is of high biodiversity value, provides refuge for protected habitats and priority species and enables the free movement of wildlife through and beyond the Borough;
 - Makes a positive contribution to the local townscape and landscape character, including by being visually attractive, in-keeping with the existing setting, helping to screen development and protect views and by linking development sites with the natural landscape;
 - Contributes towards visually attractive regenerations of derelict brownfield sites;
 - Helps to protect and enhance the structure and fertility of soils;
 - Contributes to the sustainable management of surface water runoff, thereby helping to manage flood risk and protect water quality;
 - Helps to filter out air pollutants and contribute towards cleaner air, as well as to act as a carbon capture and storage service;
 - Provides residents with access to greenspaces and a diverse range of natural habitats, as well as safe and attractive pedestrian and cycle routes to services, facilities and amenities, in order to benefit their mental well-being, to encourage physical activity and to facilitate sustainable and efficient forms of movement;
 - Facilitates community engagement and outdoor socialisation to reduce the risk of social exclusion; and
 - Provides good links in to central and shopping areas to increase the footfall here and support local businesses.

Monitoring

- xxxvi. This Interim SA Report also proposes a Draft Monitoring Framework. The Draft Monitoring Framework is proposed to measure the performance of the LPR, including the Core Strategy DPD and the Site Allocations DPD, against defined indicators. Indicators in the Monitoring Framework have been developed based on:
- The objectives, targets and indicators that were developed for the SA 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.
- xxxvii. Feedback from the monitoring process helps to provide more relevant information that can be used to pinpoint specific performance issues and significant effects, and ultimately lead to more informed decision-making. In addition to monitoring the sustainability impacts of the LPR, it will also be necessary to monitor changes to the environmental, social and economic context and baseline conditions.
- xxxviii. Monitoring in accordance with the SEA Directive can be incorporated into existing monitoring arrangements. The Council prepare an annual Authority Monitoring Report (AMR) to review progress on local development document preparation and monitor the outputs and implementation of current policies. It is expected that the proposed Draft Monitoring Framework in this chapter would be incorporated into the AMR.
- xxxix. The Draft Monitoring Framework proposes monitoring recommendations for predicted significant effects based on the assessment of the Local Plan Review. The framework will be developed further in the next stage of the SA Report, following feedback from consultees, and further refinement of the assessment of significant effects to be monitored.

1. Introduction

1.1 Purpose of this Report

- 1.1.1 This report has been prepared by Arcadis Consulting (UK) Ltd. ('Arcadis') on behalf of Ipswich Borough Council ('the Council') as part of the combined Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the emerging Local Plan Review (LPR). The LPR will replace the Local Plan, which was Adopted by the Council in February 2017.
- 1.1.2 The SA process for the LPR is set out in **Table 1-1**. It commenced in August 2017 with the preparation of the Scoping Report by the Council, which set out the scope and level of detail of the SA. The Scoping Report was updated in February 2018 based on responses to the ten-week consultation period. A summary of the Scoping stage is set out in **Chapter 2**. This document constitutes an Interim SA Report in order to accompany a public consultation on the LPR. It is currently anticipated that this Interim SA Report will be updated and amended to be an SA Report accompanying the Regulation 19 consultation on the LPR in the summer of 2019.

1.2 What is a Sustainability Appraisal (SA)?

- 1.2.1 SA is the process of identifying the social, economic and environmental impacts of a plan to ensure that sustainable development is at the heart of the plan-making process. Section 19 of the Planning and Compulsory Purchase Act 2004 requires a local planning authority (LPA) to carry out a SA of each proposal in the plan. The Town and Country Planning (Local Planning) (England) Regulations 2012 dictate that after adopting a plan the LPA must make the SA Report available. The LPA in this case is Ipswich Borough Council.
- 1.2.2 SA is a mechanism for assessing the extent to which an emerging plan promotes sustainable development by applying a holistic assessment of the likely effects of the plan on social, economic and environmental objectives. SEA is a legal requirement set out in The Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations), which transposes Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive) into UK law. As per Annex 1 of the SEA Directive, SEA is a systematic process designed 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.'
- 1.2.3 National Planning Policy Guidance (NPPG) states that SA should incorporate the requirements of the SEA Regulations, which implement the requirements of the SEA Directive. The SA of the Ipswich LPR therefore incorporates the requirements of SEA. This combined process will herein be described as 'SA'. The process will culminate in an SA Report that also satisfies the requirements of an SEA Environmental Report. The SA has been applied as an iterative process during the preparation of the LPR to help contribute to the objective of achieving sustainable development, as per **Figure 1-1**. Stages that have been or are due to be completed are presented in **Table 1-1**.

1.3 Habitats Regulations Assessment

- 1.3.1 Habitats Regulations Assessment (HRA) is a requirement of Council Directive 92/43/EEC (the Habitats Directive 1992) and Council Directive 2009/147/EC (the Birds Directive), which are transposed into UK law through the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations). The Council have commissioned Footprint Ecology to prepare an HRA for the LPR to identify risks caused by the LPR for European sites including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).
- 1.3.2 In advance of the Preferred Options consultation, a high-level screening of the LPR was prepared. The HRA will be likely to proceed to the Appropriate Assessment stage, after the Preferred Options consultation in early 2019. Any assessment findings from the Appropriate Assessment will be incorporated into the Draft SA Report accompanying the Regulation 19 version of the LPR in Summer 2019.

- 1.3.3 It is expected that the Council will continue to commit to the Recreational Disturbance Avoidance and Mitigation Strategy (RAMS), which is a means of facilitating residential development whilst at the same time adequately protecting Suffolk's coastal, estuarine and heathland European wildlife sites from harm. New residential growth brings new residents to the local area, and if those residents use European sites for recreational uses (as evidence suggests they would), there would be an increase in pressure on the European sites and the species and habitats found here, potentially resulting in a likely significant effect. The RAMS provides a suite of measures that work together to enable confidence that additional recreation pressure can be appropriately managed, and consists of:
- Dedicated staff including site rangers;
 - Improved education and interpretation;
 - Changes to visitor infrastructure such as footpaths and car parking; and
 - Where appropriate, the provision of Suitable Alternative Natural Greenspaces (SANGs).
- 1.3.4 These measures are mainly funded by contributions from developers, where their developments would have an effect on the European sites. Given the cumulative nature of the impact of residential development on European sites and the need to implement and monitor measures that are strategic in nature, it would not be viable to only pursue avoidance or mitigation measures based on individual sites on a piecemeal basis. The success of the avoidance and mitigation measures is reliant upon an overarching strategy that has regard for all residential development in combination. The RAMS is such an approach. Any other approach would not be considered to be viable or a 'reasonable alternative' in terms of the SEA Directive requirements, as it would not give certainty in successful delivery.

1.4 The Ipswich Local Plan Review

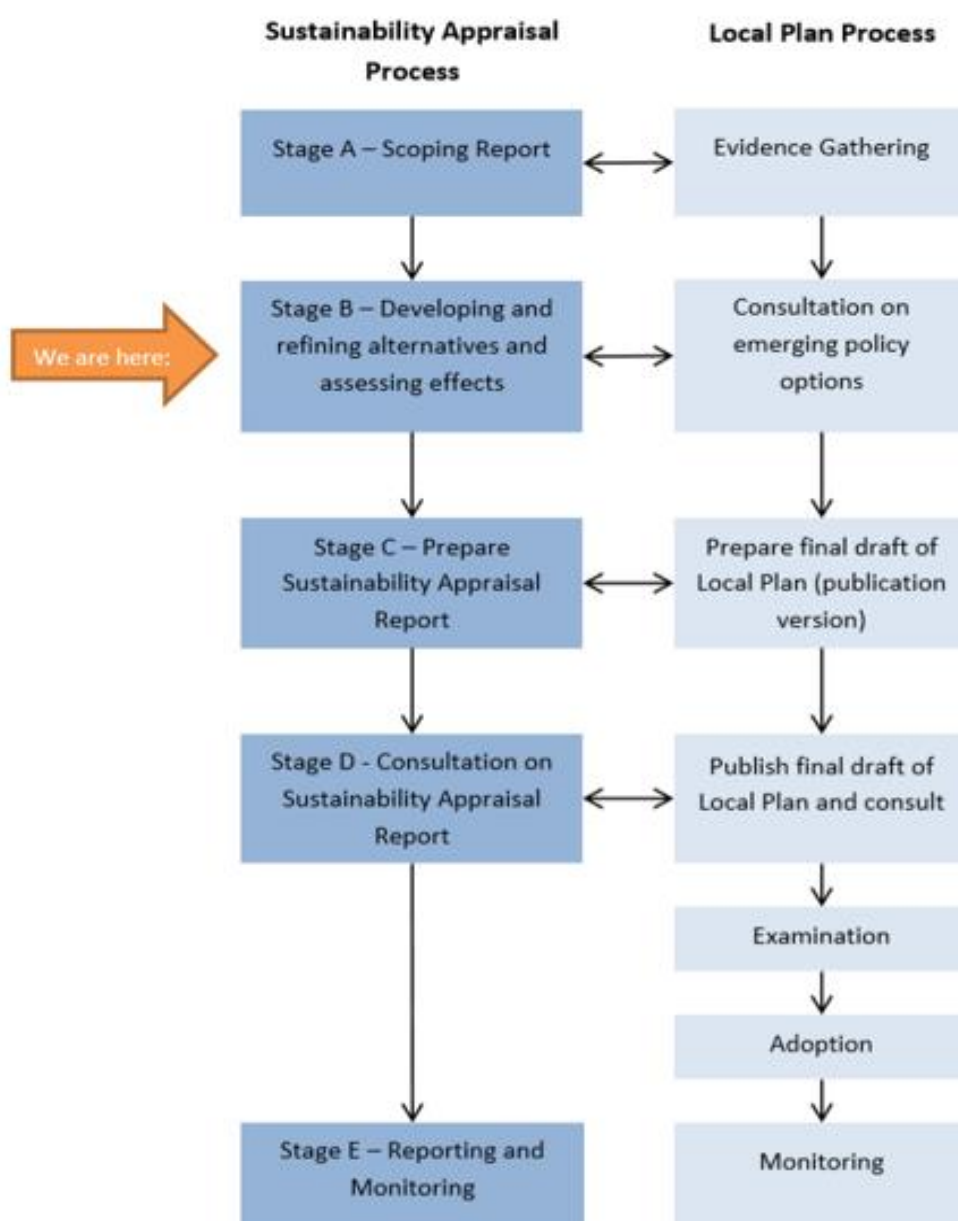
- 1.4.1 In February 2017, the Council adopted the Local Plan 2011 – 2031. The Council is now preparing a review of the Local Plan, which will replace the Adopted Plan and will look ahead to 2036. The Council is aligning its Local Plan with the Local Plans for Babergh District, Mid-Suffolk District and Suffolk Coastal District Councils – the other authorities which form the Ipswich Housing Market Area and Ipswich Functional Economic Area (FEA). The emerging Ipswich Local Plan will help to shape the future growth and development of the district and the economic, social and environmental relationships between the Ipswich Strategic Planning Area (ISPA) authorities. There are cross boundary issues that are relevant to the development and future of the Borough, the urban area of Ipswich and surrounding areas. This has long been recognised with the identification of the 'Ipswich Policy Area'. The area has now been extended and renamed as the ISPA. The geography of the ISPA now equates with the Ipswich Housing Market Area and the Ipswich Functional Economic Area, which both extend over the whole of Ipswich Borough, and Babergh, Mid Suffolk and Suffolk Coastal Districts. An ISPA Board consisting of councillors and officers from Babergh, Mid Suffolk and Suffolk Coastal District Councils, Ipswich Borough Council and Suffolk County Council is a key vehicle for cross boundary planning in the ISPA.
- 1.4.2 The 2018-2036 Local Plan will replace the existing 2017 Ipswich Local Plan Documents, which cover the plan period 2011-2031, namely:
- Core Strategy and Policies Development Plan Document (DPD) Review (Adopted February 2017); and
 - Site Allocations and Policies (incorporating IP-One Area Action Plan) DPD (Adopted February 2017).
- 1.4.3 The process commenced with consultation on the Issues and Options between August and October 2017, which was accompanied by the SA Scoping Report. This report is an Interim SA Report to accompany the Preferred Options Consultation (see **Figure 1.1**).

1.5 Structure of the Local Plan Review

- 1.5.1 The LPR Preferred Options is presented in two documents:
- Core Strategy and Policies DPD Review Preferred Options; and

- Site Allocations and Policies (incorporating IP-One AAP) Preferred Options.
- 1.5.2 This Interim SA Report assesses the policies and sites within both documents against the SA Framework, including cumulative and synergistic effects, with mitigation and monitoring recommendations also made. The Core Strategy document presents the Council's Vision and Objectives for the Borough to 2036. It also proposes policies related to the Council's strategy for the Borough. The Vision and Objectives have been tested for their compatibility with the SA Framework. The policies have been assessed for their likely effects against each SA Objective.
- 1.5.3 The Site Allocations and Policies document presents a range of site-based policies. Each of these has been assessed for their likely effects against each SA Objective, to provide an assessment against the SA Framework as a whole, including those policies that allocate certain sites in the Borough for development. Assessments are intended to be high-level, with recommendations made to improve the potential for the sites and policies to contribute to more sustainable development or mitigate any potential negative effects. The SA is an iterative process. As such, the policies will be re-assessed following refinement as a result of the consultation process and earlier SA work. The process in its entirety will be consulted upon alongside the publication version of the LPR.
- 1.5.4 The iterative processes of SA and Plan-making is illustrated in **Figure 1-1**. The stages of the SA and the LPR making processes are presented in **Table 1-1**.

Figure 1-1: Iterative SA and Plan-making processes²



² Source of figure: SA Scoping report prepared by the Council

Table 1-1: Progress of SA and LPR processes

LPR Stage	Sustainability Appraisal & Strategic Environmental Assessment Stage and requirements		Completed?
Evidence Gathering and Issues and Options	A. Setting the context and objectives, establishing the baseline and deciding on the scope	Identify related plans/programmes	Scoping Report consulted on between 18 th August – 30 th October 2017
		Identify environmental protection objectives	
		Baseline data and likely future trends	
		Identify sustainability issues and opportunities	
		Develop objectives, indicators and targets (SA Framework)	
		Prepare SA Scoping Report	
		Consult on the SA Scoping Report	
Draft LPR Regulation 18	B. Developing, refining and appraising alternatives and assessing effects C. Preparing SA Report	Review scoping consultation responses and preparation of Final Scoping Report to inform next stage.	Completed February 2018
		Assess LPR Vision and Objectives against the SA Framework	
		Assess growth and spatial options and their reasonable alternatives against the SA Framework	
		Assess preferred policy options, including allocations and their reasonable alternatives	
		Propose mitigation measures	
		Propose monitoring programme	
		Prepare Non-Technical Summary (NTS)	
Publication LPR Regulation 19	C. Update and amend SA Report in light of changes to LPR D. Consultation on SA Report	Prepare SA Report	Completed by Arcadis in 2018/19 in this Interim SA Report Stage
		Consult on the SA Report	
		Identify changes to LPR since previous stage significant changes	
		Determine relevance of changes to the LPR for the SA/SEA, including assessments of new or revised policies with cumulative and synergistic effects assessment updated accordingly	
		Update all other elements to the SA Report in light of the changes to the LPR	
Examination	C & D. Update and amend report in light of any Modifications to the LPR	Ensure the SA Report is compliant with the SEA Directive in terms of requirements for an Environmental Report	Stage to be completed
		Consult on the SA Report	
		Determine the relevance of any Modifications made to the LPR as an outcome of Examination.	
Submission Examination and Adoption	E. Adoption Statement	Assess Main Modifications for their likely impacts on SA Framework	Stage to be completed
		Prepare addendum to the SA Report addressing the Main Mods and any new significant impacts on the Framework	

1.6 Contents of in this document

1.6.1 This document constitutes an Interim SA Report to accompany the LPR Preferred Options consultation. It therefore provides an appraisal of the options presented in the LPR. In addition to this, this Interim SA Report provides an appraisal of the options considered within the Issues and Options LPR document. Overall, this document provides an appraisal of:

- **Four growth scenarios** (i.e. different quantities of housing and jobs targets) (**Issues and Options**) assessed in **Appendix C**:
 1. Preferred approach: *8,622 homes and 15,580 jobs - A trend-based scenario based on the forecast employment needs of the Borough and the 2018 update to the OAN;*
 2. Alternative Scenario A: *11,420 homes and 19,040 jobs - A trend-based scenario based on the forecast employment needs of the Borough and the 2017 calculated OAN;*
 3. Alternative Scenario B: *25,837 dwellings and 32,376 jobs - An infrastructure-led scenario based on a high increase in growth in Ipswich, with a 40% increase in the 2017-homes target relative to OAN;* and
 4. Alternative Scenario C: *30,143 dwellings and 32,376 jobs - An infrastructure-led scenario based on a high increase in growth in Ipswich, with a 40% increase in the 2017-homes target relative to OAN.*
- **Six spatial options** (i.e. different strategies for the distribution of growth) (**Issues and Options**) assessed in **Appendix C**:
 - Spatial Option 1: Higher-density urban regeneration;
 - Spatial Option 2: Increased development beyond the Borough boundary;
 - Spatial Option 3: Changing the use of existing land in the Borough to housing;

Options from Suffolk Coastal District Council

- Spatial Option 4: Continuation of existing approach;
 - Spatial Option 5: Focus on Ipswich and A14 transport corridor; and
 - Spatial Option 6: A12 transport corridor and dispersed rural focus.
- Strategic Spatial Approach (Core Strategy LPR) Policies assessed in Appendix D:
 - ISPA1 Growth in the Ipswich Strategic Planning Area Policy
 - ISPA2 Strategic Infrastructure Priorities Policy
 - ISPA3 Cross-boundary Mitigation of Effects on Protected Habitats and Species Policy
 - ISPA4 Cross-boundary Working to Deliver Sites
 - Policy CS1: Sustainable Development - Climate Change
 - Policy CS2: The Location and Nature of Development
 - Policy CS3: IP-One Area Action Plan
 - Policy CS4: Protecting our Assets
 - Policy CS5: Improving Accessibility
 - Live (Core Strategy LPR) Policies assessed in Appendix D:
 - Policy CS7: The Amount of New Housing Required
 - Policy CS8: Housing Type and Tenure
 - Policy CS10: Ipswich Garden Suburb
 - Policy CS11: Gypsy and Traveller Accommodation
 - Policy CS12: Affordable Housing
 - Work (Core Strategy LPR) Policies assessed in Appendix D:
 - Policy CS13: Planning for Jobs Growth
 - Policy CS14: Retail Development and Main Town Centre Uses
 - Learn (Core Strategy LPR) Policies assessed in Appendix D:
 - Policy CS15: Education Provision
 - Play (Core Strategy LPR) Policies assessed in Appendix D:
 - Policy CS16: Green Infrastructure, Sport and Recreation
 - Infrastructure (Core Strategy LPR) Policies assessed in Appendix D:
 - Policy CS17: Delivering Infrastructure
 - Policy CS18: Strategic Flood Defence

- Policy CS19: Provision of Health Services
- Policy CS20: Key Transport Proposals
- Development Management (Core Strategy LPR) Policies assessed in Appendix D:
 - Policy DM1: Sustainable Construction;
 - Policy DM2: Decentralised Renewable or Low Carbon Energy;
 - Policy DM3: Air Quality;
 - Policy DM4: Development and Flood Risk;
 - Policy DM5: Protection of Open Spaces, Sports and Recreation;
 - Policy DM6: Provision of New Open Spaces, Sports and Recreation Facilities;
 - Policy DM7: Provision of Private Outdoor Amenity Space in New and Existing Developments;
 - Policy DM8: The Natural Environment;
 - Policy DM9: Protection of Trees and Hedgerows;
 - Policy DM10: Green Corridors;
 - Policy DM11: Countryside;
 - Policy DM12: Design and Character;
 - Policy DM13: Built Heritage and Conservation
 - Policy DM14: Archaeology
 - Policy DM15: Tall Buildings
 - Policy DM16: Extensions to Dwellings and Provision of Ancillary Buildings
 - Policy DM17: Small Scale Infill and Backland Residential Developments
 - Policy DM18: Protection of Amenity;
 - Policy DM19: The Subdivision of Family Dwellings;
 - Policy DM20: Transport and Access in New Developments;
 - Policy DM21: Car and Cycle Parking in New Development;
 - Policy DM22: The Density of Residential Development;
 - Policy DM23: Protection and Provision of Community Facilities;
 - Policy DM24: Shopfront Design;
 - Policy DM25: Advertisement;
 - Policy DM26: The Central Shopping Area;
 - Policy DM27: Arts, Culture and Tourism;
 - Policy DM28: The Evening and Night-time Economy;
 - Policy DM29: District and Local Centres;
 - Policy DM30: Town Centre Uses Outside the Central Shopping Area;
 - Policy DM31 Retail Proposals Outside Defined Centres;
 - Policy DM32: Protection of Employment Land; and
 - Policy DM33: Delivery and Expansion of Digital Communications Networks.
- Site (Site Allocation DPD LPR) Policies assessed in Appendix E:
 - **Policy SP2: Land allocated for housing:**
 - IP003 Waste tip and employment area north of Sir Alf Ramsey Way
 - IP004 Bus depot, Sir Alf Ramsey Way
 - IP009 Victoria Nurseries, Westerfield Road
 - IP010a Co-op Depot, Felixstowe Road
 - IP010b Felixstowe Road
 - IP011a Lower Orwell Street (former Gym & Trim and (formerly listed as Smart Street/Foundation Street),
 - IP011b Smart Street, Foundation Street (South)
 - IP011c Smart Street, Foundation Street (North)
 - IP012 Peter's Ice Cream
 - IP014 Hope Church
 - IP015 West End Road Surface Car Park
 - IP028a Island adjacent to Jewsons, Greyfriars Road.
 - IP028b Jewsons, Greyfriars Road and island adjacent.
 - IP029 Land opposite 674-734 Bramford Road
 - IP031 Burrell Road including land to the east with access from Burrell Road.
 - IP032 King George V Field, Old Norwich Road
 - IP033 Land at Bramford Road (Stocks site)
 - IP035 Key Street / Star Lane / Burtons (St Peter Port)
 - IP037 Island Site

- IP039a Land between Gower Street & Gt Whip Street
- IP040 Former Civic Centre, Area / Civic Drive (Westgate)
- IP041 Former Police Station, Civic Drive
- IP043 Commercial Buildings and Jewish Burial Ground, Star Lane
- IP045 Land bounded by Cliff Road, Toller Road and Holywells Road
- IP047 Land at Commercial Road
- IP048a Mint Quarter / Cox Lane East regeneration area
- IP048b Mint Quarter / Cox Lane West regeneration area
- IP052 Land between Lower Orwell Street & Star Lane (former Essex Furniture)
- IP054b Land between Old Cattle Market and Star Lane
- IP061 Former School Site, Lavenham Road
- IP064a Land between Holywells Road and Holywells Park
- IP066 JJ Wilson and land to rear at Cavendish Street, White Elm Street
- IP067a Former British Energy Site
- IP080 240 Wherstead Road
- IP083 Banks of River upriver from Princes Street
- IP089 Waterworks Street
- IP096 Car Park Handford Road East
- IP098 Transco, south of Patteson Road
- IP105 Depot, Beaconsfield Road 0.33 15 45dph (DM30b)
- IP119 Land east of West End Road
- IP120 Land west of West End Road
- IP129 BT Depot, Woodbridge Road
- IP132 Former St Peters Warehouse Site, 4 Bridge Street
- IP133 South of Felaw Street
- IP135 112-116 Bramford Road
- IP136 Silo, College Street
- IP143 Former Norsk Hydro, Sandyhill Lane
- IP150d Land south of Ravenswood – Sports Park
- IP150e Land south of Ravenswood
- IP172 15-19 St Margaret's Green
- IP188 Websters Saleyard site, Dock Street
- IP221 Flying Horse PH, 4 Waterford Road
- IP226 Helena Road/Patteson Road
- IP279 Former British Telecom Office, Bibb Way
- IP283 25 Grimwade Street
- IP307 Prince of Wales Drive
- IP346 Suffolk Retail Park
- **Policy SP3: Sites awaiting planning permission or a Section 106**
 - IP005 Former Tooks Bakery, Old Norwich Road 80% residential and c. 20% is safeguarded for the provision of a new health centre.
 - IP042 Land between Cliff Quay and Landseer Road
 - IP059a & b Arclion House and Elton Park, Hadleigh Road
 - IP074 Church and land at Upper Orwell Street
 - IP088 79 Cauldwell Hall Road
 - IP109 R/O Jupiter Road & Reading Road
 - IP116 St Clement's Hospital Grounds
 - IP131 Milton Street
 - IP142 Land at Duke Street Allocation to provide for public open space (25%).
 - IP150a Ravenswood
 - IP161 2 Park Road
 - IP165 Eastway Business Park, Europa Way
 - IP169 23-25 Burrell Road
 - IP200 Griffin Wharf, Bath Street
 - IP205 Burton's, College Street
 - IP206 Cranfields, College Street
 - IP211 Regatta Quay, Key Street
 - IP214 300 Old Foundry Road
 - IP245 12-12a Arcade Street
 - IP256 Artificial hockey pitch, Ipswich Sports Club

- **Policy SP5: Land allocated for employment use**
 - IP067b Former British Energy Site
 - IP094 Land to rear of Grafton House
 - IP140 Land north of Whitton Lane
 - IP141a Land at Futura Park, Nacton Road
 - IP147 Land between railway junction and Hadleigh Road
 - IP150e Land south of Ravenswood
 - IP152 Airport Farm Kennels
 - IP004 Bus depot Sir Alf Ramsey Way
 - IP011b Smart St / Foundation St
 - IP043 Commercial Buildings & Jewish Burial Ground Star Lane
 - IP051 Old Cattle Market Portman Road
 - IP052 Land between Lower Orwell St & Star Lane
 - IP132 Former St Peters Warehouse Site, 4 Bridge Street
- **Policy SP6: Land allocated and protected as open**
 - IP029 Land opposite 674734 Bramford Rd
 - IP032 King George V Field, Old Norwich Rd
 - IP033 Land at Bramford Rd (Stocks Site)
 - IP037 Island Site
 - IP047 Land at Commercial Road
 - IP048 Mint Quarter / Cox lane Regeneration Area
 - IP142 Land at Duke Street
 - IP061 Former school site Lavenham Road
- **Policy SP7: Land allocated for leisure uses or community facilities**
 - IP005 Former Tooks Bakery, Old Norwich Rd (As part of a residential-led mixed use redevelopment)
 - IP010a Co-op Depot, Felixstowe Rd (As part of a residential development)
 - IP150b Land at Ravenswood (7.8ha)
- **Policy SP8: Orwell Country Park Extension**
 - Site IP149 Land at Pond Hall Carr and Farm
- **Policy SP9: Safeguarding land for transport infrastructure**
 - IP010a or b Felixstowe Road
 - IP059a Land at Elton Park Works
 - IP037 Island Site
 - IP029 Land opposite 674734 Bramford Road

1.7 How the Preferred Options were arrived at

- 1.7.1 The Preferred Options set out in the draft Local Plan Review (Regulation 18) have been formulated principally on the basis of providing for objectively assessed needs for housing and other uses within the Borough, as required under paragraph 11 of the NPPF (2018) and the available evidence. The amount of housing required has been based on the standardised methodology in the NPPF (2018), the mix of housing on Part 2 of the Ipswich Strategic Housing Market Area Assessment (SHMA) (2017) and the level of affordable housing on part 2 of the Ipswich SHMA (2017). The question of uplift to the housing figure was considered but rejected, because there are not strategic growth plans adopted across the County, investment in major infrastructure in the form of the Ipswich Northern Routes, which could unlock more growth, is not yet committed, and because of the Borough's limited capacity. Ipswich Borough Council Executive Report E/18/32 'Ipswich Local Plan Review Preferred Options' refers.
- 1.7.2 Employment needs have been considered on the basis of the Ipswich Economic Area Sector Needs Assessment (2017) and the Ipswich Economic Area Employment Land Supply Assessment (2018). Objectively assessed needs for other uses such as retail provision and gypsy and traveller accommodation have also been used as the starting point for drafting the preferred options. The majority of the evidence used has been reviewed jointly with neighbouring authorities which together form the Ipswich Strategic Planning Area (ISPA). This is to consider cross-boundary needs arising from the tightly drawn administrative boundary around Ipswich.

- 1.7.3 Beyond the objectively assessed needs, the preferred options have also been arrived at due to the need to incorporate revisions to the NPPF which occurred in July 2018. For example, policy CS12 'Affordable Housing' has been revised to reflect the amended definitions of affordable housing in the NPPF. Other policies have been amended on the basis of monitoring results that the Council has collected. An example of this includes the amendments to the Central Shopping Area policy DM26 to respond to the declining performance of retail uses in the town centre. New policies such as DM28 'The Evening and Night-time Economy' and DM3 'Air Quality' have been introduced in consideration of qualitative and quantitative feedback received from other departments and users within and outside the Council where appropriate.
- 1.7.4 A review of site allocations contained within the Site Allocations and Policies DPD (2017) has been undertaken on the basis of a comprehensive update to the Strategic Housing and Employment Land Availability Assessment (SHELAA) which is published alongside the Local Plan Review Preferred Options. This update includes the consideration of unimplemented housing and economic allocations, land ownership, land submitted through 'Call for sites' and issues and options consultations during 2017, as well as other considerations. Additions, amendments and removals of housing and economic sites within the Core Strategy and Policies DPD Review and the Site Allocations and Policies DPD Review have been undertaken on the basis of the recent update to the SHELAA.
- 1.7.5 The SHELAA included the consideration of two remaining areas of greenfield land at the edge of the Borough: land at Humber Doucy Lane in the north east, and land at Whitton Church Lane/Thurleston Lane in the north west. Whilst both areas have constraints, the work on the SHELAA concluded that some of the land in North West Ipswich was not suitable, for example protected allotments, and other land which may be suitable was not available or achievable for development at this time. Sites within the Broad Area at North East Ipswich at the northern end of Humber Doucy Lane were actively promoted through the adopted Local Plan process and the call for sites process in 2017. The broad location for future growth identified at the north end of Humber Doucy Lane is identified to meet future need after 2031. This broad location of future growth will need to be master planned with Suffolk Coastal District Council, with whom there have been positive discussions about the deliverability of necessary infrastructure and would substantially follow on from development at the Ipswich Garden Suburb.

2. Methodology

2.1 Stage A: Context, Objectives, Baseline and Scope

2.1.1 The first part of a SA is the Scoping Report, which:

- Reviews other relevant programmes, plans and strategies that have an influence on sustainability (Task A1);
- Details the existing baseline (Task A2);
- Identifies key sustainability issues and opportunities of relevance to the plan (Task A3); and
- Sets out a SA Framework for assessing policy options and the overall effect of the plan (Task A4).

2.1.2 The Scoping Report was prepared in March 2017 by the Council. It was then consulted on with the three statutory consultees of Natural England, the Environment Agency and Historic England (Task A5). The Scoping Report was finalised in light of responses received during the six-week consultation period.

A1: Identifying other relevant policies, plans and programmes and SA objectives

2.1.3 The SEA Directive requires:

“An outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes” to determine “the environmental protection objectives, established at international (European) community or national 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 (a), (e)).

2.1.4 It is therefore an essential requirement, as well as a necessary component of preparing a robust and accurate appraisal, to understand the policy context in which the SA is being prepared. A comprehensive review of other plans and programmes at a national, regional, county and local level was undertaken to identify implications for future Local Plan policies and the SA Objectives.

A2: Collecting baseline information

2.1.5 Baseline information refers to the existing economic, social and environmental characteristics of an area that may be affected by the LPR. It informs the development of a set of objectives, based on the data gathered, to inform the SA and therefore, plan preparation. Among the important decisions considered during the Scoping stage was with regards to the data, quantity of data and how should it be used in order to carry out SA. The Council compiled social, economic and baseline data for the Borough in order to provide the evidence base from which sustainability issues and opportunities could be identified (see **Appendix B**).

A3: Identifying sustainability issues and opportunities

2.1.6 The review of plans and programmes and the gathering of baseline data facilitates the identification of key sustainability issues and opportunities in the Borough. The key sustainability issues and opportunities were derived jointly between Ipswich and Suffolk Coastal as a number of these issues and opportunities are common across the two authorities. Their identification has informed the development of the objectives outlined in the SA Framework.

A4: Developing the SA Framework

2.1.7 The SA Framework presents 19 objectives relevant to the LPR and the scope of the SA across fifteen topic areas. It is important that the SA Objectives that are to be used are up to date, relevant for the district and can also provide a consistent approach between strategic level policies and site/area specific policies as part of the Local Plan Review. Baseline

information is fundamentally linked to the SA Framework and the objectives act as a basis against which sites can be assessed. indicators are used to assess progress towards the objectives being achieved. The SA Framework enables the Council to consider the impacts and alternatives of plans, programmes and policies.

A5: Consulting on the scope of SA

- 2.1.8 The Scoping Report, including the various components satisfying Tasks A1- A4, was consulted on between 18th August – 30th October 2017. The updated Scoping Report was prepared in light of the comments received during consultation and was published in February 2018³.

2.2 Stage B: Developing and Defining Options

B1: Testing the plan objectives against the SA objectives

2.3 Assessment Requirements

- 2.3.1 Each proposal in the LPR, as well as their reasonable alternatives, will be assessed for their likely impacts against the revised SA Framework. This includes:

- Growth scenarios;
- Spatial options;
- Policies; and
- Sites.

- 2.3.2 During the assessment of each proposal, it is a requirement of SA to consider the implications for the economic, social and environmental spheres of sustainability. In order to satisfy the SEA Directive and SEA Regulations, there are several factors that require consideration during the assessment process.

2.4 Strategic Options Assessment Method

- 2.4.1 The phrase 'strategic options' is considered to include the various options for the quanta of growth and potential distribution strategies that were considered by the Council. Each strategic option was assessed for its likely impacts on each SA Objective. Given the high-level nature of these options, the assessments involve a lot of uncertainty and assumptions are made. A precautionary approach is adopted to ensure potential adverse impacts can be highlighted and avoided at an early stage. A score for each strategic option, as per **Table 2-1**, is provided for each SA Objective.

2.5 Sites and Policies Assessment Method

- 2.5.1 The assessment of policies and sites lends itself to a more quantified process. An individual assessment is provided in each case with the likely impacts on each SA Objective discussed. For site assessments, each site has been assessed against a wide range of criteria that align with the Objectives. Based on the outcomes of this, a score is provided for each site against each Objective, as per **Table 2-1**.

³ LPR evidence library available online at: <https://www.ipswich.gov.uk/content/new-evidence-base-documents-ipswich-local-plan-review-2036>

Table 2-1: SA scoring for sites assessments

++	Major positive effect (significant)
+	Minor positive effect
0	Neutral effect
?	Uncertain effect
-	Minor adverse effect
--	Major adverse effect (significant)

B2: Developing the plan options

- 2.5.2 It is important to note that SA is not the only evidence base informing the Council’s decision-making process. During the SA, each strategic option, site and policy has been assessed for their likely sustainability effects and the results of this process are provided to the Council to help inform their decision-making process, alongside various other evidence documents, during the preparation of the Plan. In each case, the SA provides recommendations for avoiding or mitigating potential adverse impacts of options being considered in the Plan, such as by rewording policies or including requirements for potential developers. Overall, during the SA process, the SA plays an essential role in helping the Council decide how much and what type of development to allocate where and how to sustainably manage this development.

B3: Predicting the effects of the plan, including options

- 2.5.3 The assessment of growth options and spatial scenarios is inherently a more qualitative procedure than the assessment of policies and sites. Chapters 4 and 5 present the outcome of the assessment of growth options and spatial options, with the likely impacts of each separated into social, environmental and economic sections. These assessments involve a large degree of uncertainty, in large part due to the length of time the LPR covers (18 years), and assumptions have to be made to reach meaningful conclusions. Assessments have been provided, and quantified where feasible, based on the best-available evidence with consideration given to the baseline, key issues in Ipswich as well as local, national and international trends (such as the reducing carbon footprint per capita).
- 2.5.4 Firstly, careful consideration is given to the **significance** of effect, as based on:
- (a) the probability, duration, frequency and reversibility of the effects;
 - (b) the cumulative nature of the effects;
 - (c) the transboundary nature of the effects;
 - (d) the risks to human health or the environment (for example, due to accidents);
 - (e) the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
 - (f) the value and vulnerability of the area likely to be affected due to:
 - (i) special natural characteristics or cultural heritage;
 - (ii) exceeded environmental quality standards or limit values; or
 - (iii) intensive land-use; and
 - (g) the effects on areas or landscapes which have a recognised national, Community or international protection status.

B4: Evaluating the effects of the plan, including options

- 2.5.5 Careful consideration is also given to the **uncertainty** of effect and the likelihood of it occurring. Site-level baseline data used in this assessment is also highly changeable – for example, any given community facility can close down or move within a period of months, and thus an assessment which considers a site to have good access to this facility pre-development, may not do so by the time construction begins, even if this is only within a few years. These circumstances are impossible to predict and are an inherent part of the SA and indeed the planning process. The planning system is generally robust enough to deal with such changes by re-assessing the needs of sites/communities at the time applications are

made. Uncertainties are dealt with in the SA process by adopting a **precautionary approach**, wherein the worst-case scenario is assumed (unless reliable evidence suggests otherwise).

- 2.5.6 The **permanence** and **timescale** of effects are also determined. This is generally presented in the form of short-term, medium-term, long-term or permanent. In many cases, effects of LPR proposals are likely to be multiple terms (e.g. arise in the short-term and reside in the long-term).
- 2.5.7 The SEA Directive also requires the consideration of cumulative, synergistic and secondary effects, which we define as:
- **Secondary effects** are effects that are not a direct result but occur away from the original effect or as a result of a complex pathway;
 - **Cumulative effects** arise, for instance, where several developments each have insignificant effects but together have a significant effect, or where several individual effects have a combined effect; and
 - **Synergistic effects** interact to produce a total effect greater than the sum of the individual effects, so that the nature of the final impact is different to the nature of the individual impacts.
- 2.5.8 The appraisals of options in the appendices of this document account for both direct and secondary effects. **Chapter 8** in this report provides an appraisal of the cumulative and synergistic effects of options.

B5: Consider ways of mitigating adverse effects and maximising beneficial effects

- 2.5.9 Where appropriate, measures have been recommended to help **mitigate** adverse effects or to help enhance the extent to which likely effects are positive.

B6: Proposing measures to monitor the significant effects of the plan's implementation

- 2.5.10 As stated, uncertainty and assumptions are inherent features of the SA process. A precautionary approach is necessitated in order to identify potential significant effects at an early stage, either so adverse effects can be avoided or mitigated, or so positive effects can be maximised. The SA also proposes a monitoring framework which, if followed, would enable the Council to ensure that the LPR is having the impacts identified in the SA and that avoidance or mitigation measures are working effectively – if not, they can be amended as necessary.

2.6 Stage C: Prepare the SA Report

- 2.6.1 During Stage C of the SA process, and Environmental Report will be prepared to accompany the publication version of the LPR. At this stage, the SA report will satisfy all requirements of an 'Environmental Report' as per Annex 1 of the SEA Directive, including:
- a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;
 - b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;
 - c) the environmental characteristics of areas likely to be significantly affected;
 - d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;
 - e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those

- objectives and any environmental considerations have been taken into account during its preparation;
- f) the likely significant effects (including secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects) on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;
 - g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;
 - h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;
 - i) a description of the measures envisaged concerning monitoring in accordance with Article 10;
 - j) a non-technical summary of the information provided under the above headings.

3. Stage A: Scoping Results

3.1 Stage A.1: Identifying other Plans and Programmes and Sustainability Objectives

- 3.1.1 Relevant plans, programmes and sustainability objectives were identified during the Scoping stage, which are set out in detail in **Appendix A**. The list of relevant legislation and policies also sets out how proposals in the LPR will take these objectives into account.
- 3.1.2 In July 2018 the revised National Planning Policy Framework (NPPF) was published. The Scoping Report was prepared and consulted on in 2017, prior to the publication of the NPPF. References to the NPPF (2012) have therefore been updated to reflect the revised NPPF (2018). No additional changes to the Scoping Report or SA are required as a result of the revised NPPF's publication.

3.2 Stage A.2: Baseline information

- 3.2.1 Baseline information detailing a range of social, economic and environmental data was obtained from a number of sources, the findings of which are set out in **Appendix B**. Collectively this data was used as the baseline to provide the basis for identifying issues and determining objectives for the Local Plan Review.

3.3 Stage A.3: Key Sustainability Issues

- 3.3.1 Based on the baseline information, the Council identified key sustainability issues of relevance for the Borough. These are presented in **Appendix B**.

3.4 Stage A.4: SA Framework

- 3.4.1 The SA Framework is set out in **Table 3-1**. The Objectives, guide questions and indicators in The Framework were designed to be consistent with other authorities in the ISPA, including Suffolk Coastal, Babergh and Mid Suffolk Districts. Following consultation on the Scoping Report, a revised SA Framework was prepared that took into account any related comments.
- 3.4.2 The Framework is comprised of 19 SA Objectives. The SEA Directive necessitates the assessment of likely impacts on certain topics (listed in Annex 1(f)). SEA Topics relevant to each SA Objective are listed in the SA Framework.
- 3.4.3 The SA Framework that emerged from the SA Scoping Report considers the existing sustainability baseline in Ipswich and the key sustainability issues in the Borough. Every proposal in the LPR, and their alternatives, will be assessed against every objective of this framework to identify their likely impacts on sustainability in relation to the likely evolution of the baseline in the absence of the plan.

Table 3-1: SA Framework

SA Objective	Guide question	Indicators	SEA Topics
Population			
1 - To reduce poverty and social exclusion	Will it reduce poverty and social exclusion in those areas most affected? Will it reduce benefit dependency? Does it support the changing population profile of the area? Will it encourage engagement/participation in community/cultural activities? Will it contribute to regeneration activities? Will it enhance the public realm?	Long term unemployment rate (Suffolk Observatory) Proportion of the population who live in wards that rank within the most deprived 10% and 25% of wards in the country (Index of Multiple Deprivation)	Human health Population
Housing			
2 - To meet the housing requirements of the whole community	Will it contribute to the supply of housing? Will it reduce homelessness? Will it contribute to meeting demand for a range and mix of housing including affordable housing and specialist housing? Will it reduce the number of unfit homes? Will it contribute to the delivery of sustainable homes?	New homes completed in the monitoring year (council records) New homes approved in the monitoring year (council records) Recorded homeless rates (ONS) Net additional dwellings – size, type, affordable (Council records)	Human health Population Material assets
Health and wellbeing			
3 - To improve the health of the population overall and reduce health inequalities	Will it improve access to health facilities and social care services? Will it encourage healthy lifestyles? Will it support the diverse range of health needs within the community? Will it contribute to a healthy living environment? (noise, odour etc?) Will it reduce crime/ fear of crime and anti-social activity? Will it promote design that discourages crime? Will it avoid locating development in locations that could adversely affect people's health?	Condition of resident's general health (Census - QS302EW) Change in the amount of Accessible Natural Greenspace (Natural England) Level of recorded crime and antisocial behaviour (Suffolk Observatory) Percentage of the borough's population having access to a natural greenspace within 400 metres of their home Length of greenways construction Hectares of accessible open space per 1000 population	Water Climate factors Human health Fauna Biodiversity Flora
4 - To improve the quality of where people live and work	Will it support those with disabilities? Will it protect and improve air quality? Will it avoid exacerbating existing air quality issues in designated AQMAs?		
Education			
5 - To improve levels of education and skills in the population overall	Will it improve qualifications and skills of young people and adults? Will it support the provision of an adequate range of educational and child care facilities?	GCSE and equivalent results for young people (Department for Education) % of working age population with NVQ level 4+ or equivalent qualification (Census 2011 - QS501EW)	Population Human health

Table 3-1: SA Framework

SA Objective	Guide question	Indicators	SEA Topics
Water			
6 - To conserve and enhance water quality and resources	Will it support the achievement of Water Framework Directive Targets? Will it protect and improve the quality of inland waters? Will it protect and improve the quality of coastal waters? Will it promote sustainable use of water? Will it maintain water availability of water dependent habitats? Will it support the provision of sufficient water supply and treatment infrastructure in a timely manner to support new development? Will it improve ground water quality?	Recorded water quality in rivers, estuaries and groundwater from River Basin Management Plans (Environment Agency) Recorded Water Resource Availability Status (Environment Agency, Anglian Water, Essex & Suffolk Water) Bathing water quality (EA)	Soil Material Assets Landscape Flora
Air			
7 - To maintain and where possible improve air quality	Will it protect and improve air quality? Will it avoid exacerbating existing air quality issues in designated AQMAs? Will it contribute to a healthy living environment?	Number of designated AQMAs (Council records) Estimated district CO ₂ emissions (Department of Energy and Climate Change)	Air Human health Fauna
Material Assets (including Soil)			
8 - To conserve and enhance soil and mineral resources 9 - To promote the sustainable management of waste	Will it encourage the efficient use of land? Will it minimise the loss of open countryside to development? Will it minimise loss of the best and most versatile agricultural land to development? Will it maintain and enhance soil quality? Will it promote sustainable use of minerals? Will it encourage the use of previously developed land and/or the reuse of existing buildings? Will it prevent land contamination and facilitate remediation of contaminated sites? Will it reduce household waste generated/ head of population? Will it reduce commercial and industrial waste generated/ head of population? Will it increase rate/head of population of waste reuse and recycling?	Percentage of development recorded on greenfield / brownfield land (Council records) Change in recorded soil quality (Environment Agency) Allocations recorded on best agricultural land quality (1,2,3) (Council records/DEFRA) Estimated household waste produced (Council records) Estimated quantity of household waste recycled (Council records)	Human health Landscape
Climatic change and flooding			
10 - To reduce emissions of greenhouse gases from energy consumption	Will it ensure suitable adaptation to climate change? Will it reduce emission of greenhouse gases/head of population by reducing energy consumption? Will it increase the proportion of energy needs being met by renewable sources?	Estimated district CO ₂ emissions (Department of Energy and Climate Change) Installed Megawatts (MW) of commercial scale renewable energy schemes (Council records)	Biodiversity Flora Fauna Cultural heritage including

Table 3-1: SA Framework

SA Objective	Guide question	Indicators	SEA Topics
11 - To reduce vulnerability to climatic events and flooding	Will it minimise the risk of flooding from rivers and watercourses? Will it minimise the risk of flooding on the coasts/estuaries? Will it reduce the risk of coastal/ estuarine erosion? Will it reduce the risk of damage from extreme weather events?	Estimated number of properties at risk from flooding (Environment Agency) Number of schemes incorporating SUDs mechanisms (Suffolk County Council)	architectural & archaeological heritage Landscape
The Coast and Estuaries			
12 - To safeguard the integrity of the coast and estuaries	Will it support sustainable tourism? Will protect environmentally designated sites? Will it protect the special character and setting of the coast and estuaries?	Recorded visitor numbers on designated European sites (AONB unit, Natural England, Council records)	Biodiversity Flora Fauna Landscape Water
Biodiversity			
13 - To conserve and enhance biodiversity and geodiversity	Will it maintain and enhance European designated nature conservation sites? Will it maintain and enhance nationally designated nature conservation sites? Will it maintain and enhance locally designated nature conservation sites? Will it avoid disturbance or damage to protected species and their habitats? Will it help deliver the targets and actions in the Biodiversity Action Plan? Will it help to reverse the national decline in at risk species? Will it protect and enhance sites, features and areas of geological value in both urban and rural areas? Will it lead to the creation of new habitat? Does it ensure current ecological networks are not compromised, and future improvements in habitat connectivity are not prejudiced?	Change in the number and area of designated ecological sites (Natural England) Recorded condition/status of designated ecological sites (Natural England) Recorded visitor numbers on designated European sites (AONB unit, Natural England, Council records) Number of planning approvals that generated any adverse impacts on sites of acknowledged biodiversity importance. Percentage of major developments generating overall biodiversity enhancement. Hectares of biodiversity habitat delivered through strategic site allocations	Cultural heritage Landscape Biodiversity Flora Fauna Water
Cultural heritage			
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	Will it protect and enhance buildings, monuments, sites, places, areas and landscapes of heritage interest or cultural value (including their setting) meriting consideration in planning decisions? Will it protect and enhance sites, features and areas of archaeological value in both urban and rural areas? Will it enhance accessibility to and the enjoyments of cultural heritage assets?	Change in the number of designated and non-designated heritage assets (English Heritage, Council records) Number of heritage assets recorded as 'at risk' (English Heritage, Council records)	Cultural heritage

Table 3-1: SA Framework

SA Objective	Guide question	Indicators	SEA Topics
	Will it promote high quality design in context with its urban and rural landscape?		
Landscape			
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	Will it conserve and enhance the AONB? Will it reduce the amount of derelict, degraded and underused land? Will it protect and enhance the settlement and its setting within the landscape? Will it protect and enhance landscape character and townscapes? Will it promote high quality design in context with its urban and rural landscape?	Development brought forward through regeneration projects (Council records) Development granted in AONB or Special Landscape Area designations. (Council records) Amount of new development in AONB/National Coast	Air Material assets Water Cultural heritage Population Biodiversity Climate factors
Economy			
16 - To achieve sustainable levels of prosperity and growth throughout the plan area 17 - To maintain and enhance the vitality and viability of town and retail centres	Will it improve business development and enhance competitiveness? Will it improve the resilience of business and the economy? Will it promote growth in key sectors? Will it improve economic performance in disadvantaged areas? Will it encourage rural diversification? Will it encourage indigenous business? Will it encourage inward investment? Will it make land available for business development? Will it increase the range of employment opportunities, shops and services available in town centres? Will it decrease the number of vacant units in town centres? Will it enhance the local distinctiveness within the centre?	Estimated new job creation (Council records) Net additional gains in employment land development (Council records) Business formation rate (Suffolk Observatory) Number of business paying business rates (Council records) Numbers employed by industry (Oxford Economics - East of England Forecast Model) % of A1 use class and vacant units in town centres (Council records)	Population Human health Material assets
Transport, Travel and Access			
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	Will it reduce commuting? Will it improve accessibility to work by public transport, walking and cycling? Would it promote the use of sustainable travel modes and reduce dependence on the private car? Will it increase the proportion of freight transported by rail or other sustainable modes? Will it maintain and improve access to key services and facilities for all sectors of the population? Will it increase access to the open countryside? Will it increase access to public open space?	Loss of key services (council records) Provision of key infrastructure projects (Council records) Travel to work distances (Census) Travel to work modes (Census)	Material assets Climate factors Landscape Population

Table 3-1: SA Framework

SA Objective	Guide question	Indicators	SEA Topics
	Will it improve access to cultural facilities? Will it improve access to community facilities? Will it reduce journey times? Will it help to enhance the connectivity of more remote, rural settlements? Will it avoid impacts on the quality and extent of existing recreational assets, such as formal or informal footpaths?		
Digital Infrastructure			
<i>19 - To ensure that the digital infrastructure available meets the needs of current and future generations</i>	Will it improve digital infrastructure provision? Will it increase opportunities to improve the digital economy?	Average Broadband speeds (County records)	Population Material assets

4. Appraisal of Vision and Objectives

4.1 Stage B.1: Compatibility of Vision and Objectives with SA Framework

- 4.1.1 The Core Strategy Review document presents a Vision for the Borough by 2036, as well as 12 strategic objectives to help guide the LPR, which are set out below. Each has been assessed for their compatibility with each SA Objective (see **Table 4-1**).
- 4.1.2 Compatibility was determined by assessing the extent to which the Strategic Objective accords with the SA Objective. Each SA Objective has clearly defined guide questions. The compatibility check identified whether the strategic objectives in the LPR would be likely to make a positive contribution towards achieving the SA Objective or, if by adopting that strategic objective, it may make it more difficult to achieve the SA Objective. This was a holistic assessment process carried out at a strategic and high level. For example, a Strategic Objective in the LPR to improve air quality would be considered to be compatible with SA Objective 7 'To improve or maintain air quality'.
- 4.1.3 On the whole, the Council's Vision and Strategic Objectives proposed for the LPR are highly compatible with the SA Framework and will be likely to help ensure the LPR delivers socially, economically and environmentally sustainable land-uses and development until 2036. Uncertainties over the compatibility of Strategic Objective 3 with several SA Objectives were recorded. This is because Strategic Objective 3 sets out the desired level of housing and jobs growth by 2036 and the compatibility of this growth is largely dependent on the locations and details of design for each development proposal, which is accounted for during the assessment of sites and site-based policies. Recommendations have been provided for sites to help ensure they contribute towards sustainable development.

Our Vision is to improve the quality of life, health and well-being for all who live in, work in, learn in, play in and visit Ipswich, by supporting growth and ensuring that development happens in a sustainable manner so that the amenities enjoyed by local people are not harmed and the town is enhanced.

By 2036, Ipswich town centre will embrace a greater mix of uses providing opportunities for shopping, leisure and cultural activities, learning, working and living. The town centre, Waterfront and Portman Quarter will provide a range and choice of higher density homes to meet needs including on a redeveloped Island Site, whilst recognising that not everyone wishes to live in a flat. The Princes Street corridor will be a busy office quarter providing modern, flexible Grade A floorspace. Movement around the town centre will be easiest by foot and cycle, using an integrated network of safe, convenient and attractive routes, supported by a high-quality public transport network. The town centre will be inclusive, addressing the needs of the less mobile within a high quality public realm.

Outside central Ipswich, thriving district and local centres will provide local shopping, leisure and services close to people's homes and be at the hub of strong and cohesive communities. Three new neighbourhoods will be completed at Ipswich Garden Suburb with housing delivered alongside a country park and highway, water, energy, education, green and health infrastructure.

By 2036, a range of new homes will be provided across the Borough and within the Housing Market Area to meet needs. The Ipswich economy will have grown hand in hand with the skills and knowledge of the local workforce, providing opportunities for all as part of a strong and prosperous Ipswich Functional Economic Area supported by a successful university. Growth will be supported by modern, fit for purpose infrastructure, and Ipswich will be well connected and offer a range of sustainable transport modes to all its users.

The distinctive network of beautiful parks and open spaces, green infrastructure and open water will be protected and enhanced, to support their use by people and wildlife. The town's tree canopy will be extended and opportunities taken to enhance biodiversity and adapt to climate change. The town's built and natural heritage will be conserved and enhanced and growth will respect the character and distinctiveness of neighbourhoods within Ipswich.

The Ipswich of 2036 will have grown and changed in ways that respect the past and look to the future; it will be a county town that everyone in Suffolk will feel proud of.

Strategic objectives

1. High standards of design will be required in new development. Development must be sustainable, environmentally friendly and resilient to the effects of climate change. Standards of acceptability will be raised progressively from 2006 (Building Regulations) levels for all developments in the town in terms of design and environmental performance.
2. Every development should contribute to the aim of reducing Ipswich's carbon emissions below 2004 levels.
3. At least: (a) 8,622 new dwellings shall be provided to meet the needs of Ipswich within the Ipswich Housing Market Area between 2018 and 2036 in a manner that addresses identified local housing needs and provides a decent home for everyone, with 31% at the Ipswich Garden Suburb and 15% in the remainder of the Borough being affordable homes; and (b) approximately 15,580 additional jobs shall be provided in Ipswich to support growth in the Ipswich Policy Area between 2018 and 2036.
4. The development of the Borough should be focused primarily within the central Ipswich 'IP-One' area, Ipswich Garden Suburb and within and adjacent to identified district centres (these areas are identified on the key diagram).
5. Opportunities shall be provided to improve strategic facilities in Ipswich by:
 - Significantly enhancing the town centre in terms of the range and quality of the shops, the cultural and leisure offer and the network of the public realm;
 - Extending the strategic greenspace, ecological network and canopy cover; and
 - Continuing to support the development of the University of Suffolk and Suffolk New College.
6. To improve accessibility to and the convenience of all forms of transport and achieve significant modal shift from the car to more sustainable modes through Travel Ipswich and other local initiatives. This will: (a) promote choice and better health; (b) facilitate sustainable growth, development and regeneration; (c) improve integration, accessibility and connectivity; and (d) promote green infrastructure as alternative 'green' non-vehicular access around the town and urban greening of existing routes. Specifically:
 - Significant improvements should take place to the accessibility to and between the three key nodes of: the railway station (including the wider Portman Quarter environment), the Waterfront (and particularly the Education Quarter) and the Central Shopping Area;
 - Additional east-west highway capacity could be provided within the plan period in the Ipswich area to meet the needs of the wider population and to provide the potential to reallocate some central road space;
 - Comprehensive, integrated cycle routes should be provided; and
 - Ipswich Borough Council aspires to an enhanced public transport system.
7. Enhanced flood protection including a tidal surge barrier to be in place to protect the town's existing and expanding communities from the threat of tidal flooding.
8. To protect and enhance high quality, accessible strategic and local open spaces rich in biodiversity and geodiversity for people to visit and use, and conserve and enhance the historic environment and landscape character of Ipswich, including historic buildings, archaeology and townscape.
9. To retain and provide high quality schools, health facilities, sports and cultural facilities and other key elements of community infrastructure in locations accessible by sustainable means and in time to meet the demands put on such services from the town's growth and ageing population.
10. To tackle deprivation and inequalities across the town.
11. To improve air quality and create a safer, greener, more cohesive town.
12. To work with other local authorities in the Ipswich Strategic Planning Area and with community partners to ensure a co-ordinated approach to planning and development.

Table 4.1: Compatibility of Local Plan Vision & Objectives with SA Framework**Key:**

- ✓ Compatible;
- ✗ Incompatible;
- 0 No link between objectives; and
- ? The link between the objectives is uncertain.

SA Objectives	Vision (V) & Strategic Objectives												
	V	1	2	3	4	5	6	7	8	9	10	11	12
1 - To reduce poverty and social exclusion	✓	✓	0	✓	✓	✓	✓	0	0	✓	✓	✓	✓
2 - To meet the housing requirements of the whole community	✓	✓	0	✓	✓	✓	✓	0	0	✓	✓	✓	✓
3 - To improve the health of the population overall and reduce health inequalities	✓	✓	✓	?	0	✓	✓	0	0	✓	✓	✓	0
4 - To improve the quality of where people live and work	✓	✓	✓	✓	✓	✓	✓	0	✓	✓	✓	✓	0
5 - To improve levels of education and skills in the population overall	✓	0	0	?	0	✓	0	0	0	✓	✓	0	0
6 - To conserve and enhance water quality and resources	✓	✓	0	?	0	0	0	0	✓	0	0	✓	0
7 - To maintain and where possible improve air quality	✓	✓	✓	?	0	0	✓	0	✓	0	0	✓	0
8 - To conserve and enhance soil and mineral resources	✓	✓	0	?	0	0	✓	0	✓	0	0	✓	0
9 - To promote the sustainable management of waste	✓	✓	✓	?	0	0	✓	0	0	0	0	0	0
10 - To reduce emissions of greenhouse gases from energy consumption	✓	✓	✓	?	0	0	✓	0	0	0	0	✓	0
11 - To reduce vulnerability to climatic events and flooding	✓	0	✓	?	0	0	0	✓	0	0	0	0	0
12 - To safeguard the integrity of the coast and estuaries	✓	0	0	?	0	0	0	✓	✓	0	0	0	0
13 - To conserve and enhance biodiversity and geodiversity	✓	✓	0	?	0	✓	✓	✓	✓	0	0	✓	0
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	✓	✓	0	?	0	✓	✓	0	✓	0	0	0	0
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	✓	✓	0	?	0	✓	✓	0	✓	0	0	✓	0
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	✓	✓	0	✓	✓	✓	✓	0	0	✓	✓	✓	✓
17 - To maintain and enhance the vitality and viability of town and retail centres	✓	✓	0	✓	✓	✓	✓	0	0	✓	✓	✓	✓
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	✓	✓	✓	?	0	0	✓	0	0	✓	0	✓	0
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	✓	0	0	✓	0	0	0	0	0	0	✓	✓	0

5. Appraisals of Strategic Options

5.1 Housing Needs and Employment Trends

- 5.1.1 In 2017, the Council consulted on the Issues and Options documents. At that time, Ipswich was considered to have an Objectively Assessed Need (OAN) of 11,420 dwellings over the LPR period of 2014 – 2036.
- 5.1.2 In July 2018, the Government published the revised National Planning Policy Framework, which requires local planning authorities to use a standard method to quantify local housing need. Using the standard method and the most up to date 2016-based household projections and affordability information at October 2018 as a starting point, the figure for Ipswich Borough is 479 dwellings per annum 2018 to 2036, or 8,622 dwellings for the eighteen-year period. On 26th October 2018, the Government issued a consultation proposing that local planning authorities use the 2014-based household projections rather than the 2016-based projections in their housing need assessments. The effect of this would be to reduce the figure, but until the guidance has been finalised, the higher figure will be planned for. This figure will be reviewed at the next stage of plan preparation.
- 5.1.3 Three key evidence bases informed the employment needs identified for the Ipswich FEA:
- Jobs calculations from the East of England Forecasting Model (EEFM) (August 2016);
 - Employment Sector Needs Assessment (ESNA) (2017); and
 - Employment Land Supply Assessment (ELSA) (2017).
- 5.1.4 The EEFM identified a likely increase in the number of jobs needed in Ipswich from 75,195 in 2014 to 94,235 by 2036. The Council are therefore seeking to deliver approximately 15,580 jobs for the 2018 – 2036 period.
- 5.1.5 Each scenario of different quantities of growth has been assessed for its likely impacts on each SA Objective in **Appendix C**. The scores recorded for each strategic option against each SA Objective are presented in **Table 5-1** as an indicator of the likely overall sustainability impacts.

5.2 Growth scenarios

- 5.2.1 The Issues and Options consultation identified three potential scenarios for delivering the required level of housing and economic growth in Ipswich by 2036, as well as tackling other challenges the Borough faces. The Council's intention is to pursue the growth option of delivering 479 dpa, and this approach will be reviewed at the next stage of the Plan-making process.
- 5.2.2 In accordance with the SEA Directive, which requires reasonable alternatives to be appraised for their likely significant effects, the likely impacts of each growth scenario are appraised in **Appendix C**. An additional growth scenario was been appraised based on the new OAN figure. In sum, the following growth scenarios have been appraised:
- Preferred approach (Policy CS7(homes) and Policy CS13 (jobs)): **8,622 homes and 15,580 jobs** - A trend-based scenario based on the forecast employment needs of the Borough and the 2018 update to the OAN based on the standardised method;
 - Alternative Scenario A: **11,420 homes and 19,040 jobs** - A trend-based scenario based on the forecast employment needs of the Borough and the 2017 calculated OAN;
 - Alternative Scenario B: **25,837 dwellings and 32,376 jobs** – A policy-led scenario for significant economic growth, with a 20% increase in the 2017-homes target relative to OAN; and
 - Alternative Scenario C: **30,143 dwellings and 32,376 jobs** - An infrastructure-led scenario based on a high increase in growth in Ipswich, with a 40% increase in the 2017-homes target relative to OAN.
- 5.2.3 The nature of the appraisal process involves a degree of uncertainty that requires the use of professional judgement. The appraisals are based on the identified evidence base. Residential development is assumed to be in-perpetuity, and so the likely impacts of

development on society, the natural environment or the local economy are also likely to reside in perpetuity should mitigation not be employed.

5.3 Spatial options

5.3.1 In order to deliver development through the LPR, the Council is considering a range of different spatial distribution options. Given the tightly drawn boundary around the Borough, the range of spatial options available to the Council is limited. Six different options for delivering the desired growth have been identified, the likely social, environmental and economic impacts of each are presented in **Appendix C** (Spatial Options 4, 5 and 6 relate to the administrative boundary of Suffolk Coastal District only):

- **Spatial Option 1:** Higher-density urban regeneration;
- **Spatial Option 2:** Increased development beyond the Borough boundary;
- **Spatial Option 3:** Changing the use of existing land in the Borough to housing;

Options from Suffolk Coastal District Council

- **Spatial Option 4:** Continuation of existing approach (Suffolk Coastal District);
- **Spatial Option 5:** Focus on Ipswich and A14 transport corridor (Suffolk Coastal District); and
- **Spatial Option 6:** A12 transport corridor and dispersed rural focus (Suffolk Coastal District).

5.3.2 The appraisal of spatial options inherently involves a degree of uncertainty and assumptions are required throughout. By their nature, these assessments account for the cumulative and synergistic effects of development in combination and the identified impacts can be expected to arise in the short term and reside for the long term. Residential development is assumed to be in perpetuity, and so in the absence of mitigation any impacts on the local community, natural environment or economy can also be assumed to be in perpetuity i.e. new homes would be likely to remain for hundreds of years and, should these new homes result in the loss of soils or woodland it is likely that this loss will also remain for a similar duration.

5.4 Summary of assessments: Growth

5.4.1 The appraisal of growth scenarios and spatial options in **Appendix C** identified a range of potential positive and adverse effects, with often mixed results identified against most SA Objectives. These effects are generally related to the fact that Ipswich is a highly constrained and urban Borough that can only support a limited amount of new development. The Preferred Approach (i.e. Policy CS7 in the LPR) and Alternative Scenario A would lead to nearly all new development occurring within the Borough, whereas under Alternative Scenarios B and C the quantity of development being considered would be likely to necessitate a significant quantity of development outside of the Borough in neighbouring authorities, most likely on greenfield sites.

5.4.2 Generally speaking, it was considered that the lower the quantity of development being considered, the more feasible it would be to avoid adverse impacts on environmental objectives such as biodiversity, cultural heritage and landscape. This is because fewer sites would be required for development and there would, therefore, be less scope for direct harm to sensitive assets as well as more limited cumulative and synergistic effects on the ecological network or the local landscape character, for example. As such, Preferred Approach and Alternative Scenario A could potentially result in less adverse effects on biodiversity and landscape than Alternative Scenarios B and C.

5.4.3 Furthermore, the Preferred Approach and Alternative Scenario A may help to limit adverse impacts on natural resources, waste and climate change objectives. The lower quantities of development would facilitate a higher proportion of development to be situated on brownfield sites in urban locations than Scenarios B and C and would therefore be likely lead to less severe losses of agriculturally and ecologically valuable soils. Access to sustainable transport modes, and distances to key services and amenities, typically enable more sustainable

lifestyles with lower carbon footprints. The Preferred Approach and Alternative Scenario A could therefore be expected to have less severe impacts on climate change mitigation and air quality than Scenarios B and C. It is also expected that the lower quantities of development in the Preferred Approach and Scenario A would lead to a much more limited rise in water consumption and waste generation.

- 5.4.4 The costs or benefits of each growth scenario on access to health and education facilities is complex. The Proposed Approach and Alternative Scenario A would help to situate new residents in proximity to existing services. However, there are existing capacity concerns at Ipswich's schools and some doctor's surgeries and, without the provision of new services, the Preferred Approach or Scenario A could exacerbate capacity concerns. In contrast, Alternative Scenarios B and C could situate new residents in locations that are isolated from existing services, largely depending on the precise location of new sites in relation to settlements in neighbouring authorities. However, the larger scale of growth under these options would be likely to facilitate the provision of new services and facilities, some of which would be on-site, and Scenarios B and C may therefore help lead to an increased capacity.
- 5.4.5 A large portion of land in the centre of Ipswich is situated in Flood Zones 2 or 3. It is considered to be likely that all growth scenarios would utilise all the available land for development within Ipswich, and therefore under all scenarios it will be difficult to situate new development on land not at risk of flooding in all cases.
- 5.4.6 It has so far been identified that the Preferred Approach and Alternative Scenario A would be likely to have more beneficial impacts on SA Objectives related to biodiversity, landscape, climate change, waste, natural resources, cultural heritage, social exclusion and air quality.
- 5.4.7 However, Alternative Scenarios B and C offer some advantages. Crucially, there is a risk that focussing development in urban locations would lead to a large portion of new residents being exposed to major sources of noise, air and light pollution such as that associated with road traffic. Careful consideration should be given to the protecting the quality of life and long-term health for these residents. It is likely that Scenarios B and C would enable a large portion of new residents to pursue healthy and active lifestyles.
- 5.4.8 Scenarios B and C would facilitate an economic transformation in the Borough. They would be likely to help significantly tackle rates of deprivation and contribute towards a more prosperous and sustainable local economy as well as make a greater contribution towards vital and vibrant town centres than would perhaps be seen under the Preferred Approach or Alternative Scenario A. Scenario C would go further than Scenario B and deliver significant infrastructure projects that could lead to a range of economic and social benefits.

5.5 Summary of assessments: Spatial

- 5.5.1 The appraisal of spatial scenarios in Appendix C identified a range of benefits and likely impacts of each scenario. It is anticipated that certain spatial scenarios would help to facilitate different quantities of growth. The Preferred Approach and Alternative Scenario A would see nearly all new development occur in the Borough. Spatial Option 1: Higher-density urban regeneration and Spatial Option 3: Changing the use of existing land in the Borough to housing would help to deliver these growth options. In contrast, Alternative Scenarios B and C would require a large quantity of development to occur outside the Borough and in order to do so a combination of spatial scenarios would be required.
- 5.5.2 Spatial Option 1 would focus development in urban locations where access to services, amenities and sustainable transport modes is very good. Impacts on the natural environment, such as biodiversity, may be much less likely under this option than others. However, it would require a high density of development that in some locations could potentially reduce the quality of living for residents

Table 5-1: Scores recorded against each SA Objective for each strategic option assessed in Appendix C of this report

Key:

++	Major positive effect (significant)
+	Minor positive effect
0	Neutral effect
?	Uncertain effect
-	Minor adverse effect
--	Major adverse effect (significant)

Strategic Option	Poverty and social exclusion	Housing requirements	Health	Quality of where people live and work	Education and skills	Water quality and resource	Air quality	Soil and mineral resources	Waste	GHG emissions & energy	Climatic events & flooding	Coast and estuaries	Biodiversity and geodiversity	Historic importance	Landscapes and townscapes	Prosperity and growth	Town and retail centres	Movement & transport	Digital infrastructure
Preferred approach	+	++	+	+/-	+/-	-	-	+	-	-	+/-	+	+	+	+	++	++	++	++
Alternative scenario 1	+	++	+	+/-	+/-	-	-	+	--	-	+/-	+	+	+	+/-	++	++	+	++
Alternative scenario 2	+/-	++	+/-	+/-	+/-	--	--	+/-	--	--	+/-	+/-	-	-	-	++	++	+/-	+
Alternative scenario 3	+	++	++	+	++	--	--	-	--	--	+/-	+/-	-	-	-	++	++	+/-	+
Spatial Option 1	++	+	+	-	+	+/-	+/-	+	+	+	+/-	+	+	+/-	+	++	++	++	+
Spatial Option 2	+/-	++	+	++	+	+/-	-	--	-	-	-	-	-	+/-	--	++	+	-	+/-
Spatial Option 3	+/-	+	+	+/-	+	-	+/-	+/-	+/-	-	+/-	+/-	-	-	-	+	+	+/-	+/-
Spatial Option 4	+	++	++	+	+	+/-	-	-	+/-	-	+/-	-	-	-	-	+	+	-	+/-
Spatial Option 5	+	++	++	+	+	+/-	-	-	+/-	-	+/-	+/-	-	-	-	+	+	-	+/-
Spatial Option 6	+	++	+	+	+	+/-	-	--	-	-	-	+	-	-	-	+	+/-	-	+/-

6. Appraisal of Policies

6.1.1 Policies are proposed in the Core Strategy Review document and the Site Allocations and Policies Review document, including:

- Ipswich Strategic Planning Area policies;
- Core Strategy policies;
- Site based policies; and
- Development Management policies.

6.1.2 Each policy proposed in the LPR documents has been assessed for its likely impacts on each SA Objective in **Appendix D**. In each, the policies performed very positively and would be highly likely to help facilitate sustainable development in Ipswich. The only policies for which adverse impacts were identified were those that allocate development in the Borough.

Table 6-1: Policies proposed in the Core Strategy Review and Site Allocations and Policies Review

Core Strategy Policies
Policy ISPA1 Growth in the Ipswich Strategic Planning Area
Policy ISPA2 Strategic Infrastructure Priorities
Policy ISPA3: Cross-boundary mitigation of effects on Protected Habitats
Policy ISPA4: Cross Boundary Working to Deliver Peripheral sites
Policy CS1: Presumption in favour of Sustainable Development
Policy CS2: The Location and Nature of Development
Policy CS3: IP-One Area Action Plan
Policy CS4: Protecting our Assets
Policy CS5: Improving Accessibility
Policy CS6: The Ipswich Policy Area
Policy CS7: The Amount of Housing Required
Policy CS8: Housing Type and Tenure
Policy CS9: Previously Developed Land
Policy CS10: Ipswich Garden Suburb
Policy CS11: Gypsy and Traveller Accommodation
Policy CS12: Affordable Housing
Policy CS13: Planning for Jobs Growth
Policy CS14: Retail Development and Main Town Centre Uses
Policy CS15: Education Provision
Policy CS16: Green Infrastructure, Sport and Recreation
Policy CS17: Delivering Infrastructure
Policy CS18: Strategic Flood Defence
Policy CS19: Provision of Health Services
Policy CS20: Key Transport Proposals
Development Management Policies
Policy DM1: Sustainable Construction
Policy DM2: Decentralised Renewable or Low Carbon Energy
Policy DM3: Air Quality
Policy DM4: Development and Flood Risk
Policy DM5: Protection of Open Spaces, Sport and Recreation
Policy DM6: Provision of New Open Spaces, Sport and Recreation Facilities
Policy DM7: Provision of Private Outdoor Amenity Space in New and Existing Developments
Policy DM8: The Natural Environment
Policy DM9: Protection of Trees and Hedgerows
Policy DM10: Green Corridors
Policy DM11: Countryside
Policy DM12: Design and Character
Policy DM13: Built Heritage and Conservation
Policy DM14: Archaeology
Policy DM15: Tall Buildings

Policy DM16: Extensions to Dwellings and the Provision of Ancillary Buildings
Policy DM17: Small Scale Infill and Backland Residential Developments
Policy DM18: Amenity
Policy DM19: The Subdivision of Family Dwellings
Policy DM20: Transport and Access in New Developments
Policy DM21: Car and Cycle Parking in New Development
Policy DM22: The Density of Residential Development
Policy DM23: Protection and Provision of Community Facilities
Policy DM24: Shopfront Design
Policy DM25: Advertisement
Policy DM26: The Central Shopping Area
Policy DM27: Arts, Culture and Tourism
Policy DM28: The Evening and Night-time Economy
Policy DM29: District and Local Centres
Policy DM30: Town Centre Uses Outside the Central Shopping Area
Policy DM31 Retail Proposals Outside Defined Centres
Policy DM32: Protection of Employment Land
Policy DM33: Delivery and Expansion of Digital Communications Networks

Site Allocations Policies

Policy SP1 The protection of allocated sites
Policy SP2 Land allocated for housing
Policy SP3 Land with planning permission or awaiting a Section 106
Policy SP5 Land allocated for employment use
Policy SP6 Land allocated and protected as open space
Policy SP7 Land allocated for leisure uses or community facilities
Policy SP8 Orwell Country Park Extension
Policy SP9 Safeguarding land for transport infrastructure
Policy SP10 Retail Site Allocation
Policy SP11 The Waterfront
Policy SP12 Education Quarter
Policy SP13 Portman Quarter
Policy SP15 Improving pedestrian and cycle routes
Policy SP16 Transport Proposals in IP-One
Policy SP17 Town Centre Car Parking

6.2 Conclusions and Recommendations

- 6.2.1 The results of the assessments of policies identified largely positive impacts for all SA Objectives. These are presented in **Appendix D**. Where adverse impacts were identified, recommendations for mitigation measures were made. Where policies could potentially have a greater positive impact on an SA Objective, recommendations for improving a policy's impact or maximising its positive impact were made. Overall, the range of strategy and development management policies would be expected to help ensure that development in Ipswich over the Plan-period is environmentally, socially and economically sustainable. The cumulative and synergistic effects assessment in **Chapter 8** considers the impact of these policies in combination with the proposed sites allocations.

7. Appraisal of Sites

7.1 Identifying Reasonable Sites

7.1.1 The LPR has allocated a range of different sites in the Borough for residential, employment and mixed-use purposes. Given the limited availability of development land within Ipswich, the Council has allocated all the sites that are considered to be suitable and deliverable, in order to comply with the NPPF requirement to meet the objectively assessed housing need. During the process of assessing the deliverability, the following constraints were considered:

- Access and Highways;
- AQMA (within or close to);
- Area of Archaeological Importance;
- Conservation Areas;
- Contaminated Land;
- Existing Use;
- Flood Zone 2 and 3;
- Listed Buildings on site or nearby;
- Recreation and Open Space;
- Tree Preservation Order (TPO) on site or nearby;
- Wildlife site or adjacent to; and
- Noise.

7.1.2 There were also some locations considered to be undeliverable due to:

- Uncertainty with regard to the deliverability of the site within the plan period;
- Changed circumstances of existing use (when potential development is subject to relocation of existing uses on site);
- Development of the site has been completed; and
- Viability issues associated with amenity concerns, access and flood risk.

7.1.3 As an example of the above, some relatively small sites that could have accommodated a minor quantity of housing in the countryside of the Borough were considered by the Council. However, these sites typically had issues related to access, availability and amenity, with many of them adjacent or near to the A14 which would be a major source of air, noise and light pollution for new residents.

7.1.4 Given the requirement of the SEA Directive for the Council to consider 'reasonable alternatives' to proposals in the Plan, they have made best efforts to identify potential alternatives to the proposed site allocations. Following the filter process described above of discounting undeliverable sites, it was concluded that there are very limited potential alternative locations to those that were allocated for development (i.e. all likely deliverable sites have been allocated and those that are undeliverable can be seen as 'unreasonable'). However, two potential areas for future development were identified to the north of the Borough near Whitton Church Lane and Thurleston Lane. These areas face significant constraints including protected areas of open space, other existing site uses that play an important role in the local community as well as issues related to infrastructure and current site uses. These two areas were also appraised in **Appendix E** as alternatives to the proposed site allocations.

7.2 Sites assessed

7.2.1 Every site allocated for various uses under Policies SP1 – SP17 was assessed for its likely impacts on the SA Framework. They were also considered in the cumulative and synergistic effects assessment in **Chapter 8**. The sites assessed are listed in **Table 7-1**.

Table 7-1: Sites allocations assessed in this SA

1	IP152 Airport Farm Kennels
2	IP141a Land at Future Park, Nacton Road
3	IP150a Areas U, V & W, Ravenswood
4	IP010a Coop Depot, Felixstowe Road
5	IP010b Felixstowe Road
6	IP116 St Clement's Hospital Grounds
7	IP088 79 Cauldwell Hall Road
8	IP131 Milton Street
9	IP109 Rear of Jupiter Road and Reading Road
10	IP256 Sports Club, Henley Road
11	IP009 Victoria Nurseries, Westerfield Road
12	IP161 2 Park Road
13	IP140 Land north of Whitton Lane
14	IP032 King George V Field, Old Norwich Road
15	IP005 Former Tooks Bakery, Old Norwich Road
16	IP029 Opposite 674 – 734 Bramford Road
17	IP165 Eastway Business Park, Europa Way
18	IP033 Land at Bramford Road (Stock's Elite)
19	IP147 Land Between Railway Junction and Hadleigh Road
20	IP059 Arclion House and Elton Park Industrial Estate
21	IP061 Lavenham Road School Site
22	IP105 Depot, Beaconsfield Road
23	IP135 112–116 Bramford Road
24	IP221 Waterford Road
25	IP067b Former British Energy Site
26	IP132 - King George V Field, Old Norwich Road
27	IP205 - Burton's, College Street
28	IP136 - Silo, College Street
29	IP035 - Key Street / Star Lane / Burtons (St Peter Port)
30	IP211 - Regatta Quay, Key Street
31	IP206 - Cranfields, College Street
32	IP011a - Lower Orwell Street
33	IP089 - Waterworks Street
34	IP074 - Church and land at Upper Orwell Street
35	IP012 - Peter's Ice Cream
36	IP043 - Commercial Buildings & Jewish Burial Ground Star Lane
37	IP051 - Old Cattle Market Portman Road
38	IP004 - Bus depot Sir Alf Ramsey Way
39	IP096 - Car Park Handford Road East
40	IP245 - 12-12a Arcade Street
41	IP172 - 15-19 St Margaret's Green
42	IP214 - 300 Old Foundry Road
43	IP169 - 23-25 Burrell Road
44	IP047 - Land at Commercial Road
45	IP015 - West End Road Surface Car Park
46	IP094 - Land to rear of Grafton House
47	IP149 - Land at Pond Hall Carr and Farm
48	IP098 - Transco, south of Patteson Road
49	IP042 - Land between Cliff Quay and Landseer Road

50	IP142 - Land at Duke Street
51	IP080 - 240 Wherstead Road
52	IP200 - Griffin Wharf, Bath Street
53	IP039a - Land between Gower Street & Gt Whip Street
54	IP133 - South of Felaw Street
55	IP188 - Websters Saleyard site, Dock Street
56	Whitton Church lane area (WCL)
57	Thurleston Lane area (TL)
58	IP150b - Land at Ravenswood
59	IP003 - Waste tip and employment area north of Sir Alf Ramsey Way
60	IP011b - Smart Street, Foundation Street (South)
61	IP011c - Smart Street, Foundation Street (North)
62	IP014 - Hope Church
63	IP028a - Jewsons, Greyfriars Road and island adjacent
64	IP028b - Jewsons, Greyfriars Road and island adjacent
65	IP040 - Former Civic Centre / Civic Drive
66	IP041 - Former Police Station, Civic Drive
67	IP045 - Land bounded by Cliff Road, Toller Road and Holywells Road
68	IP048a - Mint Quarter / Cox Lane East regeneration area
69	IP048b - Mint Quarter / Cox Lane West regeneration area
70	IP052 - Land between Lower Orwell Street & Star Lane (former Essex Furniture)
71	IP054b - Land between Old Cattle Market and Star Lane
72	IP064a - Land between Holywells Road and Holywells Park
73	IP067a - Former British Energy Site
74	IP083 - Banks of River upriver from Princes Street
75	IP119 - Land east of West End Road
76	IP129 - BT Depot, Woodbridge Road
77	IP143 - Former Norsk Hydro, Sandyhill Lane
78	IP226 - Helena Road/Patteson Road
79	IP150d - Land south of Ravenswood – Sports Park
80	IP150e - Land south of Ravenswood
81	IP307 - Prince of Wales Drive
82	IP346 - Suffolk Retail Park - north
83	IP279 – Former British Telecom Office, Bibb Way
84	IP283 25 Grimwade Street
85	IP031 Burrell Road
86	IP037 Island Site
87	IP066 JJ Wilson and land to rear at Cavendish Street
88	Humber Doucy Lane Broad Location

7.3 Results, Conclusions and Recommendations

- 7.3.1 The results of the sites assessments are presented in **Appendix E**. Overall, a diverse mix of likely impacts were identified. Cumulative, synergistic and secondary impacts of these sites in combination with other proposals in the LPR, as well as with planned development in neighbouring authorities, is provided in **Chapter 8**. In each case, where adverse effects have been identified, recommendations have been made for avoiding or mitigation these effects. Where appropriate, recommendations were also made for enhancing likely positive effects.

8. Cumulative, Synergistic and Secondary Effects

8.1 Background

- 8.1.1 Annex 1(f) of the SEA Directive requires SEA to provide information on the likely significant effects, including “secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects”.
- 8.1.2 The assessment of each option indicates whether identified effects are considered to be positive or negative, short, medium or long term as well as permanent or temporary. These assessments of options, presented in the appendices of this report, also account for both direct and secondary effects. The purpose of this chapter is to provide an overview of the likely cumulative and synergistic effects, which can be defined as follows:
- **Cumulative effects** arise, for instance, where several proposals each have insignificant effects but together have a significant effect, or where several individual effects of the proposal have a combined effect; and
 - **Synergistic effects** interact to produce a total effect greater than the sum of the individual effects, so that the nature of the final impact is different to the nature of the individual impacts.

8.2 Cumulative and synergistic effects of proposals in the Ipswich LPR

- 8.2.1 The Ipswich LPR proposes a range of sites for different types of development across the Borough, in addition to various strategy, development management and site-based policies. Each has been assessed for its likely impacts on each SA Objective in detail. The purpose of this section is to provide an assessment of the likely cumulative effects of all proposals in combination against each SA Objective. This process naturally involves a large degree of uncertainty and assumptions have to be made in each case. Best efforts have been made to provide an indication of the overall uncertainty of effects and to identify likely significant effects. The results of this process as presented in **Table 8-1**.

Table 8-1: Cumulative and synergistic effects assessment of proposals in the LPR

Key:

++	Major positive effect (significant)
+	Minor positive effect
0	Neutral effect
?	Uncertain effect
-	Minor adverse effect
--	Major adverse effect (significant)

SA Objective	Overall score	Duration & uncertainty	Commentary
1 - To reduce poverty and social exclusion	++	S-LT Low uncertainty, Reversible	<p>Likely significant effects: The LPR allocates a range of residential sites in locations that will help to ensure the significant majority of Ipswich’s residents have excellent access to community facilities and areas, such as open spaces, arts and cultural facilities as well as those associated with the night-time economy. Various policies safeguard and seek to enhance community facilities, particularly those in locations accessible via public transport modes and walking and cycling. Cumulatively and synergistically, the LPR would therefore make a major contribution towards combatting the risk of social exclusion. The provision and enhancement of digital infrastructure, including that which can adapt to future technologies like 5G, will also help to combat risk of social exclusion. The LPR allocates a range of employment sites, the combination of which would facilitate the anticipated growth in jobs and prosperity in the Borough. It is highly likely that the growth in local employment opportunities for residents will make a major contribution towards tackling poverty, through increased employment. The significant majority of new homes would have excellent access to education facilities whilst there will, in some cases, be the provision of expanded or new education facilities. Educational attainment can be a highly effective route out of poverty.</p> <p style="background-color: #ADD8E6;">Recommendations: New or enhanced community facilities should be designed and managed in a manner that encourages as much community interaction as possible, with support provided that encourages community engagement for all of the local population’s diverse preferences. Particular efforts may be needed for categories of society more prone to loneliness, including those aged 16 – 24.</p>
2 - To meet the housing requirements of the whole community	++	S-LT Low uncertainty, Reversible	<p>Likely significant effects: The Council have identified the OAN for the Borough based on the best available data using the most up to date methodology. The LPR has allocated enough land to accommodate new homes to the extent that the OAN can be satisfied over the LPR period with a five-year supply consistently identified. Of these new homes, the Council has determined that, based on trend data and the SHMA, there is a need for 19.5% of housing to be Affordable Rented and 14.8% affordable home ownership. The Council have therefore</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
			<p>determined that, for sites of 10+ dwellings, there should be provision of at least 15% on-site affordable housing by number of dwellings, 60% of which should consist of affordable housing for rent. Cumulatively and synergistically, the LPR would make a major contribution towards meeting the housing requirements of the whole community.</p> <p>Recommendations: Homelessness rates have been declining in Ipswich over the past few years. The provision of affordable homes over this period has no doubt contributed towards this. It is recommended that developments are strongly encouraged to exceed the 14.8% rate where feasible.</p>
<p>3 - To improve the health of the population overall and reduce health inequalities</p>	<p>+</p>	<p>S-LT Medium uncertainty, Reversible</p>	<p>Likely significant effects: The proposed residential sites allocated for development in Ipswich would be expected to situate nearly all new residents in locations where they are within 1-4km, and typically within 1km, of a GP surgery as well as within 8km of Hospitals. A new doctor's surgery is included within the IP005 site allocation in the north west of the Borough, where access to a GP surgery is currently somewhat limited. For some residents, access to a diverse range of natural habitats is limited given their relatively urban location in central Ipswich. However, access to open spaces including public parks is generally very good, particularly as a number of sites include the provision of open space (as allocated in Policy SP6). It should also be noted that approximately 5.8% of mortality in Ipswich is considered to be associated with Nitrogen Oxide (NOx) pollution, higher than the 5.3% average seen for England. This is due to the relatively poor air quality in several areas of the Borough. Many sites proposed for residential development in the LPR are adjacent to A-roads or in proximity to AQMAs, where NOx pollutant is a particular concern. Whilst there are policies in the LPR designed to help improve local air quality, such as Policy DM3 Air Quality, there is a risk that should air quality not improve as much or as fast as hoped, the long-term health of some new residents could be harmed by exposure to particulate pollution.</p> <p>Recommendations: There are some concerns over the capacity of GP surgeries across the Borough and careful consideration may be needed to ensure that all new and existing residents are able to access a GP surgery. Access to a diverse range of natural habitats as well as public open spaces is essential to the physical and mental wellbeing of residents. Best efforts should be made to ensure that all residents are able to walk or cycle to nearby public open spaces as well as natural or semi-natural habitats. Recommendations for sites allocations have been made within the sites assessments, many of which involve incorporating green infrastructure (GI) into the development proposals. Incorporating high quality GI comprised of a diverse range of native species into the development is an effective means of ensuring new residents can experience nature in their daily lives. There should be a strategic overview of this approach to ensure the GI network is designed and laid out in a</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
			manner that utilises the air filtering, climate cooling, wildlife supporting, and flood risk alleviating services naturally provided.
4 - To improve the quality of where people live and work	-	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: It is expected that in the significant majority of cases, the LPR will help to ensure that people in Ipswich are able to pursue high-quality and active lifestyles both at home and at work. However, given the nature of Ipswich with its network of A-roads and busy roads, as well as the four AQMAs in the centre of Ipswich associated with some of these roads, it is possible that many new residents may be exposed to poor air quality as well as noise and light disturbance associated with road transport and road infrastructure. This air quality will be likely to improve over time in the long-term, given the good access to public transport modes benefitting most of the proposed residential development, as well as their proximity to services, facilities and employment areas (thereby enabling higher rates of walking and cycling) as well as the national trend of moving towards electric and low-emission vehicles.</p> <p>Various development management policies will be likely to help mitigate this to some extent, including those that would protect and enhance GI and plant cover as well as those that set out requirements for air quality improvement, sustainable construction, low carbon developments and the provision of outdoor amenity spaces. However, overall, a minor adverse impact on the quality of where people live and work as a result of options in the LPR, when considered cumulatively and synergistically, cannot be ruled out.</p> <p>Recommendations: Where feasible, new residential development should be situated as far back from sources of noise, air and light pollution as possible. GI should be incorporated into developments as much as possible in a manner that provides an effective means of screening homes from light pollution whilst also filtering out air pollutants. There should be a strategic overview of this approach to ensure the GI network is designed and laid out in a manner that utilises the air filtering, climate cooling, wildlife supporting, and flood risk alleviating services naturally provided.</p> <p>Where sites are situated in areas of poor air quality, such as within or adjacent to AQMAs, careful consideration would be needed for ventilation in homes and the circulation of fresh air.</p>
5 - To improve levels of education and skills in the population overall	++	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: The significant majority of sites allocated for residential development would provide residents with good access to primary and secondary school facilities, frequently being within 500m of a primary school and within 1km of a secondary. Several sites would also provide for an extension to an existing school (e.g. Rosehill) or the provision of a new school (e.g. at site IP048a). This is in line with Policy CS15, which seeks to ensure that there is adequate provision of new or expanded education opportunities to satisfy the needs of the growing local population. The sites assessment results indicate a large portion of new residents may be reliant on schools</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
			<p>including St Matthew’s Church of England Primary School, St Helen’s Nursery and Primary School and Stoke High School and so close consideration on the capacity of these schools may be required. Local residents also benefit from excellent access to the University of Suffolk as well as Suffolk New College, the continuing development of which the Council also seek to support. The provision of new employment land would also offer the local community with access to a broad range of new jobs, which would be expected to provide opportunities for learning new skills. Cumulatively and synergistically, options in the LPR would be expected to make a major positive contribution towards improving the levels of education and skills in Ipswich’s population overall.</p> <p>Recommendations: When determining if there is adequate education provision to satisfy the need, consideration should be given to the accessibility of education opportunities. Residents would ideally be within 500m-1km of their primary school and within 1-2km of their secondary school. Schools should also be accessible via sustainable modes including bus with safe walking and cycling links also provided or enhanced.</p>
6 - To conserve and enhance water quality and resources	-	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: In terms of water resources, it is expected that the LPR will ensure there is an adequate supply of water to match the needs of development before it takes place. Given the scale of development proposed in the LPR, it would be expected to result in a net increase in water consumption over the Plan period. It is considered to be unlikely that water quality would be significantly harmed by the LPR. The majority of sites allocated for development are not within 100m of a natural waterbody and so would not pose a risk to water quality. Some residential and employment sites are adjacent to the River Gipping and the River Orwell and in these cases the construction and operation of development could pose a risk to water quality, although policies in the LPR (as well as EA guidance) will help to minimise this risk. Given the nature of the built form pre-existing in these areas, development here would not pose a major new risk different to that which is already present. Policies such as DM4 and CS1 would help to manage surface water runoff, such as by incorporating SuDS into development, and this will help to reduce the risk of adversely impacting water quality.</p> <p>Recommendations: Development adjacent to, or within 100m of, waterbodies and the rivers should incorporate SuDS into the development to reduce the risk of contamination through surface runoff. GI should be incorporated into development in a manner that also helps to reduce rates of runoff. There should be a strategic overview of this approach to ensure the GI network is designed and laid out in a manner that utilises the air filtering, climate cooling, wildlife supporting, and flood risk alleviating services naturally provided. During the construction at these sites, best practice should be adopted to prevent contamination or pollution of nearby waters in line with EA guidance.</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
7 - To maintain and where possible improve air quality	-	S-LT Medium uncertainty, Permanent	<p>Likely significant effects:</p> <p>The LPR proposes the construction and occupation of several thousand new homes as well as the facilitation and operation of thousands of new jobs. It is expected that this would lead to some degree of air pollution, largely due to emissions from buildings and businesses as well as an associated increase in local traffic. It is unclear if this would lead to a net reduction in local air quality, particularly given the below factors and that an air quality study for the Borough found emissions to be improving⁴. However, it is likely that the proposed development in the Borough would make it more difficult to achieve air quality improvement targets, such as at AQMA No. 3 which is within 50m of approximately 800 proposed dwellings.</p> <p>The LPR proposes various policies that will help to combat air pollution throughout the Borough, particularly DM3: Air Quality which commits the Council to an Air Quality Action Plan that will be published, and which identifies action and measures for reducing emissions. The Council will also require Air Quality Assessments for certain types of development in the Borough. In addition to this, policies which reduce the need for residents to travel, including DM33 on the Delivery and Expansion of Digital Communications Network, and those that enable more sustainable and efficient travel, including DM5 on Improving Accessibility, would help to limit pollution and emissions associated with the transport sector. Policies protecting and enhancing GI and vegetation will help to preserve the air filtering service provided by plants and canopy.</p> <p>Additionally, the significant majority of development proposed in the LPR would ensure new residents and workers have excellent access to public transport modes including bus and rail. Given their proximity to jobs, homes, services and amenities higher rates of walking and cycling are also likely to be encouraged over time. It should also be noted that national and international trends, most notably the move towards renewable energies as well as electric and low-emission vehicles, is helping to reduce rates of air pollution from the transport and energy sectors and this will be likely to benefit air quality in Ipswich.</p> <p>Recommendations:</p> <p>GI should be incorporated into new developments in manner that filters air pollutants. There should be a strategic overview of this approach to ensure the GI network is designed and laid out in a manner that utilises the air filtering, climate cooling, wildlife supporting, and flood risk alleviating services naturally provided. Where new residential development occurs, it is likely that they will have good access to a number of bus stops with frequent services. However consideration is likely needed for the capacity of such services and there may in some cases be a need to increase the quantity or frequency of bus services.</p> <p>Electric vehicle charging points are currently encouraged in new developments. The Council should seek to ensure that these are provided as often as possible.</p>

⁴ WSP / Parsons Brinckerhoff (May 2016) Ipswich Core Strategy Air Quality Report

SA Objective	Overall score	Duration & uncertainty	Commentary
			<p>Residents and employees may be less willing to walk or cycle if their route is deemed unsafe. It is recommended that where pedestrian and cycling links are provided, careful consideration should be given to the safety of these routes, such as by not restricting cycle lanes to narrow strips on busy roads. High quality, attractive and safe routes, that could frequently tie in with the GI network, would encourage good rates of cycling and walking and this may be key to preventing further reductions in air quality.</p>
<p>8 - To conserve and enhance soil and mineral resources</p>	<p>-</p>	<p>S-LT Low uncertainty, Permanent</p>	<p>Likely significant effects: The LPR gives close consideration to the potential impacts of its proposals on soils. The significant majority of sites allocated for development are brownfield sites and would constitute an efficient use of land that helps to minimise permanent losses of non-renewable soils. Various policies will be likely to have indirect benefits to soils, including those that seek to protect and enhance biodiversity and above ground biomass given the importance of this for belowground biodiversity and the structure and fertility of soils. The LPR pursues a relatively high density of development in various locations, particularly along the waterfront, and this will help to ensure development uses the Borough’s land efficiently. However, overall, the LPR would be expected to result in a permanent and net loss of ecologically and agriculturally valuable soils, including those that are Grade 2 Agricultural Land Classification (ALC) (i.e. the Borough’s best and most versatile soils). This is predominantly due to the 195ha Garden Suburb, nearly all of which is situated on greenfield land and much of which is on Grade 2 ALC land. The provision of 64.5ha of open space and the country park within the Garden Suburb would help to minimise these losses, as too would the range of residential gardens and outdoor amenity spaces. However, a permanent net loss of non-renewable and highly valuable soils would be unavoidable.</p> <p>Recommendations: Where development is situated on greenfield land, sustainable soil management techniques should be enforced during the construction phases to avoid the unnecessary losses of soils and to minimise the risk of compaction, contamination or erosion of soils. Where feasible, excavated soils should be reused elsewhere on the site.</p>
<p>9 - To promote the sustainable management of waste</p>	<p>-</p>	<p>S-LT Medium uncertainty Permanent</p>	<p>Likely significant effects: The consideration of waste is present in various aspects of the LPR. Several policies, such as CS1 and CS4 will help to ensure that new employment, residential and other forms of development utilise renewable, recycled, reusable and low-impact materials during construction and occupation as well as to ensure that residents and workers have good access to waste recycling facilities. This would make a positive contribution towards limiting the amount of waste sent to landfill. Furthermore, the majority of new development proposed in the Borough is on brownfield and previously developed land. In such cases, there may be opportunities for making good use of pre-existing materials or buildings.</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
			<p>However, overall it is expected that the LPR would result in a net increase in the quantity of waste sent to landfill. This is due to the quantity of development proposed, the increase in the number of workers and residents and the waste that this would generate, not all of which can be or will be recycled or reused.</p> <p>Recommendations: It is expected that the majority of waste management in Ipswich would be carried out through Suffolk County Council’s Minerals and Waste Local Plan, which was submitted to the Planning Inspectorate on 21 December 2018. The Council should pursue the ideals of a circular economy as much as feasible, wherein materials are kept in use for as long as possible, as well as to recover and regenerate products and materials at the end of their lives. This may include encouraging developers to make best efforts to reuse any materials, foundations or buildings pre-existing in brownfield or previously developed locations.</p>
<p>10 - To reduce emissions of greenhouse gases from energy consumption</p>	<p>-</p>	<p>S-LT Medium uncertainty, Permanent</p>	<p>Likely significant effects: Several components of the LPR will help to limit increases in both energy consumption and GHG emissions in the Borough and it is a key objective of the LPR to reduce the Borough’s carbon footprint. In particular, the significant majority of new sites have excellent access to bus, rail, walking and cycling links that will encourage more sustainable and efficient movement that limits GHG emissions associated with road vehicles. Residents of Ipswich typically have a lower carbon footprint per capita than the England average (3.7 tonnes carbon per year for Ipswich vs 6 tonnes carbon per year average for England). GI will be protected in many places throughout the Borough and this will provide a carbon capture and storage service. Policy DM1 sets out strict requirements on new residential development to be relatively energy efficient and for non-residential development to perform well against BREEAM, as well as a requirement for new builds to have carbon emissions 19% below the Target Emission Rate of the 2013 edition of the 2010 Building Regulations. DM2 sets out standards for decentralised renewable and low carbon energy, with large non-residential developments, and residential developments of 10+ dwellings or 1000m²+, being expected to source at least 15% of their energy from decentralised and renewable or low-carbon sources. Overall however, the LPR would deliver several thousand new homes and facilitate significant economic growth. This would be expected to lead to some increase in energy consumption, the majority of which would be non-renewable energy. There would also be some degree of increase in local transport movements. Cumulatively and synergistically, the LPR would be expected to contribute towards a net increase in GHG emissions and energy consumption.</p> <p>Recommendations: Adapting to and addressing climate change is a particularly urgent challenge for the East of England, which is considered to be highly vulnerable to the impacts of climate change and where a high level of future development is planned, and subsequently high carbon emissions are likely.</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
			<p>It will ultimately be necessary to pursue carbon neutral development. It is recommended that the Council consider opportunities for increasing the emissions reduction standard and energy efficiency homes to the extent that carbon neutral homes are being delivered in Ipswich by 2036.</p> <p>GI should be incorporated into new developments in manner that filters air pollutants. There should be a strategic overview of this approach to ensure the GI network is designed and laid out in a manner that utilises the air filtering, climate cooling, wildlife supporting, and flood risk alleviating services naturally provided.</p>
<p>11 - To reduce vulnerability to climatic events and flooding</p>	<p>-</p>	<p>S-LT Low uncertainty, Reversible</p>	<p>Likely significant effects: Coursing through the centre of Ipswich are the River Orwell and the River Gipping, associated with which are EA Flood Zones 2 and 3. Additionally, throughout the Borough are areas of medium and high surface water flood risk (SWFR). The LPR distributes much of the desired development in locations where flood risk is not a concern. However, this was clearly not feasible for all sites and, particularly for those in the centre of Ipswich, some sites allocated for development are at a high risk of fluvial or surface water flooding.</p> <p>Some of the policies put forward in the LPR, including DM4 on Development and Flood Risk, will help to minimise the extent of flood risk face by workers and residents at these sites, such as due to the incorporation of SuDS within development proposals. Furthermore, Policy CS18 makes clear that the provision of strategic flood defence infrastructure is a key component of the LPR, delivered through the Ipswich Flood Defence Management Strategy, and integral to ensuring the proposed development can take place.</p> <p>However, it is expected that the LPR would lead to an increase in the number of residents and employees living and working in Flood Zones 2 and 3, as well as areas of high SWFR. Whilst the proposed mitigation measures and the defence strategy will help to minimise this, it will not be feasible to counter all the risk. It should be noted that the Development and Flood Risk SPD (2016) established that sites in the Borough are safe in terms of flood risk.</p> <p>Recommendations: GI should be incorporated into new developments through a strategic approach to ensure the GI network is designed and laid out in a manner that utilises the air filtering, climate cooling, wildlife supporting, and flood risk alleviating services naturally provided.</p> <p>Where there are areas of high SWFR within site perimeters, development should seek to avoid these through a careful layout. SuDS should also be incorporated into development at these locations to help manage surface water runoff.</p>
<p>12 - To safeguard the integrity of the coast and estuaries</p>	<p>+</p>	<p>S-LT Medium uncertainty, Reversible</p>	<p>Likely significant effects: No proposals in the LPR would be expected to impact on the coast and estuaries to a major degree, although protection and enhancement is given to the Stour and Orwell Estuaries SPA through Policy CS4. No proposals in the LPR were expected to result in an adverse impact on the coasts and estuaries and Policy CS4 will help provide assurance of this.</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
<p>13 - To conserve and enhance biodiversity and geodiversity</p>	<p>-</p>	<p>S-LT Medium uncertainty, Reversible</p>	<p>Likely significant effects: The significant majority of sites allocated for development in the LPR will provide an opportunity to enhance the local biodiversity value, primarily due to the provision of GI and new habitats in currently brownfield locations of limited biodiversity value. However, in some cases, and most notably within the large Garden Suburb, there could be an adverse impact on priority species and habitats due to the presence of agricultural land. The Garden Suburb would be expected to result in the loss of a significant quantity of greenfield, although the planned inclusion of a country park and other green infrastructure elements will help to counter this. In addition, as much of the site is regularly ploughed arable farmland, there is scope to enhance biodiversity through the creation of new landscape and green infrastructure features.as identified in the Ipswich Garden Suburb SPD (2017). Some sites allocated for development are adjacent to County Wildlife Sites, most commonly the River Gipping wildlife site, and adverse impacts may arise from both the construction and occupation phases of development. Various policies set out in the LPR would seek to ensure that overall biodiversity in the Borough is protected and enhanced over the Plan period, including CS4 which safeguards biodiversity assets as well as DM8, DM9 and DM10 which protect the natural environment, trees and hedgerow as well as green corridors. Cumulatively and synergistically, it is considered to be likely that the LPR would have an overall minor adverse impact on local biodiversity.</p> <p>Recommendations: GI throughout the Borough should be joined in a coherent network that enables the movement of wildlife through the network and into or out of the Borough freely with minimal blocking off by roads or the built form. Best efforts should be made to ensure that the tree canopy in Ipswich increases over the Plan period, which can only be achieved by ensuring new developments include the provision of new GI that is in part comprised of tree planting. GI should be comprised of a diverse range of native species capable of supporting a diverse range of wildlife, including insects. Blue infrastructure such as wildlife rich ponds and streams should be protected and enhanced within the GI network.</p>
<p>14 - To conserve and where appropriate enhance areas and assets of historical and</p>	<p>+</p>	<p>S-LT Medium uncertainty, Reversible</p>	<p>Likely significant effects: Adverse impacts on the historic environment or sensitive heritage assets are considered to be highly unlikely in most cases. This is because the significant majority of sites allocated for development in the Borough are on previously developed brownfield sites, many of which are vacant or derelict plots that are visually unattractive and currently have a negative impact on the local character and setting. Notwithstanding this, these sites may still have archaeological interest which needs to be appropriately assessed, and may be within proximity to Listed Buildings and other heritage assets. As such, development here is an opportunity to improve the site’s contribution to the local character and positively enhance the setting of any nearby heritage assets. Additionally, the centre of Ipswich has swathes of archaeological interest relating to a Saxon settlement. Development in</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
archaeological importance			<p>these locations will often be a chance to conduct investigation into the presence of known and unknown archaeological assets.</p> <p>Various policies are also proposed in the LPR to inform the strategy and guide development in a manner that will protect and enhance the historic environment, including CS4 on protecting assets, DM13 on the heritage environment and DM14 on archaeology.</p> <p>Recommendations: Given the historic character of Ipswich and the range of Listed Buildings and other assets, much of the proposed development is in proximity to sensitive assets and areas. In each case, efforts should be made to ensure the site makes a positive contribution to the local character and setting through a careful layout, high-quality design, vernacular architecture and the incorporation of GI.</p>
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	-	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: As the majority of sites are previously developed brownfields in urban locations, and are frequently vacant or derelict, it is likely that most new development delivered through the LPR will make a positive contribution to the local townscape character. Various strategy and development management policies are also designed to ensure that new development is situate where it is in-keeping with the existing setting and nearby uses. No adverse impacts on an AONB were identified.</p> <p>However, in a limited number of cases and most notably with the Garden Suburb and potentially the Humber Doucy Broad Location, adverse impacts on character are considered to be likely. This is due to the loss of large greenfield sites and their replacement with the built form, although measures included in the Garden Suburb Supplementary Planning Document, such as the country park and other green infrastructure elements, will help to limit adverse impacts on character. It is expected that DM policies will help to ensure development is of a high-quality design with GI incorporated and this will help to limited adverse impacts.</p> <p>Recommendations: High-quality GI comprised of a diverse range of native species, including mature trees, should be incorporated into development that might alter the local character. Best efforts should be made to ensure development is of a design, scale and type appropriate to the area as much as is feasible. In some development proposals, particularly at the Garden Suburb, it may be achievable to adopt innovative mitigation measures that help to screen the built form, such as by focussing the built form in dipped locations, whilst providing attractive GI in more prominent locations.</p>

SA Objective	Overall score	Duration & uncertainty	Commentary
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	S-LT Low uncertainty, Reversible	Likely significant effects: The LPR would be expected to make a major positive contribution towards sustainable economic growth and prosperity in Ipswich. This is primary because the quantity of land allocated for employment uses would facilitate the anticipated growth in jobs. Additionally, the distribution of development will help to ensure jobs are highly accessible for residents and businesses are accessible to customers. The provision of new and enhanced digital infrastructure will help to enable local businesses to compete in national and international markets whilst supporting a transition to more internet-based companies.
17 - To maintain and enhance the vitality and viability of town and retail centres	++	S-LT Low uncertainty, Reversible	Likely significant effects: Town and retail centres throughout Ipswich would be expected to receive a major boost to their viability and vibrancy over the Plan period due to proposals in the LPR. The support and creation of new jobs would make a direct contribution to their competitiveness. Various DM policies would help to ensure development of particular types and scale are located appropriately to support the competitiveness of centres. The regeneration and rejuvenation of derelict or run-down sites, and various other policies that would enhance the attractiveness and appeal of central areas, will contribute towards and increased footfall in these areas. This is particularly so due to their excellent accessibility via walking, cycling, bus and train.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	++	S-LT Low uncertainty, Reversible	Likely significant effects: The LPR would be expected to help ensure that residents and workers in Ipswich are able to move efficiently and relatively sustainably. Residents will be in proximity to services and facilities and so will rarely need to travel long distances. It is likely that they will be able to walk or cycle to most locations, whilst excellent access to bus and rail links will offer alternative sustainable modes of transport. Recommendations: Residents and employees may be less willing to walk or cycle if their route is deemed unsafe. It is recommended that where pedestrian and cycling links are provided, careful consideration should be given to the safety of these routes, such as by not restricting cycle lanes to narrow strips on busy roads. High quality, attractive and safe routes, that could frequently tie in with the GI network, would encourage good rates of cycling and walking.
19 - To ensure that the digital infrastructure available meets the needs of	++	S-LT Low uncertainty, Reversible	Likely significant effects: It is considered to be likely that, overall, the LPR would facilitate a significant enhancement to residents and workers' access to digital infrastructure. Most new residents will be situated in urban and central locations where such access is very good and where the enhancement of infrastructure would benefit large numbers of people. It is also expected that new infrastructure would be provided through Policy DM33 on the delivery and expansion of the network.

SA Objective	Overall score	Duration & uncertainty	Commentary
current and future generations			<p>Recommendations: Digital infrastructure enhanced or provided in the Borough should be able to adapt to future technologies such as 5G.</p>

8.3 Cumulative and synergistic effects with development in neighbouring authorities

- 8.3.1 The assessment of cumulative effects involved considering all relevant plans and programmes. Some of the development proposed in the Ipswich LPR is near the Borough's boundary, on the other side of which are, on occasion, sites being considered for development in neighbouring authorities. The following plans were factored into the cumulative effects assessment:
- Babergh and Mid Suffolk District Council – Joint Local Plan; and
 - Suffolk Coastal Local Plan Review.
- 8.3.2 Neither of the above plans are finalised or adopted and are currently in the process of determining where to situate new development. Of the Babergh and Mid Suffolk Joint Local Plan, residential and employment sites from the SHELAA that are potential allocations adjacent to the north and western perimeters of Ipswich, and that have not been discounted or deemed unreasonable, were identified. It is largely uncertain if any or all of these sites would be allocated and so in line with the precautionary principle, they will each be considered in the cumulative effects assessment. This includes:
- SS0721 - Former Sugar Beet Factory Site, Sproughton Road (size unknown, employment use);
 - SS0299 - Land at Poplar Lane, 12ha for 475 dwellings; and
 - SS0191 - Land west of London Road (A1214) and east of Hadleigh Road, 31.4ha for 700 dwellings.
- 8.3.3 Of the sites being considered for development in the Suffolk Coastal Local Plan review, the following sites were identified in the potential allocations list and, at the time of writing, it is considered to be likely that they will be allocated for the described development and will therefore be included in the cumulative effects assessment:
- SCLP12.24 Land at Humber Doucy Lane, approximately 8ha for 150 dwellings;
 - SCLP12.22: Land off Lower Road and Westerfield Road, at least 24.5ha of country park in association with Ipswich Garden Suburb; and
 - SCLP12.64: Land at Lower Road Westerfield, 2.45ha for 45 homes and open space.
- 8.3.4 A number of other sites were identified as reasonable alternatives in the Suffolk Coastal Local Plan Review. They are currently not scheduled for allocation and are unlikely to be so, generally because the local authority has determined other sites to be more appropriate for allocation. For the Suffolk Coastal LPR, growth in the east of Ipswich area is not central to the plan strategy. These alternative sites will not be included in the cumulative effects assessment. This will be revisited later in the SA process to ensure the cumulative effects assessment factors in the correct set of allocated sites in neighbouring authorities as these may be subject to change.
- 8.3.5 The results of the cumulative effects assessment of proposals in the Ipswich LPR in combination with the above listed sites in neighbouring authorities is presented in **Table 8-2**.

Table 8-2: Cumulative and synergistic effects of proposals in the LPR with development planned in neighbouring authorities

Key:

++	Major positive effect (significant)
+	Minor positive effect
0	Neutral effect
?	Uncertain effect
-	Minor adverse effect
--	Major adverse effect (significant)

SA Objective	Overall score	Duration & uncertainty	Commentary
1 - To reduce poverty and social exclusion	+	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: Sites currently being considered (i.e. identified through the SHELAA) for development in the Babergh and Mid Suffolk Plan would see approximately 1,175 new homes near Ipswich’s south-western perimeter in proximity to Sproughton, as well as new employment land. Development currently planned near Westerfield in the Suffolk Coastal Plan, as well as near Humber Doucy Lane, would also see several hundred homes in these locations. In each case, the planned development in neighbouring authorities is in proximity to residential sites currently allocated in the Ipswich Plan, including the Ipswich Garden Suburb and the Humber Doucy Lane Broad Area. It is considered to be likely that, cumulatively and synergistically, the development proposed in each authority would help to situate new residents in proximity to other residents and within coherent communities that also have excellent access to jobs and services and will thus combine to help combat the risk of social exclusion.</p> <p style="background-color: #ADD8E6;">Recommendations: When determining the accessibility of services, facilities and jobs for new residents, the development planned in neighbouring authorities should be considered. Cross-boundary efforts to ensure residents are able to move freely to access services and facilities in settlements or neighbourhoods, as well as jobs, such as via pedestrian or cycle routes, just outside the Borough border would help to combat exclusion and poverty.</p>
2 - To meet the housing requirements of the whole community	++	S-LT Low uncertainty, Reversible	<p>Likely significant effects: It is considered to be likely that districts neighbouring Ipswich will have enough land to accommodate enough housing to satisfy their respective needs, as indicated by their respective SHELAAAs.</p> <p style="background-color: #ADD8E6;">Recommendations: Cross-boundary cooperation may be needed to ensure there is adequate affordable housing provision on a settlement by settlement basis.</p>
3 - To improve the health of the population overall and	+	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: It is considered to be likely that development in neighbouring authorities would help to establish coherent communities that benefit the mental wellbeing of residents. In some cases, it is unclear if new residents in sites in neighbouring authorities would rely on health services such as GP surgeries or hospitals in Ipswich.</p>

reduce health inequalities			<p>SCLP12.22 in Suffolk Coastal includes the provision of 24.5ha of open space which will help to ensure residents of Ipswich Garden Suburb have good access to open and green spaces as well as a diverse range of natural habitats.</p> <p>The Humber Doucy Lane area would be expected to result in the loss of greenfield land and open spaces, that may reduce local residents' access to such spaces. Site SCLP12.24 in Suffolk Coastal may exacerbate this impact.</p> <p>Recommendations: Residents in Ipswich sites that are in proximity to sites in neighbouring authorities should be provided with opportunities to engage with their local community and to socialise with neighbours. This may require carefully planned pedestrian and cycle routes in to neighbourhoods in Mid Suffolk, Babergh or Suffolk Coastal districts.</p>
4 - To improve the quality of where people live and work	-	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: Cumulatively, a large quantity of development is being considered in proximity to Ipswich. In some cases, this could be a source of noise, air and light pollution as a result of the extensive construction works and the increase in road traffic from new residents.</p> <p>Sites in neighbouring authorities would also result in a reduction in greenspaces and vegetation that currently contribute towards high visual attractiveness and amenity in the local area. Conversely, a potential impact of nearby development in neighbouring authorities may be that new infrastructure to the area and high-quality GI networks is more viable. It is uncertain the impact these sites would have in combination on safety or crime – the larger increase in local residents may potentially increase the scope for crime to occur or could potentially enable higher rates of natural surveillance that alleviate the risk of crime.</p> <p>Recommendations: Development should be designed in a manner that enables high rates of natural surveillance to reduce the risk of crime. The provision of GI throughout new developments can help to filter out air pollutants and provide a screen from light pollution.</p>
5 - To improve levels of education and skills in the population overall	-	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: It is currently unknown if sites in neighbouring authorities would include new educational facilities. In line with a precautionary approach, it is assumed that many new residents in sites adjacent to the perimeter of Ipswich will rely on schools in Ipswich, which would place greater pressure on the capacity of Ipswich's schools and could, in some cases, limit Ipswich residents' access to school places.</p> <p>Recommendations: When determining the capacity of schools and education facilities, development planned in neighbouring authorities may need to be factored into the equation. Where new facilities or expanded facilities are required, these should be accessible via walking, cycling and other sustainable travel modes for residents in neighbouring authorities relying on these schools.</p>
6 - To conserve and enhance	-	S-LT	<p>Likely significant effects: Some of the sites currently allocated for development in neighbouring authorities are adjacent to waterbodies that sites in Ipswich are also adjacent to, including the River Gipping and small ponds and streams near Humber</p>

water quality and resources		Medium uncertainty, Reversible	<p>Doucy Lane. All of the development in these locations pose a cumulative risk to the quality of water, such as due to altered surface runoff rates or contamination during the construction phase. It is also expected that all sites in combination would result in a net increase in water consumption across the ISPA.</p> <p>Recommendations: Best efforts will be needed to avoid contamination of the River Gipping. Requiring development on a site by site basis to manage this risk may not adequately account for the cumulative risk of all sites in combination. SuDS and GI should be incorporated into the development of sites in Ipswich, preferably in a coherent network that also integrates with the network in neighbouring authorities to maximise its water protection service.</p>
7 - To maintain and where possible improve air quality	-	S-LT Medium uncertainty, Permanent	<p>Likely significant effects: It is considered to be likely that development proposed in neighbouring authorities would cumulatively result in a net increase in air pollution in the local area, largely as a result of increases in local road traffic. Sites in Suffolk Coastal generally have good access to railway stations and bus links, but sites in Babergh and Mid Suffolk are somewhat more isolated from sustainable transport links whilst having excellent access to the strategic road network.</p> <p>Recommendations: Consideration should be given to the accessibility and capacity of public transport links following the proposed development in Ipswich as well as neighbouring authorities. Electric car charging points should be provided for in Ipswich that can be used by those driving from neighbouring authorities into Ipswich. Green infrastructure should be incorporated into development in a manner that helps to filter out air pollutants, particularly in locations where traffic and congestion may be most liable to be exacerbated by all sites in combination and preferably in a coherent network with GI in neighbouring authorities that maximises its air filtering service.</p>
8 - To conserve and enhance soil and mineral resources	-	S-LT Low uncertainty, Permanent	<p>Likely significant effects: Development proposed in neighbouring authorities in combination with that which is proposed for Ipswich would be expected to result in a permanent net loss of soils across the ISPA. In particular, soils in the region of the proposed Ipswich Garden Suburb in combination with development planned near Westerfield in Suffolk Coastal would be adversely impacted with large-scale excavation, erosion and compaction likely with contamination also a risk. Similar impacts, but to a lesser extent, would be expected as a result of development in the Humber Doucy Lane area.</p> <p>Recommendations: Sustainable soil management practices should be adopted during the construction phase of development to minimise rates of excavation, erosion and compaction and to reduce the risk of contamination. Where feasible, excavated soils should be reused. A coherent GI network that extends throughout and beyond Ipswich, comprised of semi-natural and a diverse range of species and that is incorporated into developments would help to protect and enhance the quality of soil fertility and structure underneath.</p>

<p>9 - To promote the sustainable management of waste</p>	<p>-</p>	<p>S-LT Medium uncertainty Permanent</p>	<p>Likely significant effects: It is expected that development in Ipswich, in combination with development planned in neighbouring authorities, would result in a net increase in waste sent to landfill or incineration. It is uncertain the extent to which development in neighbouring authorities would provide the opportunities to reuse existing materials or buildings. There is a risk, although this is largely uncertain, that the large quantity of development proposed for the Ipswich Garden Suburb and in Suffolk Coastal near Westerfield could cause issues related to the capacity of waste services.</p> <p>Recommendations: All new businesses and residents should have good access to opportunities for recycling household and business waste. Where feasible, low-impact, recycled and reused materials should be encouraged as much as possible.</p>
<p>10 - To reduce emissions of greenhouse gases from energy consumption</p>	<p>-</p>	<p>S-LT Medium uncertainty, Permanent</p>	<p>Likely significant effects: Development proposed across the ISPA would cumulatively lead to a major increase in GHG emissions as a result of the construction and occupation of the large number of homes and businesses and the subsequent increase in traffic likely associated with this. Development near Westerfield and in the Ipswich Garden Suburb has good access to Westerfield Railway Station. Access to bus links is currently poor but it is expected new bus links would be provided within the new suburb. Given the provision of services and facilities within the Garden Suburb, most new residents in this region will be able to walk and cycle to access these. Development near Humber Doucy Lane as well as that near Sproughton could potentially be more isolated from services and facilities whilst also having limited access to public transport modes.</p> <p>Recommendations: New and existing residents should be provided with good access to bus, rail, cycle and walking routes, ideally within 500m of a bus stop with frequent services and within 2km of a railway station. Public transport modes should provide good access to areas throughout and beyond the Borough. A coherent GI network that extends throughout and beyond Ipswich, comprised of semi-natural and a diverse range of species and that is incorporated into developments would help to provide a carbon capture and storage service. This GI network should also provide safe and attractive pedestrian and cycling links that encourages sustainable and efficient movement.</p>
<p>11 - To reduce vulnerability to climatic events and flooding</p>	<p>-</p>	<p>S-LT Low uncertainty, Reversible</p>	<p>Likely significant effects: Development in neighbouring authorities could potentially lead to the loss of GI and tree canopy that reduces the natural climate cooling service provided by tree canopy and GI cover across the strategic planning area.</p> <p>Recommendations: A coherent GI network that extends throughout and beyond Ipswich, comprised of semi-natural and a diverse range of species and that is incorporated into developments and that leads to an overall increase in the tree canopy coverage would help to protect and enhance the climate cooling service.</p>

12 - To safeguard the integrity of the coast and estuaries	○	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: Development in neighbouring authorities would not be expected to have a cumulative impact on coasts or estuaries, including the Stour and Orwell Estuary.</p>
13 - To conserve and enhance biodiversity and geodiversity	-	S-LT Medium uncertainty, Reversible	<p>Likely significant effects: Development in Ipswich will predominantly be an opportunity to enhance the biodiversity value of sites, given their brownfield and often derelict status. Development in neighbouring authorities will more commonly be on greenfield land that results in the loss of habitats and could affect priority species. The Humber Doucy Lane broad location, in combination with the Humber Doucy Lane site in Suffolk Coastal would result in the loss of valuable greenfield land and potentially priority habitats in that area. The Ipswich Garden Suburb, in combination with sites allocated for development near Westerfield, would result in the loss of a large quantity of greenfield land in the area and could pose a risk to local protected species if identified through appropriate surveys. Cumulatively, development across the ISPA would facilitate a large population growth. The increase in local residents and workers would be expected to increase the pressure on local nature reserves, wildlife sites, woodland and other green spaces due to the increased visitor pressure and footfall.</p> <p>Recommendations: Appropriate ecological surveys of sites should be carried out prior to development to establish the presence of protected species and habitats. Sites should be considered for the extent to which they contain land functionally linked with habitats outside the Borough. A coherent GI network that extends throughout and beyond Ipswich, comprised of semi-natural and a diverse range of species and that is incorporated into developments and that is also designed to permit the movement of wildlife through high-quality and semi-natural corridors and stepping stones would help to protect and enhance biodiversity in and around Ipswich.</p>
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	○	N/A, Low uncertainty, Reversible	<p>Likely significant effects: Cumulative and synergistic effects on the historic environment, caused by development in neighbouring authorities in combination with development in Ipswich, are considered to be unlikely.</p>
15 - To conserve and enhance the	-	S-LT	<p>Likely significant effects: Development in neighbouring authorities would be expected to have a cumulative impact on the character of the local landscape, including near Humber Doucy Lane, north of Ipswich Garden Suburb and near Sproughton. This</p>

<p>quality and local distinctiveness of landscapes and townscape</p>		<p>Medium uncertainty, Reversible</p>	<p>is primarily due to the conversion of visually attractive greenfield land containing green landscape features being converted to the urban built form. Cumulative and synergistic effects on the AONB would not be expected.</p> <p>Recommendations: Development near the perimeter of neighbouring authorities and development planned there should seek to adopt a high-quality design and appropriate architecture, with GI incorporated throughout the development, to minimise adverse impacts on the local character. A coherent GI network that extends throughout and beyond Ipswich, comprised of semi-natural and a diverse range of species that is incorporated into developments and that is also designed to be visually attractive and links with the natural landscape should be sought.</p>
<p>16 - To achieve sustainable levels of prosperity and growth throughout the plan area</p>	<p>++</p>	<p>S-LT Low uncertainty, Reversible</p>	<p>Likely significant effects: It is expected that development proposed in Ipswich and neighbouring authorities would help to provide a major boost to local prosperity and growth. It is expected that new residential development in neighbouring authorities would help to increase footfall in central and shopping areas of Ipswich. The creation of employment land in neighbouring authorities would also provide residents of Ipswich with new employment opportunities that are in accessible locations.</p>
<p>17 - To maintain and enhance the vitality and viability of town and retail centres</p>	<p>++</p>	<p>S-LT Low uncertainty, Reversible</p>	<p>Likely significant effects: It is expected that development proposed in Ipswich and neighbouring authorities would help to provide a major boost to central areas in Ipswich, including shopping, retail, tourism, culture and leisure industries. Ipswich town centre is highly permeable and accessible via various modes for residents in neighbouring authorities and they will be likely to visit Ipswich and its central locations regularly, increasing footfall in these locations and helping to ensure they are viable, vital and prosperous.</p>
<p>18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services</p>	<p>+</p>	<p>S-LT Low uncertainty, Reversible</p>	<p>Likely significant effects: Development near Westerfield and in the Ipswich Garden Suburb has good access to Westerfield Railway Station. Access to bus links is currently poor but it is expected new bus links would be provided within the new suburb. Given the provision of services and facilities within the Garden Suburb, most new residents in this region will be able to walk and cycle to access these. Development near Humber Doucy Lane as well as that near Sproughton could potentially be more isolated from services and facilities whilst also having limited access to public transport modes.</p> <p>Recommendations: A coherent GI network that extends throughout and beyond Ipswich, comprised of semi-natural and a diverse range of species should be incorporated into developments to provide safe and attractive pedestrian and cycling links that encourages sustainable and efficient movement. Residents should have good access to frequent bus services, preferably within 500m of their home, and would ideally be within 2km of a railway station. It is likely that residents near Sproughton will rely on Ipswich Railway</p>

			<p>Station, and residents near Humber Doucy Lane will rely on Derby Road or Westerfield railway stations, within Ipswich and so good pedestrian, cycling and bus links between these areas is required.</p>
<p>19 - To ensure that the digital infrastructure available meets the needs of current and future generations</p>	<p>+</p>	<p>S-LT Low uncertainty, Reversible</p>	<p>Likely significant effects: With sites in Ipswich in proximity to sites in neighbouring authorities, new digital infrastructure delivered in the area has the potential to benefit larger numbers of residents. The greater quantity of development near Sproughton, Westerfield and the Humber Doucy Lane area may also make delivering new digital infrastructure, or enhancing existing infrastructure, in these locations more viable.</p> <p>Recommendations: Newly delivered or enhanced digital infrastructure should be able to provide high speed or full fibre internet speeds to nearby residents and able to adapt to future technologies such as the provision of 5G. Given the large quantity of development in some locations, particularly near the proposed Garden Suburb and Westerfield, the local digital infrastructure will need to have a large capacity.</p>

9. Mitigation

9.1.1 Annex 1(g) of the SEA Directive requires the following information to be included in the environmental report:

“the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme”

9.1.2 The assessment of proposals in the Ipswich LPR has identified the likely significant effects, including those that are positive and adverse. Where adverse effects were identified, recommendations have been made to help avoid or minimise these effects. Where positive effects have been identified, recommendations have been made to enhance these effects where feasible. Recommendations are included within the policy and sites assessments tables in **Appendices D** and **E**.

9.1.3 The most frequent measure recommended throughout the assessments has been the development of a coherent, high-quality and connected GI network extending throughout and beyond the Borough. This network could include all forms of GI such as parks, hedgerow and mature trees. The GI network should be designed and managed in a way that:

- Helps to ensure it is of high biodiversity value, provides refuge for protected habitats and priority species and enables the free movement of wildlife through and beyond the Borough;
- Makes a positive contribution to the local townscape and landscape character, including by being visually attractive, in-keeping with the existing setting, helping to screen development and protect views and by linking development sites with the natural landscape;
- Contributes towards visually attractive regeneration of brownfield sites;
- Helps to protect and enhance the structure and fertility of soils;
- Contributes to the sustainable management of surface water runoff, thereby helping to manage flood risk and protect water quality;
- Helps to filter out air pollutants and contribute towards cleaner air, as well as to act as a carbon capture and storage service;
- Provides residents with access to greenspaces and a diverse range of natural habitats, as well as safe and attractive pedestrian and cycle routes to services, facilities and amenities, in order to benefit their mental well-being, to encourage physical activity and to facilitate sustainable and efficient forms of movement;
- Facilitates community engagement and outdoor socialisation to reduce the risk of social exclusion; and
- Provides good links in to central and shopping areas to increase footfall and support local businesses.

9.1.4 It may be appropriate to consider the benefits of preparing a Supplementary Planning Document dedicated to the design, implementation and management of the Borough's GI network.

10. Next steps

10.1 Consultation on the Preferred Options LPR and Interim SA Report

10.1.1 The purpose of this Interim SA Report is to accompany the Preferred Options version of the LPR for consultation. The responses to this public consultation, including that which is received from the statutory consultees and other interested parties, will be considered and taken on board where appropriate in advance of the next version of this SA Report, which will accompany the Regulation 19 version of the LPR for public consultation in the summer of 2019.

10.2 Monitoring

10.2.1 The SEA Directive, with regards to the requirements for monitoring, states:

“Member States shall monitor the significant environmental effects of the implementation of plans and programmes... in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action” (Article 10.1) and “The Environmental Report should provide information on “a description of the measures envisaged concerning monitoring”” (Annex I (i)).

10.2.2 This SA Report therefore proposes a Draft Monitoring Framework in **Table 10-1** that will be revisited and updated at each stage of the SA process in light of changes to the LPR.

10.2.3 A Draft Monitoring Framework is proposed to measure the performance of the LPR, including the Core Strategy DPD and the Site Allocations DPD, against defined indicators. Indicators in the Monitoring Framework have been developed based on:

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

10.2.4 Feedback from the monitoring process helps to provide more relevant information that can be used to pinpoint specific performance issues and significant effects, and ultimately lead to more informed decision-making. In addition to monitoring the sustainability impacts of the LPR, it will also be necessary to monitor changes to the environmental, social and economic context and baseline conditions.

10.2.5 Monitoring in accordance with the SEA Directive can be incorporated into existing monitoring arrangements. The Council prepare an annual Authority Monitoring Report (AMR) to review progress on local development document preparation and monitor the outputs and implementation of current policies. It is expected that the proposed Draft Monitoring Framework in this chapter would be incorporated into the AMR.

Table 10-1: Proposed Monitoring Framework

SA Objective	Effect to be monitored	Indicators	Data source	Frequency
1 - To reduce poverty and social exclusion	<ul style="list-style-type: none"> Inequality Rates of poverty 	<ol style="list-style-type: none"> Proportion of population who live in wards that rank within the 10% most deprived in the country: Reduce the number of wards with LSOAs in the bottom 10% most deprived 	<ol style="list-style-type: none"> Index of Multiple Deprivation 	Every three years
2 - To meet the housing requirements of the whole community	<ul style="list-style-type: none"> Ensure housing growth meets demand in the IHMA Deliver a mix of high-quality housing to meet local needs Address homelessness 	<ol style="list-style-type: none"> Affordable housing provision In Ipswich and at the Garden Suburb: Ipswich Garden Suburb to provide for at least 31% on-site affordable housing and 15% elsewhere in the Borough Living environment deprivation: To improve Ipswich's rank for living environment deprivation Number of housing completions: To meet local need Rough sleeping rate per 1,000 households 	<ol style="list-style-type: none"> Development management IBC Index of Multiple Deprivation Development management IBC Rough Sleeping Statistics, England https://www.gov.uk/government/statistical-data-sets/live-tables-on-homelessness#rough-sleeping-tables 	Every three years
3 - To improve the health of the population overall and reduce health inequalities	<ul style="list-style-type: none"> Promote healthier lifestyles Tackle health inequalities 	<ol style="list-style-type: none"> Number of wards in the bottom 10% most deprived: Reduce the number of wards with LSOAs in the bottom 10% most deprived % of physically active adults Area of open space created through new development: To increase provision 	<ol style="list-style-type: none"> Index of Multiple Deprivation Public Health England (https://fingertips.phe.org.uk/profile/physical-activity/data#page/1/gid/1938132899/pat/6/par/E12000006/ati/101/are/E07000202) Development management IBC 	Every three years
4 - To improve the quality of where people live and work	<ul style="list-style-type: none"> Reduce anti-social behaviour and crime 	<ol style="list-style-type: none"> Recorded crime per 1,000 population: To tie in with Police targets relating to reducing crime levels by 2031 	<ol style="list-style-type: none"> Office for National Statistics data https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/datasets/recordedcrimeatcommunitysafetypartnershiplocalauthoritylevel/current 	Annual
5 - To improve levels of education and skills in the population overall	<ul style="list-style-type: none"> Raising educational attainment Raising skills levels 	<ol style="list-style-type: none"> Average Attainment 8 scores for Key Stage 2 students in Suffolk Proportion of the population aged 16-64 with no qualifications 	<ol style="list-style-type: none"> National statistics data for Revised GCSE and equivalent results https://www.gov.uk/government/statistics/revised-gcse-and-equivalent-results-in-england-2016-to-2017 Local Government Association data https://lginform.local.gov.uk/reports/ 	Annual
6 - To conserve and enhance water	<ul style="list-style-type: none"> Protection and enhancement of water quality 	<ol style="list-style-type: none"> Daily domestic water use (per capita consumption, litres): Number of new homes meeting standard of 110 litres/person/day 	<ol style="list-style-type: none"> Development management IBC (annually) Water Resource Management Plans for the area (five years) 	Annual/Every five years

SA Objective	Effect to be monitored	Indicators	Data source	Frequency
quality and resources	<ul style="list-style-type: none"> Provision of adequate water supply infrastructure to meet demand arising from new development 	<ol style="list-style-type: none"> Water resource availability Proportion of the Gipping's twelve surface waters in good ecological status and good chemical status 	<ol style="list-style-type: none"> Environment Agency data https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3199/Summary (Annual) 	
7 - To maintain and where possible improve air quality	<ul style="list-style-type: none"> Protection and enhancement of air quality Protection of those most at risk of poor health related to poor air quality 	<ol style="list-style-type: none"> Number and distribution of AQMAs: No new AQMAs to be designated in the Borough Quantity of residents living in or within 200m of AQMAs 	<ol style="list-style-type: none"> Development management IBC Development management IBC 	Every three years
8 - To conserve and enhance soil and mineral resources	<ul style="list-style-type: none"> Remediation of contaminated sites and avoidance of further contamination Protection of Best and Most Versatile agricultural land Protection and enhancement of soil quality 	<ol style="list-style-type: none"> Area of contaminated land returned to beneficial use: Target to be established (Ipswich Borough Council). Density of new residential development Percentage of development on previously developed land Quantity of BMV soils developed on 	<ol style="list-style-type: none"> Development management IBC Development management IBC Development management IBC Development management IBC using data from DEFRA at magic.defra.gov.uk/MagicMap 	Every three years
9 - To promote the sustainable management of waste	<ul style="list-style-type: none"> Promotion of resource efficiency through sustainable design and construction Management of waste arisings in accordance with the waste hierarchy 	<ol style="list-style-type: none"> Total household waste collected and total household waste sent for recycling 	<ol style="list-style-type: none"> National statistics Local authority collected and household waste statistics https://data.gov.uk/dataset/5aea1caf-3e38-4d57-b321-ba34eb762b6e/local-authority-collected-waste-management-statistics 	As frequently as the data is collected and available

SA Objective	Effect to be monitored	Indicators	Data source	Frequency
10 - To reduce emissions of greenhouse gases from energy consumption	<ul style="list-style-type: none"> Reduction of emissions of carbon dioxide (CO₂) and other greenhouse gases 	<ol style="list-style-type: none"> Grand total carbon emissions and average per capita CO₂ emissions in Ipswich 	<ol style="list-style-type: none"> National statistics Emissions of carbon dioxide for Local Authority Areas https://data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/emissions-of-carbon-dioxide-for-local-authority-areas 	Annual
11 - To reduce vulnerability to climatic events and flooding	<ul style="list-style-type: none"> Protection of flood plains Adaptation to the effects of climate change e.g. extreme weather, sea level rise. Promotion of sustainable drainage systems 	<ol style="list-style-type: none"> Agency advice: No planning applications permitted contrary to Environment Agency advice on flooding (Ipswich Borough Council) Percentage of developments incorporating SuDS Tree canopy change over the Plan period 	<ol style="list-style-type: none"> Development management IBC Development management IBC Corporate Mapping IBC 	Every three years
12 - To safeguard the integrity of the coast and estuaries	<ul style="list-style-type: none"> Protect existing properties and other land uses on the coast and estuaries 	<ol style="list-style-type: none"> Flood and Coastal Erosion Risk Management: Efficacy of the tidal surge barrier (Environment Agency). 	<ol style="list-style-type: none"> Environment Agency 	Every three years
13 - To conserve and enhance biodiversity and geodiversity	<ul style="list-style-type: none"> Protection and enhancement/creation of new biodiversity/habitat Protection and enhancement/creation of new green infrastructure provision Protection of species at risk Increasing canopy cover 	<ol style="list-style-type: none"> Extent and condition of key habitats for which Biodiversity Action Plans have been established: To maintain / enhance condition of BAP habitats. Net change in extent of protected habitat: No net loss of area of protected habitat. To increase the tree canopy cover in the borough to 22% by 2050 (Ipswich Borough Council). Canopy cover: net increase overall 	<ol style="list-style-type: none"> Planning Policy IBC Planning Policy IBC Corporate Mapping IBC 	Annual

SA Objective	Effect to be monitored	Indicators	Data source	Frequency
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	<ul style="list-style-type: none"> Conservation and enhancement of the IHMA's cultural heritage. Protection/enhancement of local character and distinctiveness. 	<ol style="list-style-type: none"> Number of heritage assets 'at risk': To reduce number of heritage assets 'at risk' (Ipswich Borough Council). Number of archaeological investigations carried out at development sites and notable finds 	<ol style="list-style-type: none"> Development management IBC Development management IBC 	Every five years
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	<ul style="list-style-type: none"> Conservation and enhancement of the IHMA's landscape character Protection/enhancement of character and views of AONB 	<ol style="list-style-type: none"> Quantity of development within 1km of AONB Quantity of greenfield land lost to development 	<ol style="list-style-type: none"> Development management IBC Development management IBC 	Every five years
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	<ul style="list-style-type: none"> Delivery of employment land that supports economic diversification and the creation of high quality, local jobs. Supporting the growth and development of existing businesses. Providing job opportunities in sustainable locations. Ensuring tourism growth is sustainable. 	<ol style="list-style-type: none"> Unemployment rate: To improve Ipswich's rank in the indices of multiple deprivation by 2031 for income and employment deprivation Employment development on employment land: To increase the amount of employment development on employment land each year. Average wage: To increase the average wage within Ipswich 	<ol style="list-style-type: none"> Index of Multiple Deprivation Annual Employment Land Availability Assessment (IBC) ONS data https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datalist?size=50&sortBy=relevance 	Every three years
17 - To maintain and enhance the	<ul style="list-style-type: none"> Enhancing town centres, district and 	<ol style="list-style-type: none"> Unemployment in Ipswich: To reduce the proportion of people unemployed in Ipswich 	<ol style="list-style-type: none"> ONS data https://www.ons.gov.uk/employmentandlabourm 	Every three years

SA Objective	Effect to be monitored	Indicators	Data source	Frequency
vitality and viability of town and retail centres	<p>local centres and villages.</p> <ul style="list-style-type: none"> Improving the viability of Ipswich. 	<p>2. No. / Percentage of vacant retail units: To reduce number of vacant units in defined centres</p>	<p>arket/peopleinwork/earningsandworkinghours/datalist?size=50&sortBy=relevance</p> <p>2. Development management IBC</p>	
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	<ul style="list-style-type: none"> Reducing the need to travel, particularly by private motor car. Promotion of sustainable forms of transport including public transport, walking and cycling. 	<p>1. Extent of the PRow network and cycle paths: To increase the quantity and quality of pedestrian and cycle routes</p>	<p>1. Highway Authority (Suffolk County Council)</p>	<p>Every three years</p>
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	<ul style="list-style-type: none"> Provision of services through technology. Supporting the growth of the (digital) economy. Realising opportunities for social inclusion and reducing rural isolation. 	<p>1. To improve average internet speeds in Ipswich and to increase the proportion of Ipswich's residents with access to high-speed and full fibre internet</p>	<p>1. https://labs.thinkbroadband.com/local/index.php?area=E14000761</p>	<p>Annual</p>