Contents

Appendix A

Review of Plans, Programmes and Environmental Protection Objectives

PLANS, PROGRAMMES AND ENVIRONMENTAL PROTECTION OBJECTIVES

1.1.1 Prior to the preparation of a Sustainability Appraisal it is essential to understand the policy context in which the document 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 Sustainability Appraisal objectives.

1.1.2 An 'Environmental Report' required under the SEA Directive should include:

"*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)).

1.1.3 This appendix lists the plans and programmes that have been reviewed to inform the preparation of the Sustainability Appraisal. The review of plans and programmes identified a number of objectives and policy issues relevant to the Local Plan and the scope of the SA across fifteen topic areas and these are summarised in Table A-1.

Table A-1: Review of plans, policies and environmental objectives to be accounted for during the SA of the LPR

Topic and key messages	Key Source(s)	What should the SA objectives/guide questions cover?
Population Address deprivation Reduce inequality Reduce social exclusion	NPPF, 2019; Planning Policy for Traveller Sites, 2015; Localism Act, 2011; Suffolk Poverty Strategy: Working together to tackle poverty 2015-2020; Transforming Suffolk Community Strategy 2008-2028; Strategic Housing Market Assessment, 2019.	Achieving equality, inclusion and social mobility Reducing deprivation Provision of high-quality community facilities and services.
Housing Ensure housing growth meets demand in the IHMA Deliver a mix of high-quality housing to meet local needs Make appropriate provision for Gypsies, Travellers, Travelling Showpeople and Boat Dwellers Address issues associated with empty homes and second homes Address homelessness	NPPF, 2019; Planning Policy for Traveller Sites, 2015; Housing White Paper: Fixing our Broken Housing Market, 2017, Housing Act, 2004; Lifetime homes, lifetime neighbourhoods – A national strategy for housing in an Ageing Society, 2008; Strategic Housing Market Assessment, 2019.	Provision of housing to meet local needs Provision of high-quality community facilities and services Provision of an adequate supply of land for housing Improving the quality of and utilising the existing housing stock Urban regeneration.
Health and Wellbeing Promote healthier lifestyles Tackle health inequalities Reduce anti-social behaviour and crime (including the fear of crime) Ensure that there are appropriate facilities for the physically and mentally disabled and elderly.	NPPF, 2019; Guidance for NHS Commissioners on equality and health inequalities, 2015; NHS Five Year Forward View, 2014; Dementia-friendly Health and Social Care Environments, 2015; Suffolk Walking Strategy 2015-2020; Suffolk Health and Wellbeing Strategy, Refreshed for 2016 to 2019; Transforming Suffolk Community Strategy 2008-2028 (2008 revision); Hidden Needs, 2016; State of Children in Suffolk Report, 2016; Health effects of climate change in the UK, 2012; Ipswich Health and Wellbeing Strategies	Provision of health facilities and services Provision of open space and recreational facilities Reduction of crime, the fear of crime and antisocial behaviour Improve health outcomes in relation to specific/disadvantaged demographic groups e.g. the elderly, Gypsies and Travellers

Topic and key messages	Key Source(s)	What should the SA objectives/guide questions cover?
Education Enhance skills in the workforce to reduce unemployment and deprivation Improve educational attainment in the IHMA Ensure the appropriate supply of high quality educational and childcare facilities.	DCLG Planning for schools, 2011; Schools Organisational Review, 2006; Transforming Suffolk Community Strategy 2008-2028 (2008 revision); Department of education, Home to school travel and transport guidance, 2014; Suffolk County Council's Education and Learning Infrastructure Plan version 2.1.	Raising educational attainment Raising skills levels Adequate provision of childcare, pre-schools, schools, and further and higher education establishments.
Water Address the high levels of nitrates in farmland Protect and enhance surface and groundwater quality Improve water efficiency Ensure timely investment water services infrastructure to meet demand arising from new development.	Flood and Water Management Act, 2010; Water Act, 2014; Future Water – the governments Water Strategy for England , 2011; NPPF, 2019; Water for People and the Environment: Water Resources Strategy Regional Action Plan Anglian Region, 2009; Anglian Water: Water Resources Management Plan, 2014; Anglian River Basin District Management Plans (RBMP), 2015; Anglia Water – Water Resources Management Plan, 2015; Haven Gateway Water Cycle Study, November 2009; Essex and Suffolk Water- Water Resources Management Plan, 2010-2035	Protection and enhancement of water quality (surface and groundwater) Provision of adequate water supply infrastructure to meet demand arising from new development. Provision of adequate waste water treatment infrastructure to meet demand arising from new development Addressing pollution via run-off (particularly from farmland).
Air Ensure that air quality is maintained or enhanced (e.g. in existing Air Quality Management Areas) Reduce emissions to air Address health inequalities and public health	Improving air quality: reducing nitrogen dioxide in our towns and cities, 2017; Air Quality Strategy for England, Scotland, Wales and Northern Ireland, 2007; National Air Quality Strategy for England, Wales, Scotland and Northern Ireland Vol 2, 2011; NPPF, 2018; Suffolk Local Authorities – Air Quality Management and New Development, 2011; Ipswich Borough Council Air Quality Action Plan, 2008; Ipswich Air Quality Action Plan 2019-2024.	Protection and enhancement of air quality Provision of adequate sustainable travel modes Protection of those most at risk of poor health related to poor air quality.
Material Assets (including soil and waste) Encourage the use of previously developed (brownfield) land Conserve and enhance soil quality and mineral resources Protect/minimise the loss of Best and Most Versatile agricultural land Protect geologically important sites Encourage mixed use development To promote the sustainable management of waste	Safeguarding Our Soils: A Strategy for England, 2009; NPPF, 2019; National Planning Policy For Waste, 2014; The Geological Conservation Review, ongoing; Guidance on the planning for mineral extraction, 2014; DEFRA waste management plan for England, 2013; National Quality Mark Scheme for Land Contamination Management, January 2017; Suffolk Local Geodiversity Action Plan, 2006; Suffolk Joint Municipal Waste Strategy 2003-2020; Suffolk Minerals Core Strategy, 2008; Suffolk Waste Core Strategy, 2011; Suffolk Minerals and Waste Local Plan, Submission Draft 2018	Remediation of contaminated sites and avoidance of further contamination Protection of Best and Most Versatile agricultural land Protection and enhancement of soil quality Promotion of resource efficiency through sustainable design and construction Management of waste arisings in accordance with the waste hierarchy Prioritise development on previously developed land and/or make use of existing buildings and infrastructure.
Climatic Change and Flooding Ensure adaptation to the effects of climate change	Climate Change Act , 2008; Energy Act, 2013; National Adaptation Programme, 2013; Carbon Plan: Delivering our Low Carbon Future; UK Renewable Energy	Reduction of emissions of carbon dioxide (CO_2) and other greenhouse gases. □ Promotion of sustainable

Topic and key messages	Key Source(s)	What should the SA objectives/guide questions cover?
Minimise the effects of climate change e.g. through sustainable construction Reduce emissions of greenhouse gases that may cause climate change Promote the uptake of renewable energy technologies Reduce the risk of flooding arising from new development. Protect flood plains	Strategy; NPPF; Climate Change Risk Assessment, 2012; Suffolk Climate Action Plan 2, 2012; Ipswich Strategic Flood risk assessment, May 2011 (currently being refreshed as of October 2019), Developing Adaptation to Climate Change in the East of England, 2011; Suffolk Local Flood Risk Management Strategy, 2012; A summary of Climate Change Risks for the East of England, 2012; The Stour & Orwell Estuaries Management Strategy 2015 – 2020 (draft May 2016).	construction. Promotion of the uptake of renewable energy technologies Protection of flood plains Adaptation to the effects of climate change e.g. extreme weather, sea level rise Promotion of sustainable drainage systems.
The Coast and Estuaries Reduce the risk of flooding arising from new development. Protect existing properties and other land uses on the coast and estuaries	UK Marine Policy Statement, 2013; A summary of Climate Change Risks for the East of England, 2012; The Stour & Orwell Estuaries Management Strategy 2015 – 2020 (draft May 2016); The Stour and Orwell Estuaries: scheme of management, and management strategy (Suffolk Coasts and Heaths) (2010) Updated 2013 – 2018; Essex and South Suffolk Shoreline Management Plan (Oct 2010) (Environment Agency); Habitats Regulations Assessment Recreational Avoidance and Mitigation Strategy (2019)	Managing pressure on protected European Sites and other designated sites Responding to the impacts of climatic change Balancing the economic and environmental needs especially with regard to tourism
Biodiversity Protect and enhance biodiversity including designated sites and ecological networks Protect and enhance green infrastructure Encourage biodiversity net gain Increase canopy cover Ecosystem services Ensure tourism is compatible with protection of biodiversity, landscapes and townscapes	The Natural Environment and Rural Communities Act, 2006; Biodiversity 2020: Biodiversity duty: public authority to have regard to conserving biodiversity, 2014; A Strategy for England's Wildlife and Ecosystem Services; UK post 2010 Biodiversity Framework; NPPF, 2019; Accessible Natural Green Space Standards in Towns and Cities: A Review and Toolkit for their Implementation (2003) and Nature Nearby: Accessible Green Space Guidance (2010) Suffolk Biodiversity Action Plan, 2012; Suffolk Coast and Heaths AONB Management Strategy (June 2013-18); Suffolk's Nature Strategy, 2015; Suffolk Tree Strategy (forthcoming); and UK 25-year Environment Plan.	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.
Cultural Heritage Improve the quality of the built environment Incorporate good quality design Conserve and enhance cultural heritage assets and their settings Respect, maintain and strengthen local character and distinctiveness Ensure tourism is compatible with protection of biodiversity, landscapes and townscapes	NPPF, 2019; Heritage in Local Plans: How to create a sound plan under the NPPF, 2018; Suffolk Heritage Strategy, 2014; and Development and Archaeology SPD 2018 (IBC).	Conservation and enhancement of the IHMA's cultural heritage Protection/enhancement of the IHMAs designated and non-designated cultural heritage assets and their settings Protection/enhancement of local character and distinctiveness Promotion of high-quality design that respects local character.

Topic and key messages	Key Source(s)	What should the SA objectives/guide questions cover?
Landscape Protect and enhance the quality and distinctiveness of natural landscapes and townscapes Promote high quality design that respects and enhances local character Ensure tourism is compatible with protection of biodiversity, landscapes and townscape	Integrated Landscape Character Objectives, Landscape East 2010; Suffolk Countryside Strategy (2000); Touching the Tide Landscape Character Assessment August 2012 (Suffolk County Council Landscape Character Assessment); Suffolk Historic Landscape Characterisation Map 2008; and Settlement Sensitivity Assessment – Volume 1: Landscape Fringes of Ipswich 2018.	Conservation and enhancement of the IHMA's landscape character Promotion of high-quality design that respects/enhances local character and the quality of urban environments.
Economy Ensure that there is an adequate supply of employment land to meet the economic ambition of the IHMA (in rural and urban contexts) Attract inward investment in line with the ambition of the Local Economic Partnership Encourage economic diversification including growth in high value, high growth, and high knowledge economic sectors Create local employment opportunities Enhance skills in the workforce to reduce unemployment and deprivation Build upon the IHMA's successes in tourism Attract visitors to Ipswich as well as the rest of Suffolk in order to contribute to the vitality of Ipswich	Industrial Strategy: Building a Britain Fit for the Future, White Paper 2017; Economic Strategy for Norfolk and Suffolk 2017; Leading the Way: Green Economy Pathfinder Manifesto 2012-15, New Anglia LEP; New Anglia Local Enterprise Partnership Towards a Growth Plan, 2013; Suffolk Coast Tourism Strategy 2013-2023; Suffolk's Local Economic Assessment 2011; New Anglia LEP Skills Manifesto (Parts 1 and 2), Draft Norfolk and Suffolk Local Industrial Strategy 2019	Delivery of employment land that supports economic diversification and the creation of high quality, local jobs Enhancing town centres, district and local centres and villages Improving the viability of Ipswich Supporting the growth and development of existing businesses Providing job opportunities in sustainable locations Ensuring tourism growth is sustainable How tourism can contribute to the vitality and viability of Ipswich.
Transport and Connectivity Promote sustainable transport modes, walking and cycling and reduce the need to travel. Ensure timely investment in transport infrastructure to accommodate new development Reduce traffic and congestion Improve public transport provision including better integration of modes Enhance accessibility to key community facilities, services and jobs for all (urban and rural)	NPPF, 2019; Suffolk's Local Transport Plan, 2011-2031; Suffolk Cycle Strategy, 2014; Ipswich Borough Council's Cycling Strategy Supplementary Planning Document, 2016; Suffolk Walking Strategy 2015-2020; Department of education, Home to School Travel and Transport Guidance, 2014; In Step with Suffolk: Rights of Way Improvement Plan 2006-16	Reducing the need to travel, particularly by private motor car Promotion of sustainable forms of transport including public transport, walking and cycling Maintaining and enhancing accessibility to key facilities, services and jobs Investment in transport infrastructure to meet future needs Maintaining and enhancing accessibility to key tourist destinations.
Digital Infrastructure Build upon the IHMA's successes in digital industries Attract inward investment Create local employment opportunities	Industrial Strategy: Building a Britain Fit for the Future, White Paper 2017; UK Digital Strategy, 2017; Suffolk Local Authorities Draft 5 Year Infrastructure Plan, 2017 – 2022; Suffolk County Council's 'Better Broadband for Suffolk'	Provision of services through technology Supporting the growth of the (digital) economy Realising opportunities for social inclusion and reducing rural isolation

Topic and key messages	Key Source(s)	What should the SA objectives/guide questions cover?
Enhance digital skills in the workforce to reduce unemployment and deprivation. Ensure that the digital infrastructure is used to promote social inclusion and reduce isolation (particularly in rural areas) Capitalise on the ability of digital infrastructure to deliver services		Enhancing the digital skills of the IHMA residents Building upon existing strengths and successes in digital industries.

Appendix B

Baseline and Key Sustainability Issues and Opportunities

Baseline and Key Sustainability Issues and Opportunities

1.1.4 The Ipswich Housing Market Area and Functional Economic Area is made up of four districts; Suffolk Coastal District Council (now within East Suffolk Council), Babergh District Council, Mid Suffolk District Council, and Ipswich Borough Council. Figure 3, below, shows a map of the Ipswich Housing Market Area. The housing market area is predominately rural in character with some significant urban areas such as Ipswich, Felixstowe, Stowmarket and Sudbury. The A12 and A14 are significant transport corridors supported by the main line railway connecting Norwich and London and other branch lines.

1.1.5 This appendix sets out the baseline situation - that is the current status, in relation to society, the environment and the economy - in Ipswich Borough and the wider Ipswich Housing Market Area and Functional Economic Area. The topics identified above during the PPP review were organised under the three themes as illustrated in Table B-1.

Table B-1: Topics of baseline characteristics

Society	Environment	Economy
1 - Population 2 - Housing 3 - Health and Wellbeing 4 - Education	5 - Water 6 - Air 7 - Material Assets (including Soil and Waste 8 - Climatic Change and Flooding 9 - The Coast and Estuaries 10 - Biodiversity 11 - Cultural Heritage 12 - Landscape	13 - Economy 14 - Transport and Connectivity 15 - Digital Infrastructure

1.1.6 Each topic was broken down into the following elements:

- Current status;
- Future Considerations;
- Likely Evolution of the Baseline Without the Local Plan;
- Key Data Sources; and
- Key Issues for the Sustainability Appraisal.

1.1.7 The baseline data is presented in its entirety in the Scoping Report available on the Council website[1].

[1] Ipswich Local Plan Sustainability Appraisal Scoping Report Consultation, August 2017, available online at: https://www.ipswich.gov.uk/services/new-local-plan-review

Appendix C

Options Appraisals

Appraisals of Growth Scenarios

1.1.8 In 2017, Ipswich was considered to have an Objectively Assessed Need (OAN) of 11,420 dwellings over the LPR period of 2014 – 2036. In July 2018, the Government published a revised National Planning Policy Framework (which was further updated in February 2019), 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 required for Ipswich Borough was 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 has been to reduce the OAN for Ipswich to an average of 445dpa for a total of 8,010 dwellings over the LPR period.

1.1.9 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).

1.1.10 Since the Preferred Options consultation, it has been identified that the job calculations from the latest EEFM (August 2017) have forecast a significant reduction in the jobs growth in the Borough when compared to the originally used 2016 EEFM calculations. This equated to a 40% reduction (15,580 jobs to 9,318 jobs) and due to this significant change, it was deemed appropriate to revise the target. Based on the latest 2017 EEFM, the Council are seeking to deliver at least 9,500 new jobs for the 2018 – 2036 period through the Final Draft Ipswich Local Plan. This also means that there is a better balance between dwelling numbers proposed for the Borough and forecasted new jobs.

1.1.11 After identifying the minimum housing and employment needs for the Borough, the Council explored a range of options of various levels of growth that meet or exceed the minimum needs (Table 3-4). The consideration of alternatives enabled the Council to weigh up the costs, risks and benefits of different quantities of development and to select a strategy that would be achievable, deliverable, would satisfy local employment needs and would be as sustainable as possible. Two of the growth scenarios, Alternative Scenarios A and B, are high growth scenarios for the two authorities of Ipswich and Suffolk Coastal (i.e. the development in these high growth scenarios would be split between Ipswich and Suffolk Coastal).

Table 3-5: Strategic growth options considered by the Council during the LPR making process

Name	Scale of growth	Description	LPR version	Location of SA assessment
Old OAN	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;	Preferred Options LPR	Interim SA Report, January 2019 Results also presented in Appendix C of this report
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. This high growth scenario is for both Ipswich and Suffolk Coastal combined.		
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. This high growth scenario is for both Ipswich and Suffolk Coastal combined.		
Alternative Scenario D (new OAN)	8,010 homes and 9,500 jobs	PPG compliant.	Publication LPR	SA Report, September 2019

Name	Scale of growth	Description	LPR version	Location of SA assessment
Alternative Scenario E	8,838 homes and 15,580 jobs	PPG compliant in being 2014 based plus some uplift.		Results also presented in Appendix C of this report
Alternative Scenario F	8,802 homes and 15,580 jobs	PPG compliant in being 2014 based plus some uplift.		
Alternative Scenario G	9,612 homes and 15,580 jobs	PPG compliant in being 2014 based plus more uplift.		

1.1.12 The eight growth scenarios considered by the Council during the preparation of the Final Draft Ipswich Local Plan (Table 3-5) have been assessed in Appendix C. The scores recorded for each strategic option against each SA Objective are presented in Table 3-8.

1.1.13 The appraisal identified a range of potential positive and adverse effects, with often mixed results identified against most SA Objectives. All options would be expected to help ensure that housing and employment needs in Ipswich to 2036 can be met, and this would make a significant contribution towards transforming the Borough and combating rates of homelessness, unemployment, deprivation, inequality and poverty. 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 Old OAN and Alternative Scenarios A, D, E, F and G 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.

1.1.14 Generally speaking, it was considered that the lower the quantity of development being considered, the more feasible it would be to avoid adverse effects 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, the Old OAN and Alternative Scenarios A, D, E, F and G could potentially result in less adverse effects on biodiversity and landscape than Alternative Scenarios B and C.

1.1.15 Furthermore, the Old OAN and Alternative Scenarios A, D, E, F and G may help to limit negative effects 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. Alternative Scenario D could therefore be predicted as having more limited adverse impacts on climate change mitigation and air pollution improvement efforts than all other scenarios. As the scenarios increase in quantity of development, from D to C, these impacts would be likely to be of an increasing severity and magnitude.

1.1.16 The costs or benefits of each growth scenario on access to health and education facilities are complex. The Old OAN and Alternative Scenarios A, D, E, F and G 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 Old OAN and Alternative Scenarios A, D, E, F and G 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.

1.1.17 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.

1.1.18 It has so far been identified that the Old OAN and Alternative Scenarios A, D, E, F and G would be likely to have more beneficial effects on SA Objectives related to biodiversity, landscape, climate change, waste, natural resources, cultural heritage, social exclusion and air quality. Scenario D would, in particular, be likely to enable negative impacts on biodiversity and other natural environment topics of sustainability to be avoided and more effectively mitigated due to the lower quantity of development. With less development, there may also be greater opportunities for achieving positive impacts and delivering biodiversity net gains.

1.1.19 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.

1.1.20 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 Old OAN and Alternative Scenarios A, D, E, F and G. Scenario C would go further than Scenario B and deliver significant infrastructure projects that could lead to a range of economic and social benefits.

8,622 dwellings 15,580 jobs	Old OAN A trend-based scenario based on the forecast employment needs of the Borough and the 2018 update to the OAN.

The Issues and Options documents consulted on in 2017 identified an objectively assessed housing need for the Borough of 11,420 dwellings. Since then, the standardised methodology for calculating household projections was revised as part of the revised NPPF 2018, leading to a lower level of housing need at 8,622 dwellings using the 2016-based household population figures. The benefits of this option are generally related to the fact that the lower quantities of development could result in more spacious development-layouts and could be accommodated within the Borough boundary. It should be noted that Government guidance regarding the standardised methodology was later amended to clarify that the 2014-based household population figures should be used (see alternative D).

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	The provision of 8,622 new homes would be expected to satisfy the housing needs of the Borough by 2036 and to support the anticipated population growth. Given the ageing population of the Borough, careful consideration in the LPR would be required to help ensure these residents have good access to culture, leisure and community facilities to avoid social exclusion. It is largely uncertain what impact each growth option would have on the quality of homes. The Preferred Option will be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good and where there is an existing community. Leisure and culture facilities, such as sports clubs, play areas and meeting points, are distributed liberally throughout the Borough and are unlikely to be rendered over-capacity. Under the Preferred Option it may be easier than other scenarios to ensure that new residents do not feel socially excluded.
2 - To meet the housing requirements of the whole community	++	The Preferred Option for growth would satisfy the minimum housing needs of Ipswich over the LPR period and it is expected that a significant portion of these homes would be of a mixture and type that ensure the diverse needs of all are catered for.
3 - To improve the health of the population overall and reduce health inequalities	+	There are currently 23 GP surgeries within the boundary of Ipswich, predominantly situated in the northern and eastern regions of the Borough, some of which are experiencing pressures on capacity. The Preferred Option of delivering 479+dpa would be less likely than the alternatives of resulting in significant over-capacity concerns at schools and health services. Given most development would be within the Borough, the majority of new residents would be expected to have good access to health facilities. Residents would have excellent access to open spaces and leisure facilities. Given that most services, amenities and facilities would be within walking distance this option would be likely to encourage greater rates of walking and cycling than Alternative Scenarios B and C, although it is uncertain if this would be counteracted somewhat by the noise and air pollution issues in central urban areas.
4 - To improve the quality of where people live and work	+/-	With lower quantities of development, the risk of rising crime rates may be lower than other scenarios where the population growth could potentially grow significantly more. This approach would be likely to situate nearly all new residents in the relatively urban Ipswich where major noise, air and light pollutants are relatively common. This approach may therefore lead to somewhat lower quality living environments than other scenarios, although this is largely dependent on the detail of development design and its precise distribution. It may be more feasible under this approach than others to situate all new residential development in locations that have excellent access to services and facilities that benefit the health, education and employment prospects of new residents and enable them to pursue high quality and active lifestyles.
5 - To improve levels of education and skills in the population overall	+/-	Primary and secondary schools are distributed relatively equally throughout Ipswich, but the entire Borough currently has limited surplus capacity, with a shortage of both primary and secondary school places being forecast in multiple areas. Given the likely sizes of most development and their somewhat constrained locations within the Borough, it is unlikely that this approach would facilitate the delivery of additional services or facilities in most cases. This approach would deliver lower levels of development than other scenarios and may therefore be less likely to result in over-capacity concerns in some locations, although this is caveated by the fact that other scenarios would be likely to have more dispersed

		development with many new homes in settlements outside the Borough, which could reduce pressure on educational facilities within Ipswich.
6 - To conserve and enhance water quality and resources	-	Under the Preferred Option, it is likely that the construction and occupation of 8,622 homes, in addition to the creation of 15,580 jobs, would result in a net increase in the consumption of water resources in the Borough. It is expected that much of this development would be within Groundwater SPZs in Ipswich and there could be a cumulative risk of impacts on water quality. However, it is expected that construction will closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a number of developments.
7 - To maintain and where possible improve air quality	-	It is likely that the construction and occupation of 8,622 homes, in addition to the creation of 15,580 jobs, would result in a net increase in air pollutants in relation to existing levels, in large part due to the associated increase in road transport. This could make it increasingly difficult to achieve air quality improvement targets at AQMAs in the Borough. Access to sustainable transport modes in Ipswich may help to limit this increase to some extent.
8 - To conserve and enhance soil and mineral resources	+	A large portion of development could potentially be situated on brownfield land. This fact, coupled with the fact that this approach would require lower levels of development than other approaches, this would be likely to help ensure an efficient use of land and to limit the loss of valuable soils and minerals due to development.
9 - To promote the sustainable management of waste	-	It is likely that the construction and occupation of 8,622 homes, in addition to the creation of 15,580 jobs, would result in a net rise in waste generation. Mitigation in the form of a strong recycling or re-use policy during construction would help to limit the use of materials. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently.
10 - To reduce emissions of greenhouse gases from energy consumption	-	The average carbon footprint per capita in 2016 in Ipswich was 3.1tonnes(T) Carbon dioxide (CO_2). A population growth of approximately 19,831 (i.e. 2.3 people per dwelling) could potentially lead to an increase in annual CO_2 emissions in the order of 61,475T, although it should be noted that development would be phased in over the LPR period and that per capita CO_2 emissions decreased from 5.8T in 2005 to 3.1T in 2016 and this trend is likely to continue to some extent. However, the level of growth proposed under this option would be likely to lead to a net increase in the Borough's carbon footprint. The Preferred Option will be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. New residents under this option may therefore be likely to have a lower carbon footprint or to have less of an adverse impact on air quality than residents situated in the more rural and, in some cases, more isolated areas of the neighbouring authorities as they will typically be in closer proximity to services, facilities and sustainable transport modes.
11 - To reduce vulnerability to climatic events and flooding	+/-	This approach proposes lower levels of development compared with other scenarios and may therefore provide greater choice in terms of where to situate development in the Borough, although it is uncertain given the limited land availability. Greater choice over site allocations provides greater freedom in terms of avoiding land at risk of flooding. Conversely, flood risk is fairly prevalent in Ipswich and situating all development here, instead of directing some to outside the Borough, could make it more difficult to avoid land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+	The Preferred Option will be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This would contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on the distinctive character of the estuary and the heritage, landscape and biodiversity assets here may more easily be avoided.
13 - To conserve and enhance biodiversity and geodiversity	+	The Preferred Option will be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This could contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on sensitive constraints and assets designated for their biodiversity value are likely to be more easily avoided, with the majority of them in fairly rural locations. Situating all development in the relatively urban Borough would also be less likely to risk adversely impacting

		protected species or to risk reducing habitat connectivity than if most development were in the more rural areas outside the Borough. On the other hand, this approach could lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity, although this would be expected to be a very limited impact.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	+	Impacts on the landscape and townscape character depend almost entirely on the precise details of development, such as its type, pattern and form, in relation to its precise location. Lower density developments or low-rise buildings would contribute to a range of potential benefits in terms of cultural heritage because adverse impacts on sensitive constraints and assets designated for their cultural heritage value are likely to be more easily avoided. With fewer locations being developed, fewer heritage assets would be placed at risk compared to other higher growth options. It may also be more feasible to ensure all development is in-keeping with the existing setting and makes a positive contribution to the local character under this option.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	+	Lower density developments or low-rise buildings would contribute to a range of potential benefits for the protecting the character of landscapes or townscapes as they would be less imposing than high-density or taller developments. At the same time, higher density developments could result in less land being lost to development, contributing to a more efficient land-use approach. A larger proportion of new development would be likely to be in-keeping with the existing townscape, with adverse impacts on the local character also avoided or minor due to less greenfield sites being lost to development.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	The Preferred Option and Alternative Scenario A would both provide the same quantity of jobs and would have largely similar impacts on the economic sphere of sustainability, thereby making a major positive contribution towards sustainable growth and prosperity in Ipswich over the LPR period. Whilst the minimum employment and housing needs of Ipswich would be satisfied, this level of growth would not deliver enough houses to support, or enough jobs to constitute, significant economic growth across the FEA. It also would not facilitate significant infrastructure development across the FEA. The population of Ipswich is ageing, and it will therefore be important to increase the population of the local working age group. It is uncertain the extent to which Scenario A would encourage growth in the proportion of the local population that is of working age in comparison to other scenarios.
17 - To maintain and enhance the vitality and viability of town and retail centres	++	The provision for 15,580 jobs would satisfy the employment needs of Ipswich's growing population and make a significant contribution towards helping to improve the vitality and viability of town centres, particularly if many of the new jobs or homes are situated in central areas.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	+	The Preferred Option will be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. This would help to reduce the need for residents to travel far and frequently and would also help to facilitate a higher uptake of sustainable transport modes than other scenarios where higher quantities of development are proposed, and a larger number of new residents would be situated in more rural locations. However, the significant scale of growth would be likely to place the capacity of various nodes and routes of public transport under pressure. This option would also result in a greater increase in local car movements than options of lower quantities of development.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	++	It is somewhat uncertain the impacts each growth option would have on SA Objective 19. However, the lower quantity of development proposed under this option may be likely to result in less pressure placed on the existing capacity of digital infrastructure and may lead to a higher proportion of all residents having good access to fast internet speeds. It is likely to be more feasible to deliver broadband or full fibre internet for development in urban locations than it would for development in rural locations and, where such digital infrastructure is provided for, a large portion of residents would be catered for.

11,420 dwellings 19,040 jobs	Alternative Scenario A A trend-based scenario based on the forecast employment needs of the Borough and the 2017 calculated OAN.

The Issues and Options documents consulted on in 2017 identified an objectively assessed housing need for the Borough of 11,420 dwellings, which is the basis of this alternative scenario. The scenario would deliver more development than the preferred approach and may therefore be more likely to lead to adverse effects on the natural environment, although benefits are generally related to the fact that the quantities of development could be accommodated within the Borough boundary,

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	At 2.3 people per dwelling, 11,420 dwellings would more than support the Borough's anticipated population growth. Given the ageing population of the Borough, careful consideration in the LPR would be required to help ensure these residents have good access to culture, leisure and community facilities to avoid social exclusion. Leisure and culture facilities, such as sports clubs, play areas and meeting points, are distributed liberally throughout the Borough and are unlikely to be rendered over-capacity under Scenario A due to their quantity, distribution and the more limited residential growth considered. However, this scenario would be unlikely to facilitate the provision of additional capacity in most cases due to the lower quantity of development and smaller site sizes.
2 - To meet the housing requirements of the whole community	++	Alternative Scenario A would satisfy the minimum housing needs of Ipswich over the LPR period and it is expected that a significant portion of these homes would be of a mixture and type that ensure the diverse needs of all ages, abilities and wealth are catered for.
3 - To improve the health of the population overall and reduce health inequalities	+	There are currently 23 GP surgeries within the boundary of Ipswich, predominantly situated in the northern and eastern regions of the Borough, some of which are experiencing pressures on capacity. Scenario A would sustain a more limited population growth than Scenarios B and C and may therefore result in less additional pressure on GP surgeries. Given most development would be within the Borough, the majority of new residents would be expected to have good access to health facilities. Residents would have excellent access to open spaces and leisure facilities. Given that most services, amenities and facilities would be within walking distance this option would be likely to encourage greater rates of walking and cycling than Alternative Scenarios B and C, although it is uncertain if this would be counteracted somewhat by the noise and air pollution issues in central urban areas.
4 - To improve the quality of where people live and work	+/-	With lower quantities of development, the risk of rising crime rates may be lower than other scenarios were the population growth could potentially grow significantly more. This approach would be likely to situate nearly all new residents in the relatively urban Ipswich where major noise, air and light pollutants are relatively common. This approach may therefore lead to somewhat lower quality living environments than the Preferred Approach, although this is largely dependent on the detail of development design and its precise distribution. Scenario A would deliver less housing than Scenarios B and C and it may therefore be more feasible under this scenario to situate all new residential development in locations that have excellent access to services and facilities that benefit the health, education and employment prospects of new residents and enable them to pursue high quality and active lifestyles.
5 - To improve levels of education and skills in the population overall	+/-	Primary and secondary schools are distributed relatively equally throughout Ipswich, but the entire Borough currently has limited surplus capacity whilst a shortage of both primary and secondary school places is forecast in multiple areas. Scenario A would sustain a more limited population growth than Scenarios B and C and may therefore result in less additional pressure on school places, although it could result in greater capacity pressure than the Preferred Option. This scenario would be unlikely to facilitate the provision of additional capacity in most cases due to the lower quantity of development and smaller site sizes.
6 - To conserve and enhance water quality and resources	-	Under Alternative Scenario A, it is likely that the construction and occupation of 11,420 new dwellings, in addition to the creation of 19,040 jobs, would result in a net increase in the consumption of water resources in the Borough. A large portion of development would be expected to be situated in groundwater SPZs in the Borough and there could potentially be a cumulative risk on groundwater quality as

		a result. However, it is expected that construction will closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a number of developments.
7 - To maintain and where possible improve air quality	-	Under Alternative Scenario A, it is likely that the construction and occupation of 11,420 new dwellings, in addition to the creation of 19,040 jobs, would result in a net increase in air pollutants in relation to existing levels, in large part due to the associated increase in road transport. This could make it increasingly difficult to achieve air quality improvement targets at AQMAs in the Borough. Access to sustainable transport modes in Ipswich may help to limit this increase to some extent.
8 - To conserve and enhance soil and mineral resources	+	A large portion of development could potentially be situated on brownfield land. It could also enable more spacious developments or shorter buildings, although this may be a less efficient use of land than higher density developments in some cases.
9 - To promote the sustainable management of waste	--	Under Alternative Scenario A, it is likely that the construction and occupation of 11,420 new dwellings, in addition to the creation of 19,040 jobs, would result in a net increase in waste generation in relation to existing levels. Mitigation in the form of a strong recycling or re-use policy during construction would help to limit the use of materials. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently.
10 - To reduce emissions of greenhouse gases from energy consumption	-	The average carbon footprint per capita in 2016 in Ipswich was 3.1tonnes(T) Carbon dioxide (CO_2). The population growth of approximately 26,266 could potentially lead to an increase in annual CO_2 emissions in the order of 81,425T, although it should be noted that development would be phased in over the LPR period and that per capita CO_2 emissions decreased from 5.8T in 2005 to 3.1T in 2016 and this trend is likely to continue to some extent. However, the level of growth proposed under this option would be likely to lead to a net increase in the Borough's carbon footprint.
11 - To reduce vulnerability to climatic events and flooding	+/-	This approach proposes lower levels of development than Scenarios B and C and may therefore provide greater choice in terms of where to situate development in the Borough, although it is uncertain to the extent this would be the case given the limited land availability. Greater choice over site allocations provides greater freedom in terms of avoiding land at risk of flooding. Conversely, flood risk is fairly prevalent in Ipswich and situating all development here, instead of directing some to outside the Borough, could make it more difficult to avoid land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+	A large portion of development could potentially be situated on brownfield land in urban locations. This would be expected to help avoid adverse impacts on the coast and estuaries.
13 - To conserve and enhance biodiversity and geodiversity	+	A large portion of development could potentially be situated on brownfield land in urban locations. It could also enable lower density developments or low-rise buildings than would perhaps be seen in Scenarios B and C. This would contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on sensitive constraints and assets designated for their biodiversity value are likely to be more easily avoided, with the majority of them in fairly rural locations. Situating all development in the relatively urban Borough would also be less likely to risk adversely impacting protected species or to risk reducing habitat connectivity than if most development were in the more rural areas outside the Borough. On the other hand, this approach could lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity, although this would be expected to be a very limited impact.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	+	A large portion of development could potentially be situated on brownfield land in urban locations. Development would therefore be likely to be relatively in-keeping with the existing setting. If developments were less dense or tall than would be likely under Scenarios B and C, they would generally be less imposing on the local character. With fewer locations being developed than Scenarios B and C, fewer heritage assets would be placed at risk. It may also be more feasible to ensure all development is in-keeping with the existing setting and makes a positive contribution to the local character under this option.
15 - To conserve and enhance the quality and local distinctiveness of	+/-	A large portion of development could potentially be situated on brownfield land in urban locations. Development would therefore be likely to be relatively in-keeping with the existing setting. If developments were less dense or tall than would be likely under Scenarios B and C, they would generally be less imposing on the local

landscapes and townscape		character. Given the higher quantity of development proposed under this option than the Preferred Approach, it would be likely to require somewhat higher density developments that necessitate taller buildings and could in a limited number of locations have a capacity for adversely affecting the local townscape character.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	**++**	The Preferred Option and Alternative Scenario A would both provide the same quantity of jobs and would have largely similar impacts on the economic sphere of sustainability, thereby making a major positive contribution towards sustainable growth and prosperity in Ipswich over the LPR period. Whilst the minimum employment and housing needs of Ipswich would be satisfied, this level of growth would not deliver enough houses to support, or enough jobs to constitute, significant economic growth across the FEA. It also would not facilitate significant infrastructure development across the FEA. The population of Ipswich is ageing, and it will therefore be important to increase the population of the local working age group. It is uncertain the extent to which Scenario A would encourage growth in the proportion of the local population that is of working age in comparison to other scenarios.
17 - To maintain and enhance the vitality and viability of town and retail centres	**++**	The provision for 19,040 jobs in would satisfy the employment needs of Ipswich's growing population and make a significant contribution towards helping to improve the vitality and viability of town centres, particularly if many of the new jobs or homes are situated in central areas.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	**+**	This approach would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. This would help to reduce the need for residents to travel far and frequently and would also help to facilitate a higher uptake of sustainable transport modes than other scenarios where higher quantities of development are proposed, and a larger number of new residents would be situated in more rural locations. However, the significant scale of growth would be likely to place the capacity of various nodes and routes of public transport under pressure. This option would also result in a greater increase in local car movements than options of lower quantities of development.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	**++**	It is largely uncertain the impacts each growth option would have on SA Objective 19. However, to some extent, the quantity of development proposed under this option may be likely to result in less pressure placed on the existing capacity of digital infrastructure than alternative scenarios B and C and may lead to a higher proportion of all residents having good access to fast internet speeds.

25,837 dwellings 32,376 jobs	**Alternative Scenario B** A policy-led scenario for significant economic growth, with a 20% increase in the 2017-homes target relative to OAN. This high growth scenario is for both Ipswich and Suffolk Coastal combined.

Scenario B would facilitate the pursuit of significant economic development across the FEA, largely achieved through opportunities in the form of Sizewell nuclear power station, offshore energy industries and further support for key sectors. Most of the new jobs would be situated outside the Ipswich boundary, but would still make a key contribution to the success of the Ipswich FEA. The extra jobs targeted under this scenario necessitate the delivery of extra homes in order to ensure there is sufficient labour. In the case of Sizewell, campus-style housing would be provided for employees (this would be expected to be long term but temporary accommodation).

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+/-	At 2.3 people per dwelling, 25,837 dwellings would more than support the Borough's anticipated population growth. It is likely that some of the proposed development would be situated outside of Ipswich in neighbouring rural authorities and, unless they are situated near existing communities or new services and facilities are provided, there is a risk that some new residents could feel isolated. It may therefore be necessary to provide new services or facilities (including for health, education, community and leisure) in some locations, which would be likely to be feasible given the level of economic growth this scenario would facilitate.
2 - To meet the housing requirements of the whole community	++	Alternative Scenario B would deliver >20% more housing than Alternative Scenario A and would more than satisfy the local housing needs over the LPR period and it is expected that a significant portion of these homes would be of a mixture and type that ensure the diverse needs of all ages, abilities and wealth are catered for.
3 - To improve the health of the population overall and reduce health inequalities	+/-	Depending on the distribution of development, the greater quantity of development may increase the pressure on the capacity of existing services, particularly on GP surgeries where pressures on capacity are an existing concern. It may therefore be necessary to provide additional health services capacity in some locations, which could be feasible given the level of economic growth this scenario would facilitate. It is unlikely that most residents would be able to walk or cycle to access most services and facilities, given their more rural locations, in which case this Scenario may not encourage walking and cycling amongst new residents as much as the Preferred Approach might.
4 - To improve the quality of where people live and work	+/-	The relatively large quantity of residential development may make it difficult to ensure all new dwellings are situated in a location that offers good access to services and facilities, including health, education, leisure and culture facilities. The greater quantity of development could have an impact on crime rates or social cohesion due to more rapid growth. It is largely uncertain where development would be located, although this approach may necessitate situating some residents in more rural locations outside the Borough where noise, air and light pollution associated with the central areas is less of a concern.
5 - To improve levels of education and skills in the population overall	+/-	Depending on the distribution of development, the greater quantity of development may increase the pressure on the capacity of existing services, particularly on school places where pressures on capacity are an existing concern. It may therefore be necessary to provide additional schooling capacity in some locations, which could be feasible given the level of economic growth this scenario would facilitate.
6 - To conserve and enhance water quality and resources	--	Alternative Scenario B would deliver >20% more houses than Scenario A and so could be expected to result in a greater increase in water and consumption than Scenario A or the Preferred Option. It is also likely that a significant portion of development would be situated in a groundwater SPZ and a cumulative risk on the quality of groundwaters is likely. It is expected that construction will closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a number of developments but, given the quantity of development being considered, a major adverse effect on water resources cannot be ruled out.
7 - To maintain and where possible improve air quality	--	Alternative Scenario B would deliver >20% more houses than Scenario A and would be expected to result in a more severe impact on local air quality, largely due to the associated increase in road traffic. Should development be situated in

		more rural locations or outside the Borough, residents may have more limited access to sustainable transport modes and thus a higher reliance on personal car use.
8 - To conserve and enhance soil and mineral resources	**+/-**	Given the higher quantity of development under this scenario, it is unlikely to be feasible to situate all new development on brownfield land or in central areas of Ipswich. Less choice over where to situate development may also make it more difficult to avoid allocating land that contains agriculturally or ecologically important soils.
9 - To promote the sustainable management of waste	**--**	Alternative Scenario B would deliver >20% more houses than Scenario A and so could be expected to result in a greater increase in waste generation than Scenario A and the Preferred Option. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently. Given the quantity of development being considered, a major adverse impact on waste generation would be likely and ensuring high rates of recycling in all cases would be very difficult. Options for reusing materials or buildings in rural locations would also be more limited.
10 - To reduce emissions of greenhouse gases from energy consumption	**--**	At 3.1T CO_2 per capita, the population growth of 59,425 supported in this scenario could lead to an increase in annual CO_2 emissions in the order of 184,218T, although development would be phased in over the LPR period and per capita CO_2 emissions are likely to continue the trend of decreasing year on year. However, the level of growth proposed under this option would be likely to lead to a net increase in the Borough's carbon footprint.
11 - To reduce vulnerability to climatic events and flooding	**+/-**	Given the higher quantity of development under this scenario, it is unlikely to be feasible to situate all new development on brownfield land or in central areas of Ipswich. Less choice over where to situate development may also make it more difficult to avoid allocating land at some risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	**+/-**	Given the higher quantity of development under this scenario, it is unlikely to be feasible to situate all new development on brownfield land or in central areas of Ipswich. Less choice over where to situate development may also make it more difficult to avoid allocating land in proximity to sensitive estuaries including the Orwell.
13 - To conserve and enhance biodiversity and geodiversity	**-**	The >20% additional homes in this scenario may necessitate more dense developments and a larger number of different locations to be developed, although in some cases higher density development could also contribute to a more efficient use of land in the Borough. This could limit the Council's choice in terms of what land to allocate for development and in so doing make it more difficult to avoid adverse impacts on land or assets that have biodiversity value. More voluminous developments are also likely to create a more impassable barrier for local wildlife that fragments the ecological network, although given the relatively urban nature of much of the Borough this is unlikely to be a major concern in most places. Development in more rural locations outside the Borough, or in the countryside in the Borough, risks adversely impacting protected species.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	**-**	This scenario could limit the Council's choice in terms of what land to allocate for development and in so doing make it more difficult to avoid adverse impacts on land or assets that have cultural heritage value. Should taller buildings be required to accommodate the greater number of new dwellings, impacts on the setting, or views of and from, sensitive heritage assets may be more difficult to avoid in all cases.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	**-**	This scenario could limit the Council's choice in terms of what land to allocate for development and in so doing make it more difficult to avoid adverse impacts on land or assets that have landscape value. Should taller buildings be required to accommodate the greater number of new dwellings, impacts on the local character and views are more likely.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	**++**	The provision for 32,376 jobs in Alternative Scenario B would more than meet the anticipated trends in job needs for Ipswich. A key benefit of Scenario B is that it would target significant economic growth in Ipswich, which would make a major positive contribution towards sustainable growth and prosperity in the Borough. Rates of unemployment in Ipswich, at 4.7%, are slightly lower than the UK average of 5.1% but slightly higher than those seen in neighbouring authorities. The population of Ipswich is ageing, and it will be important to help increase the population of the local working age group. The ambitious economic growth target

		under this scenario could help to boost the local population of those of working age.
17 - To maintain and enhance the vitality and viability of town and retail centres	**++**	The provision for 32,376 jobs in Alternative Scenario B would be expected to make a major contribution towards enhancing the vibrancy and vitality of central areas in Ipswich. Whilst many new jobs would be outside the Borough boundary, most new residents would be within the Borough and would help to improve the vitality and viability of town centres.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	**+/-**	The greater quantity of development proposed under this scenario than Scenario A or the Preferred Option may increase the risk of exacerbating local congestion issues, particularly at pinch points such as Orwell Bridge, without the provision of new infrastructure or transport facilities. Should new development be situated in more rural locations, or in the countryside, access to sustainable transport modes may be more limited whilst the longer distances may mean walking or cycling to central areas and places of employment may be less feasible for new residents.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	**+**	It is largely uncertain the impacts each growth option would have on SA Objective 19. However, to some extent, the greater quantity of development proposed under this option than Scenario A or the Preferred Option may be likely to result in greater pressure placed on the existing capacity of digital infrastructure. Where residents are situated in rural locations, it may be challenging to ensure they all have access to high internet speeds without the provision of new infrastructure.

30,143 dwellings 32,376 jobs	**Alternative Scenario C** 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. This high growth scenario is for both Ipswich and Suffolk Coastal combined.

The Norfolk and Suffolk Devolution Agreement June 2016 set out a commitment to substantially increase housing delivery and planned for 200,000 homes across Norfolk and Suffolk between 2012 – 2036, along with the delivery of significant infrastructure. Scenario C aspires to support this ambitious growth. In addition to 30,143 dwellings it would also permit the delivery of key infrastructure, potentially including a resolution to congestion problems associated with the closure of Orwell Bridge during bad weather. The new infrastructure would also open up new areas inside and outside of the Borough for residential development, such as large sites opening up following major road schemes. This scenario would also facilitate the delivery of new services, including health, education and community infrastructure, that could be delivered on-site as well as a large quantity of affordable and social-rented housing.

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	At 2.3 people per dwelling, 30,143 new dwellings would more than support the Borough's anticipated population growth. The provision of services and facilities on-site that this scenario would facilitate could be accessible via foot, which is particularly beneficial to the growing elderly population and would help to alleviate the risk of social exclusion.
2 - To meet the housing requirements of the whole community	++	Alternative Scenario C would deliver significantly more housing than the OAN, and 4,306 more dwellings than Scenario B. It would also deliver a greater quantity of affordable housing and would be likely to cater to the wider housing needs of local and new residents.
3 - To improve the health of the population overall and reduce health inequalities	++	Scenario C proposes the greatest quantity of growth through an infrastructure led proposal that would provide additional health and leisure services and facilities and could therefore help to alleviate existing pressures on GP surgeries and to ensure all residents have good access to necessary health services. It is unlikely that most residents would be able to walk or cycle to access most services and facilities, given their more rural locations, in which case this Scenario may not encourage walking and cycling amongst new residents as much as the Preferred Approach might.
4 - To improve the quality of where people live and work	+	Given the provision of new services and facilities, including those designed for culture or leisure purposes, it is likely that many residents under this scenario would be able to pursue high quality and active lifestyles and to feel integrated into a local community. The greater quantity of development could have an impact on crime rates or social cohesion due to more rapid growth. It is somewhat uncertain where development would be located, although this approach may necessitate situating the majority of new residents in more rural locations outside the Borough where noise, air and light pollution associated with the central areas is less of a concern.
5 - To improve levels of education and skills in the population overall	++	Primary and secondary schools are distributed relatively equally throughout Ipswich. However, the entire Borough currently has limited surplus capacity whilst a shortage of both primary and secondary school places is forecast in multiple areas. Scenario C proposes the greatest quantity of growth through an infrastructure led proposal that would provide additional schooling capacity, although it is likely that much of the proposed Development would be situated outside of Ipswich.
6 - To conserve and enhance water quality and resources	--	Alternative Scenario C would accommodate more new housing than other scenarios and could therefore be expected to result in a greater increase in the consumption of water resources. The majority of development would also be expected to be situated in groundwater SPZs and there would be a cumulative risk to the quality of groundwater sources. It is expected that construction will closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a number of sites but given the quantity of development being considered a major adverse effect on water resources cannot be ruled out.

7 - To maintain and where possible improve air quality	--	Alternative Scenario C would accommodate more new housing than other scenarios and could therefore be expected to result in a greater increase in air pollution, particularly as many residents could be situated in rural locations where access to sustainable transport modes is more limited and where they have to travel longer distances to reach central areas and places of employment and thus are less likely to walk or cycle. A key facet of Scenario C is the delivery of significant infrastructure and it is largely uncertain the impacts this would have on the environment. Some of the congestion issues troubling certain locations of the Borough could be resolved, which would help to reduce rates of air pollution in these locations, although it would also introduce greater rates of air pollution, over the long term, in locations where new roads are provided.
8 - To conserve and enhance soil and mineral resources	-	As development would take place in new locations opened up by new road schemes, it is likely that a large portion of development would take place outside the Borough in the more rural neighbouring authorities in previously undeveloped locations and on greenfield land and thus significant losses of agriculturally and ecologically valuable soils may be more likely under Scenario C than any other scenario.
9 - To promote the sustainable management of waste	--	Alternative Scenario C would accommodate more new housing than other scenarios and could therefore be expected to result in a greater increase in the generation of waste. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently. Given the quantity of development being considered, a major adverse impact on waste generation would be likely and ensuring high rates of recycling in all cases would be very difficult. Options for reusing materials or buildings in rural locations would also be more limited.
10 - To reduce emissions of greenhouse gases from energy consumption	--	At 3.1T CO_2 per capita, the population growth of 69,329 supported in this scenario could lead to an increase in annual CO_2 emissions in the order of 214,920T. It should be noted that development would be phased in over the LPR period and that per capita CO_2 emissions decreased from 5.8T in 2005 to 3.1T in 2016 and this trend is likely to continue to some extent. As development would take place in new locations opened up by new road schemes, it is likely that a large portion of development would take place outside the Borough in the more rural neighbouring authorities, where carbon footprints per capita are generally greater.
11 - To reduce vulnerability to climatic events and flooding	+/-	The ambitious level of growth aspired for under Scenario C would be likely to require a greater quantity of sites to be developed on and this could make it difficult to avoid land at risk of flooding in all cases.
12 - To safeguard the integrity of the coast and estuaries	+/-	The ambitious level of growth aspired for under Scenario C would be likely to require a greater quantity of sites to be developed on and this could make it difficult to avoid adverse impacts on estuaries in all cases.
13 - To conserve and enhance biodiversity and geodiversity	-	The ambitious level of growth aspired for under Scenario C would be likely to require a greater quantity of sites to be developed on and this could make it difficult to avoid adverse impacts on biodiversity in all cases. Development in the more rural areas outside the Borough is more likely to risk adversely impacting protected species as well as to reduce the connectivity of the ecological network by increasing the distances between habitats.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	-	The ambitious level of growth aspired for under Scenario C would be likely to require a greater quantity of sites to be developed on and this could make it difficult to avoid adverse impacts on heritage assets in all cases. Should taller buildings be required to accommodate the greater number of new dwellings, impacts on the local setting are more likely.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	-	The ambitious level of growth aspired for under Scenario C would be likely to require a greater quantity of sites to be developed on and this could make it difficult to avoid adverse impacts on distinctive landscapes or townscapes in all cases. Should taller buildings be required to accommodate the greater number of new dwellings, impacts on the local character and views are more likely.
16 - To achieve sustainable levels of prosperity and growth	++	The creation of 32,376 jobs under Alternative Scenario C would more than satisfy local employment needs over the LPR period and would facilitate a transformation of Ipswich's economy. The ambitious economic growth target under this scenario could help to boost the local population of those of working age.

throughout the plan area		
17 - To maintain and enhance the vitality and viability of town and retail centres	++	The greater population growth and significant uplift in jobs would support would be likely to help enhance the vitality and viability of town centres throughout the Borough.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	+/-	The substantial uplift target for housing aspired to under this scenario would enable the delivery of key infrastructure such as new major road schemes. This would be expected to help alleviate congestion issues in some areas of the Borough, particularly at pinch points such as Orwell Bridge. The population of Ipswich is ageing, and it will be important to help increase the population of the local working age group. It is expected that this option would require a large quantity of development to be situated outside Ipswich in the more rural neighbouring authorities. Access to public transport modes is generally more limited here, particularly as development would occur on new land opened up due to major road schemes. The greater distances to reach central areas may also contribute towards a generally higher reliance on personal car use under this scenario than others.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	+	It is largely uncertain the impacts each growth option would have on SA Objective 19. However, to some extent, the greater quantity of development proposed under this option than other scenarios may be likely to result in greater pressure placed on the existing capacity of digital infrastructure. Where residents are situated in rural locations, it may be challenging to ensure they all have access to high internet speeds without the provision of new infrastructure. On the other hand, where new development is located the relatively large scale of it could facilitate the delivery of additional digital infrastructure that benefits the local community. Given the scale of development under this infrastructure-led scenario, it is considered to be likely that in some locations the proposed Development could facilitate the delivery of additional digital infrastructure.

Alternative Scenario D: 8,010 dwellings and 9,500 jobs

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	The provision of 8,010 new homes would be expected to satisfy the housing needs of the Borough by 2036 and to support the anticipated population growth. Careful consideration in the LPR would be required to help ensure these residents have good access to culture, leisure and community facilities to avoid social exclusion. It is largely uncertain what impact each growth option would have on the quality of homes. The scenario would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good and where there is an existing community. Leisure and culture facilities, such as sports clubs, play areas and meeting points, are distributed liberally throughout the Borough and are unlikely to be rendered over-capacity. Under this scenario it may be easier than all other scenarios to ensure that new residents do not feel socially excluded.
2 - To meet the housing requirements of the whole community	++	The Preferred Option for growth would satisfy the minimum housing needs of Ipswich over the LPR period and it is expected that a significant portion of these homes would be of a mixture and type that ensure the diverse needs of Ipswich's varied and growing population are catered for. Whilst this scenario doesn't allow for uplift or a buffer in relation to housing need, if the Council were to allocate all available sites (which would accommodate 9,517 dwellings) there would be a 14% contingency over the 8,010 housing requirement.
3 - To improve the health of the population overall and reduce health inequalities	+	There are currently 23 GP surgeries within the boundary of Ipswich, predominantly situated in the northern and eastern regions of the Borough, some of which are experiencing pressures on capacity. This growth scenario proposes the lowest quantity of new homes and so would be less likely than the alternatives to result in significant over-capacity concerns at schools and health services. Given most development would be within the Borough, the majority of new residents would be expected to have good access to health facilities. Residents would have excellent access to open spaces and leisure facilities. Given that most services, amenities and facilities would be within walking distance this option would be likely to encourage greater rates of walking and cycling than any other growth scenario.
4 - To improve the quality of where people live and work	+/-	With lower quantities of development, the risk of rising crime rates may be lower than other scenarios where the population growth could potentially grow significantly more. This approach would be likely to situate nearly all new residents in the relatively urban Ipswich where major noise, air and light pollutants are relatively common. This approach may therefore lead to somewhat lower quality living environments than other scenarios, although this is largely dependent on the detail of development design and its precise distribution. It may be more feasible under this approach than others to situate all new residential development in locations that have excellent access to services and facilities that benefit the health, education and employment prospects of new residents and enable them to pursue high quality and active lifestyles.
5 - To improve levels of education and skills in the population overall	+/-	Primary and secondary schools are distributed relatively equally throughout Ipswich, but the entire Borough currently has limited surplus capacity, with a shortage of both primary and secondary school places being forecast in multiple areas. Given the likely sizes of most development and their somewhat constrained locations within the Borough, it is unlikely that this approach would facilitate the delivery of additional services or facilities in most cases. This approach would deliver lower levels of development than any other scenario and may therefore be less likely to result in over-capacity concerns in some locations, although this is caveated by the fact that other scenarios would be likely to have more dispersed development with many new homes in settlements outside the Borough, which could reduce pressure on educational facilities within Ipswich.
6 - To conserve and enhance water quality and resources	-	Under this scenario, it is likely that the construction and occupation of 8,010 homes would result in a net increase in the consumption of water resources in the Borough. It is expected that much of this development would be within Groundwater SPZs in Ipswich and there could be a cumulative risk of impacts on water quality. However, it is expected that construction would closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a larger developments.

Alternative Scenario D: 8,010 dwellings and 9,500 jobs

SA Objective	Score	Commentary
7 - To maintain and where possible improve air quality	-	It is likely that the construction and occupation of 8,010 homes would result in a net increase in air pollution in relation to existing levels, in large part due to the associated increase in road transport. This could make it increasingly difficult to achieve air quality improvement targets at AQMAs in the Borough. Access to sustainable transport modes in Ipswich may help to limit this increase to some extent. This impact would be likely to be more limited than it is under all other scenarios considered by the Council.
8 - To conserve and enhance soil and mineral resources	+	A large portion of development could potentially be situated on brownfield land. This fact, coupled with the fact that this approach would require lower levels of development than other approaches, means that Scenario D would be likely to help ensure an efficient use of land and to limit the loss of valuable soils and minerals due to development.
9 - To promote the sustainable management of waste	-	It is likely that the construction and occupation of 8,010 homes would result in a net rise in waste generation. Mitigation in the form of a strong recycling or re-use policy during construction would help to limit the use of materials. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently. This scenario would be likely to result in significantly less waste than other growth scenarios considered by the Council.
10 - To reduce emissions of greenhouse gases from energy consumption	-	The average carbon footprint per capita in 2016 in Ipswich was 3.1tonnes(T) Carbon dioxide (CO_2). A population growth of approximately 18,423 (i.e. 2.3 people per dwelling) could potentially lead to an increase in annual CO_2 emissions in the order of 57,111T, although it should be noted that development would be phased in over the LPR period and that per capita CO_2 emissions decreased from 5.8T in 2005 to 3.1T in 2016 and this trend is likely to continue to some extent. However, the level of growth proposed under this option would be likely to lead to a net increase in the Borough's carbon footprint. This scenario would be expected to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. New residents under this scenario may therefore be likely to have a lower carbon footprint or to have less of an adverse impact on air quality than residents situated in the more rural and, in some cases, more isolated areas of the neighbouring authorities as they will typically be in closer proximity to services, facilities and sustainable transport modes.
11 - To reduce vulnerability to climatic events and flooding	+/-	This approach proposes lower levels of development compared with other scenarios and may therefore provide greater choice in terms of where to situate development in the Borough, although it is uncertain given the limited land availability. Greater choice over site allocations provides greater freedom in terms of avoiding land at risk of flooding. Conversely, flood risk is fairly prevalent in Ipswich and situating all development here, instead of directing some to outside the Borough, could make it more difficult to avoid land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+	Scenario D would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This would contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on the distinctive character of the estuary and the heritage, landscape and biodiversity assets here may more easily be avoided.
13 - To conserve and enhance biodiversity and geodiversity	+	Scenario D would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This could contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on sensitive constraints and assets designated for their biodiversity value are likely to be more easily avoided, with the majority of them in fairly rural locations. Situating all development in the relatively urban Borough would also be less likely to risk adversely impacting protected species or to risk reducing habitat connectivity than if most development were in the more rural areas outside the Borough. On the other hand, this approach could lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity, although this would be expected to be a very limited impact.
14 - To conserve and where appropriate	+	Impacts on the landscape and townscape character depend almost entirely on the precise details of development, such as its type, pattern and form, in relation to its

Alternative Scenario D: 8,010 dwellings and 9,500 jobs

SA Objective	Score	Commentary
enhance areas and assets of historical and archaeological importance		precise location. Lower density developments or low-rise buildings would contribute to a range of potential benefits in terms of cultural heritage because adverse impacts on sensitive constraints and assets designated for their cultural heritage value are likely to be more easily avoided. With fewer locations being developed under this scenario than other scenarios, fewer heritage assets would be placed at risk compared to other higher growth options. It may also be more feasible to ensure all development is in-keeping with the existing setting and makes a positive contribution to the local character under this option.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	+	Lower density developments or low-rise buildings would contribute to a range of potential benefits for the protecting the character of landscapes or townscapes as they would be less imposing than high-density or taller developments. At the same time, higher density developments could result in less land being lost to development, contributing to a more efficient land-use approach. A larger proportion of new development would be likely to be in-keeping with the existing townscape, with adverse impacts on the local character also avoided or minor due to less greenfield sites being lost to development.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	The creation of 9,500 jobs under Alternative Scenario D would satisfy local employment needs over the Plan period and would contribute towards a transformation of Ipswich's economy. The ambitious economic growth target under this scenario could help to boost the local population of those of working age.
17 - To maintain and enhance the vitality and viability of town and retail centres	++	The greater population growth and significant uplift in jobs would support would be likely to help enhance the vitality and viability of town centres throughout the Borough.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	++	Scenario D would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. This would help to reduce the need for residents to travel far and frequently and would also help to facilitate a higher uptake of sustainable transport modes than other scenarios where higher quantities of development are proposed, and a larger number of new residents would be situated in more rural locations.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	++	It is somewhat uncertain the impacts each growth option would have on SA Objective 19. However, the lower quantity of development proposed under this option may be likely to result in less pressure placed on the existing capacity of digital infrastructure and may lead to a higher proportion of all residents having good access to fast internet speeds. It is likely to be more feasible to deliver broadband or full fibre internet for development in urban locations than it would for development in rural locations and, where such digital infrastructure is provided for, a large portion of residents would be catered for.

Alternative Scenario E: 8,838 dwellings and 15,580 jobs

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	The provision of 8838 new homes would be expected to satisfy the housing needs of the Borough by 2036 and to support the anticipated population growth. Given the ageing population of the Borough, careful consideration in the LPR would be required to help ensure these residents have good access to culture, leisure and community facilities to avoid social exclusion. It is largely uncertain what impact each growth option would have on the quality of homes. The scenario would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good and where there is an existing community. Leisure and culture facilities, such as sports clubs, play areas and meeting points, are distributed liberally throughout the Borough and are unlikely to be rendered over-capacity. Under this scenario it may be easier than all other scenarios to ensure that new residents do not feel socially excluded.
2 - To meet the housing requirements of the whole community	++	Scenario E would satisfy the minimum housing needs of Ipswich over the LPR period and it is expected that a significant portion of these homes would be of a mixture and type that ensure the diverse needs of Ipswich's varied and growing population are catered for. If the Council were to allocate all available sites (which would accommodate 9,517 dwellings) there would be a 7.7% contingency over the 8,838 housing requirement.
3 - To improve the health of the population overall and reduce health inequalities	+	There are currently 23 GP surgeries within the boundary of Ipswich, predominantly situated in the northern and eastern regions of the Borough, some of which are experiencing pressures on capacity. This growth scenario proposes a significantly lower quantity of new homes than Alternative Scenarios A, B and C but only a slightly higher quantity than the Old Preferred Approach an Scenarios D and F. This scenario would therefore be relatively unlikely to result in over-capacity concerns at schools and health services. Given most development would be within the Borough, the majority of new residents would be expected to have good access to health facilities. Residents would have excellent access to open spaces and leisure facilities. Given that most services, amenities and facilities would be within walking distance this option would be likely to encourage greater rates of walking and cycling than any other growth scenario.
4 - To improve the quality of where people live and work	+/-	With lower quantities of development, the risk of rising crime rates may be lower than other scenarios where the population growth could potentially grow significantly more. This approach would be likely to situate nearly all new residents in the relatively urban Ipswich where major noise, air and light pollutants are relatively common. This approach may therefore lead to somewhat lower quality living environments than other scenarios, although this is largely dependent on the detail of development design and its precise distribution. It may be more feasible under this approach than others to situate all new residential development in locations that have excellent access to services and facilities that benefit the health, education and employment prospects of new residents and enable them to pursue high quality and active lifestyles.
5 - To improve levels of education and skills in the population overall	+/-	Primary and secondary schools are distributed relatively equally throughout Ipswich, but the entire Borough currently has limited surplus capacity, with a shortage of both primary and secondary school places being forecast in multiple areas. Given the likely sizes of most development and their somewhat constrained locations within the Borough, it is unlikely that this approach would facilitate the delivery of additional services or facilities in most cases. This approach would deliver lower levels of development than any other scenario and may therefore be less likely to result in over-capacity concerns in some locations, although this is caveated by the fact that other scenarios would be likely to have more dispersed development with many new homes in settlements outside the Borough, which could reduce pressure on educational facilities within Ipswich.
6 - To conserve and enhance water quality and resources	-	Under this scenario, it is likely that the construction and occupation of 8,838 homes would result in a net increase in the consumption of water resources in the Borough. It is expected that much of this development would be within Groundwater SPZs in Ipswich and there could be a cumulative risk of impacts on water quality. However, it is expected that construction would closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a larger developments.

Alternative Scenario E: 8,838 dwellings and 15,580 jobs

SA Objective	Score	Commentary
7 - To maintain and where possible improve air quality	-	It is likely that the construction and occupation of 8,838 homes would result in a net increase in air pollution in relation to existing levels, in large part due to the associated increase in road transport. This could make it increasingly difficult to achieve air quality improvement targets at AQMAs in the Borough. Access to sustainable transport modes in Ipswich may help to limit this increase to some extent. This impact would be likely to be more limited than it is under all other scenarios considered by the Council.
8 - To conserve and enhance soil and mineral resources	+	A large portion of development could potentially be situated on brownfield land. This fact, coupled with the fact that this approach would require lower levels of development than most other scenarios (significantly less than Alternative Scenarios A, B and C), means that Scenario E would be likely to help ensure an efficient use of land and to limit the loss of valuable soils and minerals due to development. This positive impact would be likely to be of a slightly lower magnitude than for Scenarios D and F.
9 - To promote the sustainable management of waste	-	It is likely that the construction and occupation of 8,838 homes would result in a net increase in waste generation. Mitigation in the form of a strong recycling or re-use policy during construction would help to limit the use of materials. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently. This scenario would be likely to result in significantly less waste than other growth scenarios considered by the Council.
10 - To reduce emissions of greenhouse gases from energy consumption	-	The average carbon footprint per capita in 2016 in Ipswich was 3.1tonnes(T) Carbon dioxide (CO_2). A population growth of approximately 18,423 (i.e. 2.3 people per dwelling) could potentially lead to an increase in annual CO_2 emissions in the order of 63,015T, although it should be noted that development would be phased in over the LPR period and that per capita CO_2 emissions decreased from 5.8T in 2005 to 3.1T in 2016 and this trend is likely to continue to some extent. However, the level of growth proposed under this option would be likely to lead to a net increase in the Borough's carbon footprint. Scenario E would be expected to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. New residents under this scenario may therefore be likely to have a lower carbon footprint or to have less of an adverse impact on air quality than residents situated in the more rural and, in some cases, more isolated areas of the neighbouring authorities as they will typically be in closer proximity to services, facilities and sustainable transport modes.
11 - To reduce vulnerability to climatic events and flooding	+/-	This approach proposes lower levels of development compared with most other scenarios and may therefore provide greater choice in terms of where to situate development in the Borough, although it is uncertain given the limited land availability. Greater choice over site allocations provides greater freedom in terms of avoiding land at risk of flooding. Conversely, flood risk is fairly prevalent in Ipswich and situating all development here, instead of directing some to outside the Borough, could make it more difficult to avoid land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+	Scenario E would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This would contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on the distinctive character of the estuary and the heritage, landscape and biodiversity assets here may more easily be avoided.
13 - To conserve and enhance biodiversity and geodiversity	+/-	Scenario E would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This could contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on sensitive constraints and assets designated for their biodiversity value are likely to be more easily avoided, with the majority of them in fairly rural locations. Situating all development in the relatively urban Borough would also be less likely to risk adversely impacting protected species or to risk reducing habitat connectivity than if most development were in the more rural areas outside the Borough. On the other hand, this approach would be likely to lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity given the scale of development proposed.

Alternative Scenario E: 8,838 dwellings and 15,580 jobs

SA Objective	Score	Commentary
		More development would be required in rural locations where impacts on wildlife are likely to be more severe, such as reducing the connectivity of ecological networks.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	+	Impacts on the landscape and townscape character depend almost entirely on the precise details of development, such as its type, pattern and form, in relation to its precise location. Lower density developments or low-rise buildings would contribute to a range of potential benefits in terms of cultural heritage because adverse impacts on sensitive constraints and assets designated for their cultural heritage value are likely to be more easily avoided. With fewer locations being developed under this scenario than other scenarios, fewer heritage assets would be placed at risk compared to other higher growth options. It may also be more feasible to ensure all development is in-keeping with the existing setting and makes a positive contribution to the local character under this option.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	+/-	Lower density developments or low-rise buildings would contribute to a range of potential benefits for the protecting the character of landscapes or townscapes as they would be less imposing than high-density or taller developments. At the same time, higher density developments could result in less land being lost to development, contributing to a more efficient land-use approach. A larger proportion of new development would be likely to be in-keeping with the existing townscape, with adverse impacts on the local character also avoided or minor due to less greenfield sites being lost to development. On the other hand, this approach would be likely to lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity given the scale of development proposed. More development would also be required in rural locations where impacts on landscape character are likely to be more severe and more difficult to avoid or minimise.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	The creation of 15,580 jobs under this Scenario would more than satisfy local employment needs over the Plan period and would contribute towards a transformation of Ipswich's economy. The ambitious economic growth target under this scenario could help to boost the local population of those of working age.
17 - To maintain and enhance the vitality and viability of town and retail centres	++	The greater population growth and significant uplift in jobs would support would be likely to help enhance the vitality and viability of town centres throughout the Borough.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	+	Scenario E would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. This would help to reduce the need for residents to travel far and frequently and would also help to facilitate a higher uptake of sustainable transport modes than other scenarios where higher quantities of development are proposed, and a larger number of new residents would be situated in more rural locations. However, the significant scale of growth would be likely to place the capacity of various nodes and routes of public transport under pressure. This option would also result in a greater increase in local car movements than options of lower quantities of development.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	++	It is somewhat uncertain the impacts each growth option would have on SA Objective 19. However, the lower quantity of development proposed under this option may be likely to result in less pressure placed on the existing capacity of digital infrastructure and may lead to a higher proportion of all residents having good access to fast internet speeds. It is likely to be more feasible to deliver broadband or full fibre internet for development in urban locations than it would for development in rural locations and, where such digital infrastructure is provided for, a large portion of residents would be catered for.

Alternative Scenario F: 8,802 dwellings and 15,580 jobs

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	The provision of 8,802 new homes would be expected to satisfy the housing needs of the Borough by 2036 and to support the anticipated population growth. Given the ageing population of the Borough, careful consideration in the LPR would be required to help ensure these residents have good access to culture, leisure and community facilities to avoid social exclusion. It is largely uncertain what impact each growth option would have on the quality of homes. The scenario would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good and where there is an existing community. Leisure and culture facilities, such as sports clubs, play areas and meeting points, are distributed liberally throughout the Borough and are unlikely to be rendered over-capacity. Under this scenario it may be easier than all other scenarios to ensure that new residents do not feel socially excluded.
2 - To meet the housing requirements of the whole community	++	Scenario F would satisfy the minimum housing needs of Ipswich over the LPR period and it is expected that a significant portion of these homes would be of a mixture and type that ensure the diverse needs of Ipswich's varied and growing population are catered for. If the Council were to allocate all available sites (which would accommodate 9,517 dwellings) there would be a 8.1% contingency over the 8,802 housing requirement.
3 - To improve the health of the population overall and reduce health inequalities	+	There are currently 23 GP surgeries within the boundary of Ipswich, predominantly situated in the northern and eastern regions of the Borough, some of which are experiencing pressures on capacity. This growth scenario proposes a significantly lower quantity of new homes than Alternative Scenarios A, B and C but only a slightly higher quantity than the Old Preferred Approach an Scenario E. This scenario would therefore be relatively unlikely to result in over-capacity concerns at schools and health services. Given most development would be within the Borough, the majority of new residents would be expected to have good access to health facilities. Residents would have excellent access to open spaces and leisure facilities. Given that most services, amenities and facilities would be within walking distance this option would be likely to encourage greater rates of walking and cycling than any other growth scenario.
4 - To improve the quality of where people live and work	+/-	With lower quantities of development, the risk of rising crime rates may be lower than other scenarios where the population growth could potentially grow significantly more. This approach would be likely to situate nearly all new residents in the relatively urban Ipswich where major noise, air and light pollutants are relatively common. This approach may therefore lead to somewhat lower quality living environments than other scenarios, although this is largely dependent on the detail of development design and its precise distribution. It may be more feasible under this approach than others to situate all new residential development in locations that have excellent access to services and facilities that benefit the health, education and employment prospects of new residents and enable them to pursue high quality and active lifestyles.
5 - To improve levels of education and skills in the population overall	+/-	Primary and secondary schools are distributed relatively equally throughout Ipswich, but the entire Borough currently has limited surplus capacity, with a shortage of both primary and secondary school places being forecast in multiple areas. Given the likely sizes of most development and their somewhat constrained locations within the Borough, it is unlikely that this approach would facilitate the delivery of additional services or facilities in most cases. This approach would deliver lower levels of development than any other scenario and may therefore be less likely to result in over-capacity concerns in some locations, although this is caveated by the fact that other scenarios would be likely to have more dispersed development with many new homes in settlements outside the Borough, which could reduce pressure on educational facilities within Ipswich.
6 - To conserve and enhance water quality and resources	-	Under this scenario, it is likely that the construction and occupation of 8,802 homes would result in a net increase in the consumption of water resources in the Borough. It is expected that much of this development would be within Groundwater SPZs in Ipswich and there could be a cumulative risk of impacts on water quality. However, it is expected that construction would closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a larger developments.

Alternative Scenario F: 8,802 dwellings and 15,580 jobs

SA Objective	Score	Commentary
7 - To maintain and where possible improve air quality	-	It is likely that the construction and occupation of 8,802 homes would result in a net increase in air pollution in relation to existing levels, in large part due to the associated increase in road transport. This could make it increasingly difficult to achieve air quality improvement targets at AQMAs in the Borough. Access to sustainable transport modes in Ipswich may help to limit this increase to some extent. This impact would be likely to be more limited than it is under all other scenarios considered by the Council.
8 - To conserve and enhance soil and mineral resources	+	A large portion of development could potentially be situated on brownfield land. This fact, coupled with the fact that this approach would require lower levels of development than most other scenarios (significantly less than Alternative Scenarios A, B and C), means that this scenario would be likely to help ensure an efficient use of land and to limit the loss of valuable soils and minerals due to development. This positive impact would be likely to be of a slightly lower magnitude than for Scenario D.
9 - To promote the sustainable management of waste	-	It is likely that the construction and occupation of 8,802 homes would result in a net increase in waste generation. Mitigation in the form of a strong recycling or re-use policy during construction would help to limit the use of materials. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently. This scenario would be likely to result in significantly less waste than other growth scenarios considered by the Council.
10 - To reduce emissions of greenhouse gases from energy consumption	-	The average carbon footprint per capita in 2016 in Ipswich was 3.1tonnes(T) Carbon dioxide (CO_2). A population growth of approximately 18,423 (i.e. 2.3 people per dwelling) could potentially lead to an increase in annual CO_2 emissions in the order of 62,758T, although it should be noted that development would be phased in over the LPR period and that per capita CO_2 emissions decreased from 5.8T in 2005 to 3.1T in 2016 and this trend is likely to continue to some extent. However, the level of growth proposed under this option would be likely to lead to a net increase in the Borough's carbon footprint. Scenario F would be expected to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. New residents under this scenario may therefore be likely to have a lower carbon footprint or to have less of an adverse impact on air quality than residents situated in the more rural and, in some cases, more isolated areas of the neighbouring authorities as they will typically be in closer proximity to services, facilities and sustainable transport modes.
11 - To reduce vulnerability to climatic events and flooding	+/-	This approach proposes lower levels of development compared with most other scenarios and may therefore provide greater choice in terms of where to situate development in the Borough, although it is uncertain given the limited land availability. Greater choice over site allocations provides greater freedom in terms of avoiding land at risk of flooding. Conversely, flood risk is fairly prevalent in Ipswich and situating all development here, instead of directing some to outside the Borough, could make it more difficult to avoid land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+	Scenario F would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This would contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on the distinctive character of the estuary and the heritage, landscape and biodiversity assets here may more easily be avoided.
13 - To conserve and enhance biodiversity and geodiversity	+/-	Scenario F would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This could contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on sensitive constraints and assets designated for their biodiversity value are likely to be more easily avoided, with the majority of them in fairly rural locations. Situating all development in the relatively urban Borough would also be less likely to risk adversely impacting protected species or to risk reducing habitat connectivity than if most development were in the more rural areas outside the Borough. On the other hand, this approach would be likely to lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity given the scale of development proposed.

Alternative Scenario F: 8,802 dwellings and 15,580 jobs

SA Objective	Score	Commentary
		More development would be required in rural locations where impacts on wildlife are likely to be more severe, such as reducing the connectivity of ecological networks.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	+	Impacts on the landscape and townscape character depend almost entirely on the precise details of development, such as its type, pattern and form, in relation to its precise location. Lower density developments or low-rise buildings would contribute to a range of potential benefits in terms of cultural heritage because adverse impacts on sensitive constraints and assets designated for their cultural heritage value are likely to be more easily avoided. With fewer locations being developed under this scenario than other scenarios, fewer heritage assets would be placed at risk compared to other higher growth options. It may also be more feasible to ensure all development is in-keeping with the existing setting and makes a positive contribution to the local character under this option.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	+/-	Lower density developments or low-rise buildings would contribute to a range of potential benefits for the protecting the character of landscapes or townscapes as they would be less imposing than high-density or taller developments. At the same time, higher density developments could result in less land being lost to development, contributing to a more efficient land-use approach. A larger proportion of new development would be likely to be in-keeping with the existing townscape, with adverse impacts on the local character also avoided or minor due to less greenfield sites being lost to development. On the other hand, this approach would be likely to lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity given the scale of development proposed. More development would also be required in rural locations where impacts on landscape character are likely to be more severe and more difficult to avoid or minimise.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	The creation of 15,580 jobs under this Scenario would more than satisfy local employment needs over the Plan period and would contribute towards a transformation of Ipswich's economy. The ambitious economic growth target under this scenario could help to boost the local population of those of working age.
17 - To maintain and enhance the vitality and viability of town and retail centres	++	The greater population growth and significant uplift in jobs would support would be likely to help enhance the vitality and viability of town centres throughout the Borough.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	+	Scenario F would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. This would help to reduce the need for residents to travel far and frequently and would also help to facilitate a higher uptake of sustainable transport modes than other scenarios where higher quantities of development are proposed, and a larger number of new residents would be situated in more rural locations. However, the significant scale of growth would be likely to place the capacity of various nodes and routes of public transport under pressure. This option would also result in a greater increase in local car movements than options of lower quantities of development.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	++	It is somewhat uncertain the impacts each growth option would have on SA Objective 19. However, the lower quantity of development proposed under this option may be likely to result in less pressure placed on the existing capacity of digital infrastructure and may lead to a higher proportion of all residents having good access to fast internet speeds. It is likely to be more feasible to deliver broadband or full fibre internet for development in urban locations than it would for development in rural locations and, where such digital infrastructure is provided for, a large portion of residents would be catered for.

Alternative Scenario G: 9,612 dwellings and 15,580 jobs

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	The provision of 9,612 new homes would be expected to satisfy the housing needs of the Borough by 2036 and to support the anticipated population growth. Given the ageing population of the Borough, careful consideration in the LPR would be required to help ensure these residents have good access to culture, leisure and community facilities to avoid social exclusion. It is largely uncertain what impact each growth option would have on the quality of homes. The scenario would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good and where there is an existing community. Leisure and culture facilities, such as sports clubs, play areas and meeting points, are distributed liberally throughout the Borough and are unlikely to be rendered over-capacity. Under this scenario it may be easier than all other scenarios to ensure that new residents do not feel socially excluded.
2 - To meet the housing requirements of the whole community	++	Scenario G would satisfy the minimum housing needs of Ipswich over the LPR period and it is expected that a significant portion of these homes would be of a mixture and type that ensure the diverse needs of Ipswich's varied and growing population are catered for. If the Council were to allocate all available sites (which would accommodate 9,517 dwellings) there would be a 95 dwelling shortfall and so there is a low certainty of this scenario being achievable. It would also not allow for any uplift.
3 - To improve the health of the population overall and reduce health inequalities	+	There are currently 23 GP surgeries within the boundary of Ipswich, predominantly situated in the northern and eastern regions of the Borough, some of which are experiencing pressures on capacity. This growth scenario proposes a significantly lower quantity of new homes than Alternative Scenarios A, B and C but a greater quantity than all other scenarios. Overall this scenario would be relatively unlikely to result in over-capacity concerns at schools and health services. Given most development would be within the Borough, the majority of new residents would be expected to have good access to health facilities. Residents would have excellent access to open spaces and leisure facilities. Given that most services, amenities and facilities would be within walking distance this option would be likely to encourage greater rates of walking and cycling than any other growth scenario.
4 - To improve the quality of where people live and work	+/-	With lower quantities of development, the risk of rising crime rates may be lower than other scenarios where the population growth could potentially grow significantly more. This approach would be likely to situate nearly all new residents in the relatively urban Ipswich where major noise, air and light pollutants are relatively common. This approach may therefore lead to somewhat lower quality living environments than other scenarios, although this is largely dependent on the detail of development design and its precise distribution. It may be more feasible under this approach than others to situate all new residential development in locations that have excellent access to services and facilities that benefit the health, education and employment prospects of new residents and enable them to pursue high quality and active lifestyles.
5 - To improve levels of education and skills in the population overall	+/-	Primary and secondary schools are distributed relatively equally throughout Ipswich, but the entire Borough currently has limited surplus capacity, with a shortage of both primary and secondary school places being forecast in multiple areas. Given the likely sizes of most development and their somewhat constrained locations within the Borough, it is unlikely that this approach would facilitate the delivery of additional services or facilities in most cases. This approach would deliver lower levels of development than any other scenario and may therefore be less likely to result in over-capacity concerns in some locations, although this is caveated by the fact that other scenarios would be likely to have more dispersed development with many new homes in settlements outside the Borough, which could reduce pressure on educational facilities within Ipswich.
6 - To conserve and enhance water quality and resources	-	Under this scenario, it is likely that the construction and occupation of 9,612 homes would result in a net increase in the consumption of water resources in the Borough. It is expected that much of this development would be within Groundwater SPZs in Ipswich and there could be a cumulative risk of impacts on water quality. However, it is expected that construction would closely consider the potential impacts on water quality and prevent runoff during construction. SuDS would also be expected at a larger developments.

Alternative Scenario G: 9,612 dwellings and 15,580 jobs

SA Objective	Score	Commentary
7 - To maintain and where possible improve air quality	-	It is likely that the construction and occupation of 9,612 homes would result in a net increase in air pollution in relation to existing levels, in large part due to the associated increase in road transport. This could make it increasingly difficult to achieve air quality improvement targets at AQMAs in the Borough. Access to sustainable transport modes in Ipswich may help to limit this increase to some extent. This impact would be likely to be more limited than it is under all other scenarios considered by the Council.
8 - To conserve and enhance soil and mineral resources	+	A large portion of development could potentially be situated on brownfield land. This fact, coupled with the fact that this approach would require significantly less new development than Alternative Scenarios A, B and C, means that this scenario would be likely to help ensure an efficient use of land and to limit the loss of valuable soils and minerals due to development. This positive impact would be likely to be of a slightly lower magnitude than for Scenarios D, E and F.
9 - To promote the sustainable management of waste	-	It is likely that the construction and occupation of 9,612 homes would result in a net increase in waste generation. Mitigation in the form of a strong recycling or re-use policy during construction would help to limit the use of materials. New residents should be provided with the opportunity to recycle most types of household waste frequently and conveniently. This scenario would be likely to result in significantly less waste than other growth scenarios considered by the Council.
10 - To reduce emissions of greenhouse gases from energy consumption	-	The average carbon footprint per capita in 2016 in Ipswich was 3.1tonnes(T) Carbon dioxide (CO_2). A population growth of approximately 18,423 (i.e. 2.3 people per dwelling) could potentially lead to an increase in annual CO_2 emissions in the order of 68,533T, although it should be noted that development would be phased in over the LPR period and that per capita CO_2 emissions decreased from 5.8T in 2005 to 3.1T in 2016 and this trend is likely to continue to some extent. However, the level of growth proposed under this option would be likely to lead to a net increase in the Borough's carbon footprint. Scenario G would be expected to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. New residents under this scenario may therefore be likely to have a lower carbon footprint or to have less of an adverse impact on air quality than residents situated in the more rural and, in some cases, more isolated areas of the neighbouring authorities as they will typically be in closer proximity to services, facilities and sustainable transport modes.
11 - To reduce vulnerability to climatic events and flooding	+/-	This approach proposes lower levels of development compared with most other scenarios and may therefore provide greater choice in terms of where to situate development in the Borough, although it is uncertain given the limited land availability. Greater choice over site allocations provides greater freedom in terms of avoiding land at risk of flooding. Conversely, flood risk is fairly prevalent in Ipswich and situating all development here, instead of directing some to outside the Borough, could make it more difficult to avoid land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+	Scenario G would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This would contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on the distinctive character of the estuary and the heritage, landscape and biodiversity assets here may more easily be avoided. This positive impact would be of a slightly lower magnitude than is predicted for Alternative Scenarios D, E and F.
13 - To conserve and enhance biodiversity and geodiversity	+/-	Scenario G would be likely to be able to situate all new residential development within the Borough and could also enable lower density developments or low-rise buildings. This could contribute to a range of potential benefits in terms of biodiversity including those associated with the River Orwell or the coast and estuary because adverse impacts on sensitive constraints and assets designated for their biodiversity value are likely to be more easily avoided, with the majority of them in fairly rural locations. Situating all development in the relatively urban Borough would also be less likely to risk adversely impacting protected species or to risk reducing habitat connectivity than if most development were in the more rural areas outside the Borough. On the other hand, this approach would be likely to lead to development taking place on urban greenspaces and limiting

Alternative Scenario G: 9,612 dwellings and 15,580 jobs

SA Objective	Score	Commentary
		opportunities for urban biodiversity given the scale of development proposed. More development would be required in rural locations where impacts on wildlife are likely to be more severe, such as reducing the connectivity of ecological networks.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	+	Impacts on the landscape and townscape character depend almost entirely on the precise details of development, such as its type, pattern and form, in relation to its precise location. Lower density developments or low-rise buildings would contribute to a range of potential benefits in terms of cultural heritage because adverse impacts on sensitive constraints and assets designated for their cultural heritage value are likely to be more easily avoided. With fewer locations being developed under this scenario than other scenarios, fewer heritage assets would be placed at risk compared to other higher growth options. It may also be more feasible to ensure all development is in-keeping with the existing setting and makes a positive contribution to the local character under this option. This positive impact would be of a slightly lower magnitude than is predicted for Alternative Scenarios D, E and F.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	+/-	Lower density developments or low-rise buildings would contribute to a range of potential benefits for the protecting the character of landscapes or townscapes as they would be less imposing than high-density or taller developments. At the same time, higher density developments could result in less land being lost to development, contributing to a more efficient land-use approach. A larger proportion of new development would be likely to be in-keeping with the existing townscape, with adverse impacts on the local character also avoided or minor due to less greenfield sites being lost to development. On the other hand, this approach would be likely to lead to development taking place on urban greenspaces and limiting opportunities for urban biodiversity given the scale of development proposed. More development would also be required in rural locations where impacts on landscape character are likely to be more severe and more difficult to avoid or minimise.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	The creation of 15,580 jobs under this Scenario would more than satisfy local employment needs over the Plan period and would contribute towards a transformation of Ipswich's economy. The ambitious economic growth target under this scenario could help to boost the local population of those of working age.
17 - To maintain and enhance the vitality and viability of town and retail centres	++	The greater population growth and significant uplift in jobs would support would be likely to help enhance the vitality and viability of town centres throughout the Borough.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	+	Scenario G would be likely to be able to situate all new residential development within the Borough, where access to facilities and services as well as public transport modes is very good. This would help to reduce the need for residents to travel far and frequently and would also help to facilitate a higher uptake of sustainable transport modes than other scenarios where higher quantities of development are proposed, and a larger number of new residents would be situated in more rural locations. However, the significant scale of growth would be likely to place the capacity of various nodes and routes of public transport under pressure. This option would also result in a greater increase in local car movements than options of lower quantities of development.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	++	It is somewhat uncertain the impacts each growth option would have on SA Objective 19. However, the lower quantity of development proposed under this option may be likely to result in less pressure placed on the existing capacity of digital infrastructure and may lead to a higher proportion of all residents having good access to fast internet speeds. It is likely to be more feasible to deliver broadband or full fibre internet for development in urban locations than it would for development in rural locations and, where such digital infrastructure is provided for, a large portion of residents would be catered for. This positive impact would be of a slightly lower magnitude than is predicted for Alternative Scenarios D, E and F.

Appraisals of Spatial Options

1.1.21 In order to deliver development through the LPR, the Council are 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 somewhat limited. Six different options for delivering the desired growth have been identified, the likely social, environmental and economic impacts of each are discussed in the following sections:

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

1.1.22 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 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.

1.1.23 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. Overall, the likely benefits or effects of Spatial Options 1 and 3 are somewhat similar to the likely effects of the Preferred Approach and Alternative Scenario A for growth. 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 or spatial scenarios would be required.

1.1.24 Development in neighbouring authorities is likely on greenfield sites near rural settlements. These neighbouring authorities are currently in the process of preparing their own Local Plans. It is currently unknown where they would be allocating new development and so there is some degree of uncertainty over the likely effects, particularly cumulative effects, of development delivering through the Ipswich LPR on land in neighbouring authorities.

Spatial Option 1

Higher-density urban regeneration

Spatial Option 1 is designed around higher-density housing concentrated in urban areas. A similar option was consulted on during the preparation of planning documents in 2007, but for various reasons, including poor economic conditions rendering higher-density developments unviable, it was not pursued. Currently, the highest minimum density requirement in the adopted Local Plan is set out in Policy DM30 at 90 dwellings per hectare (dph).

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	++	Option 1 would focus the significant majority of new development in urban locations. Many of the sites allocated for development would be expected to be derelict brownfield sites and this option would help to regenerate some of the more run-down areas of the Borough whilst also enhancing the vitality and vibrancy of central area. It is likely that residents in these locations would have good access to key services and facilities, including education and health services, shops and leisure areas, as well as sustainable transport modes, that are prevalent throughout urban areas of Ipswich, reducing the need to travel by motorised vehicle. This would help to promote community interaction through passive and direct interactions, which may ensure that new residents live within, or close to, existing communities and community facilities and are less likely to feel excluded whilst also facilitating higher walking rates. Many new residents would be exposed to the higher rates of crime generally found in dense urban locations.
2 - To meet the housing requirements of the whole community	+	Option 1 would make a major contribution towards meeting the housing need in the Borough by 2036, although it would be unlikely to satisfy the need on its own and would have to be pursued in-combination with another option. It is unclear the extent to which high-density developments would facilitate higher rates of affordable housing.
3 - To improve the health of the population overall and reduce health inequalities	+	It is likely that residents in these locations would have good access to key services and facilities including health centres. Depending on the density of development, it could be made increasingly difficult to deliver additional services on-site and new residents will be required to rely on existing services. This could lead to some capacity concerns in some locations for GP surgeries that are under existing capacity pressures. Access to green spaces as well as a diverse range of natural habitats may be more limited for some urban developments. This option would also help to promote community interaction through passive and direct interactions, which may ensure that new residents live within, or close to, existing communities and community facilities and are less likely to feel excluded whilst also facilitating higher walking rates.
4 - To improve the quality of where people live and work	-	Residents living in urban locations would be likely to have to deal with higher levels of air, noise and light pollution, such as that associated with road transport or construction works, than those living in more rural locations, particularly if they live near AQMAs where the poor air quality is particularly harmful. High density developments may necessitate the use of taller buildings, such as apartment blocks, with less outdoor private amenity space and public open space provided for new residents as well as less floorspace within dwellings. They can also give rise to security or safety concerns due to the absence of public space and the large number of people going in and out. Higher density developments and taller buildings can be particularly unsuitable for families with children, although they can help to provide for higher quantities of affordable housing.
5 - To improve levels of education and skills in the population overall	+	It is likely that residents in these locations would have good access to key services and facilities including education services. Depending on the density of development, it could be made increasingly difficult to deliver additional services on-site and new residents will be required to rely on existing services. This could lead to some capacity concerns in some locations for school places that are under existing capacity pressures.
6 - To conserve and enhance water quality and resources	+/-	Most of Ipswich is within groundwater SPZs and it is considered to be likely that situating most development in Ipswich could pose a risk to the quality of groundwaters. However, new development on greenfield land in rural locations outside of Ipswich may pose a greater risk to water quality.
7 - To maintain and where	+/-	Air pollution from many residents in this scenario would be likely to be lower than other options, primarily as they are able to more frequently utilise sustainable

possible improve air quality		transport modes like foot, cycle, bus or train, not only as they have better access to sustainable transport links but also because they live in proximity to services, facilities and employment areas. However, there are areas of poor air quality within the Borough and situating the majority of development in proximity to these may make it more difficult to achieve air quality improvement targets.
8 - To conserve and enhance soil and mineral resources	+	In general, the approach of directing the majority of new development towards existing urban areas would increase the opportunities for development on brownfield sites and could help to minimise loss of agriculturally and ecologically important soils.
9 - To promote the sustainable management of waste	+	Options for reusing buildings and recycled materials, as well as opportunities for residents and businesses to recycle waste, may be greater in the urban areas of Ipswich.
10 - To reduce emissions of greenhouse gases from energy consumption	+	The average carbon footprint of urban residents is generally lower than those in rural areas, primarily as they are able to more frequently utilise sustainable transport modes like foot, cycle, bus or train, not only as they have better access to sustainable transport links but also because they live in proximity to services, facilities and employment areas. In terms of renewable energy generation however, higher density developments may have less space available for solar panels and could also reduce the efficacy of any nearby panels due to shadowing. The higher densities could make Combined Heat and Power (CHP) a more viable option in some cases.
11 - To reduce vulnerability to climatic events and flooding	+/-	Some of central Ipswich is within EA Flood Zones 2 or 3 and it will be necessary to allocate sites for development in a sequential approach. It may be difficult to avoid land at risk of flooding in all cases.
12 - To safeguard the integrity of the coast and estuaries	+	Option 1 would situate nearly all new development within urban locations and it is therefore unlikely that it would adversely affect the coast or estuaries. However, it would also not provide an opportunity to enhance the setting or character of the coast and estuaries.
13 - To conserve and enhance biodiversity and geodiversity	+	This approach would help to direct development away from rural locations where sensitive biodiversity and landscape designations and assets are more prevalent. It may therefore be feasible to avoid significant effects on biodiversity and the natural landscape in most cases. New development can often be an opportunity to enhance a site's biodiversity value, particularly if the site is brownfield (although brownfield sites can often support a diverse ecology for which close regard should be given prior to development). Within low-density developments, incorporating green infrastructure, comprising a variety of native species within the development, could help to enhance the biodiversity value of the site whilst helping to better connect habitats in the local ecological network. Depending on the density of developments, Option 1 may in some cases make it difficult to incorporate high quality green infrastructure into new developments due to the higher density requirements.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	+/-	Should taller buildings be required to meet the higher density requirements, there is greater potential for development to have an adverse impact on long-distance views and to discord with the local character. A large quantity of cultural heritage assets, including Listed Buildings, Scheduled Monuments and Conservation Areas, are situated within the urban areas of Ipswich, the setting of which could be adversely impacted by any nearby high-density developments or tall buildings.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	+	This approach would help to direct development away from rural locations where sensitive landscapes are more prevalent. It may therefore be feasible to avoid significant effects on the natural landscape in most cases. With most development taking place in urban areas, it is uncertain the extent to which high density development might discord with the local townscape character.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	New residents through this option would generally have good access to employment areas throughout the Borough, which would improve their employment prospects whilst providing support to the local economy. This would go some way to helping tackle deprivation and economic inequality in the Borough. By focussing development in urban areas within Ipswich's boundary, there may be less scope for future development to support the growth of nearby market towns.
17 - To maintain and enhance the vitality and	++	Many of the sites allocated for development would be expected to be derelict brownfield sites and this option would help to regenerate some of the more run-

viability of town and retail centres		down areas of the Borough whilst also enhancing the vitality and vibrancy of central area. By directing the majority of new residents to existing urban areas, Option 1 may be likely to help improve the vitality and viability of town centres throughout the Borough due to residents' ease of access to high streets and shops.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	**++**	This option would help to ensure that the majority of residents are able to more frequently utilise sustainable transport modes like foot, cycle, bus or train, not only as they have better access to sustainable transport links but also because they live in closer proximity to services, facilities and employment areas. This would enable efficient movement and higher rates of sustainable transport. Residents in urban areas may also, generally speaking, have better access to digital infrastructure and higher internet speeds, thereby enabling a greater proportion of social and business interactions to be conducted online and thus a reduced need to travel in some circumstances.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	**+**	It is considered to be likely that this option would help to situate the majority of new residents in locations with existing access to digital infrastructure. Depending on the density and location of development, it may in some circumstances be difficult to ensure the provision of new digital infrastructure equipped for future technologies.

Spatial Option 2

Increased development beyond the Borough boundary

Spatial Option 2 would situate more housing outside of the Borough boundary in neighbouring districts such as East Suffolk, Babergh and Mid Suffolk. This could be pursued in a variety of ways, such as by developing predominantly in communities surrounding Ipswich or by distributing development across the more extensive Ipswich HMA. Alternatively, a new settlement could potentially be developed in the Ipswich HMA.

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+/-	Under Option 2, a large proportion of new residential development would be situated outside the Borough boundary. Generally speaking, access to services and facilities, including health and education centres as well as culture and leisure facilities, are more limited in rural locations. Careful consideration would need to be given to new residential development to ensure residents are not excluded from important services, particularly given the growing elderly population who may be less willing to travel long distances on a regular basis. This approach would be unlikely to help tackle rates of deprivation or inequality in the Borough, particularly that which afflicts the central area, due to lower levels of development taking place in central areas and thus derelict sites being regenerated and less new jobs being located here. The more widely distributed development is throughout the HMA, the less likely it is that existing facilities and services would be rendered over-capacity, although the greater the risk that residents in these locations may feel excluded. Should the option of a new settlement in the wider Ipswich HMA be pursued, it would be good opportunity to situate a significant portion of new housing in proximity to services and facilities incorporated into the development. Depending on the layout of the settlement and the distribution of development, it may also be an opportunity to ensure that new residents are living within and active and engaged community that reduces the risk of exclusion.
2 - To meet the housing requirements of the whole community	++	Option 2 would be expected to facilitate the delivery of enough housing to satisfy Ipswich's need, as well as a large proportion of affordable homes.
3 - To improve the health of the population overall and reduce health inequalities	+	Under Option 2, a large proportion of new residential development would be situated outside the Borough boundary. Generally speaking, access to services and facilities including health centres could be more limited in these locations. The wide distribution of development may make over-capacity concerns on health centres less likely. The majority of residents would also be expected to have excellent access to a diverse range of natural habitats and greenspaces.
4 - To improve the quality of where people live and work	++	Under Option 2, low-density developments may be more common, and, in such circumstances, it is likely that new homes would be accompanied by larger quantities of outdoor amenity space with good access to high quality open spaces, thereby permitting high quality lives at home and outside. Many residents would be likely to be situated in rural locations where issues with air, light and noise pollution are less prescient.
5 - To improve levels of education and skills in the population overall	+	Under Option 2, a large proportion of new residential development would be situated outside the Borough boundary. Generally speaking, access to services and facilities including education centres could be more limited in these locations. The wide dispersion of development may help to avoid over-capacity concerns on schools in most cases. Should a new settlement be delivered it is expected it would provide the necessary schooling capacity for residents.
6 - To conserve and enhance water quality and resources	+/-	Option 2 would be likely to distribute a large quantity of development and new residents in rural locations where the risk of harming natural water sources may be more likely than in urban locations, although the majority of Ipswich is within a groundwater SPZ.
7 - To maintain and where possible improve air quality	-	Higher rates of driving long distances associated with rural residents poses a risk to air quality in these locations due to higher emissions associated with road traffic. However, these rural locations outside of Ipswich are likely to have currently better air quality than central areas of Ipswich.

8 - To conserve and enhance soil and mineral resources	--	Additionally, opportunities for developing on brownfield land are more limited in rural locations and so it is likely that Option 2 would lead to the losses of a significant quantity of ecologically and agriculturally valuable soils.
9 - To promote the sustainable management of waste	-	Options for using recycled materials of reusing buildings may be limited under this option due to the quantity of development in previously undeveloped greenfield land in rural locations.
10 - To reduce emissions of greenhouse gases from energy consumption	-	Where residents are in more rural locations, their access to sustainable modes of transport is typically more limited. They are therefore more likely to rely relatively heavily on personal car use, which contributes towards the higher average carbon footprint associated with rural living. This is compounded by the longer distances these residents need to travel to reach work, particularly those living outside Ipswich but working inside the Borough. It may be relatively feasible under this option to provide renewable energy generation capacity in many new generations due to their rural location and more spacious layouts.
11 - To reduce vulnerability to climatic events and flooding	-	The risk of flooding largely depends on the precise distribution of development. Fluvial flood risk is present within and around Ipswich, including the rural areas to the north, and it may be difficult to avoid land at some risk of flooding in all cases.
12 - To safeguard the integrity of the coast and estuaries	-	Situating development in the rural areas could make it difficult to avoid adverse impacts on the coast and estuaries in all cases, including the biodiversity value, sensitive landscapes and heritage value prevalent here. This would be particularly the case if a new settlement were delivered.
13 - To conserve and enhance biodiversity and geodiversity	-	Generally speaking, sensitive assets and constraints designated for their biodiversity value are more prevalent in these locations and it may be more difficult under Option 2 to avoid significant adverse effects in all cases. Development in these greenfield locations would also be more likely to fragment the local ecological network by increasing distances between habitats and agricultural areas, or by leading to the loss of wildlife corridors and stepping stones. However, as development density may be low, this may result in a more penetrable and porous barrier to wildlife movements compared to more dense developments. In some cases, development can be an opportunity to enhance a site's biodiversity value. Through careful layout and the incorporation of large quantities of green infrastructure comprised of native species, previously biodiversity-poor sites could be enhanced, whilst the wildlife corridor capacity of the site is increased.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	+/-	The wider distribution of development may make it more feasible to avoid harming the sensitive setting or heritage assets. However, where development takes place in rural locations it is more likely to discord with the local character and adverse impacts may be more likely.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	--	Generally speaking, sensitive assets and constraints designated for their landscape value are more prevalent in these locations and it may be more difficult under Option 2 to avoid significant adverse effects in all cases. Distinctive views and sensitive landscapes are prevalent in the rural areas around Ipswich and development here would be likely to diminish this in many locations. A new settlement, should it be delivered, would be expected to result in a major alteration to the character of the local landscape.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	++	Whilst new homes would be situated outside the Borough under Option 2, it is expected that they would still contribute towards the success of the Ipswich FEA and a large proportion would be working within the Borough. New residents may in some locations find they have somewhat limited access to major employment areas, particularly if they are situated in rural locations away from Ipswich or have poor bus or rail links into the Borough.
17 - To maintain and enhance the vitality and viability of town and retail centres	+	Option 2 may also be a change to help provide a boost to market towns on the periphery and outside of Ipswich. This approach would be unlikely to help tackle rates of deprivation or inequality in the Borough, particularly that which afflicts the central area, due to lower levels of development taking place in central areas and thus derelict sites being regenerated and less new jobs being located here.
18 - To encourage efficient patterns of movement, promote sustainable travel	-	Where residents are in more rural locations, their access to sustainable modes of transport is typically more limited. They are therefore more likely to rely relatively heavily on personal car use whilst also having to travel longer distances than

of transport and ensure good access to services		those in urban locations to reach places of employment, key services and amenities.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	**+/-**	It is largely uncertain the impact this option would have on access to digital infrastructure. Where development is situated in more rural locations, access to high speed internet may be more limited. It is expected that if a new settlement were delivered it would provide for digital infrastructure capable of adapting to future technologies.

Spatial Option 3

Change the use of existing land in the Borough to housing

The Borough of Ipswich has a tightly drawn boundary, within which there is limited land available for future residential development. Of the land that could potentially have become available, a significant portion is countryside land on the periphery of the Borough or is land that is currently protected for employment use. Many of the sites identified within the countryside are somewhat difficult to access, are relatively small, are within or adjacent to the Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) or are adjacent to the A14. The employment land supply in the Borough has been assessed through the ELSA (2017), which concludes that the net employment land need could be up to half that which is allocated in the adopted Local Plan. This is in part due to the increased occupancy rates of Employment Areas such as Whitehouse and Ransomes Europark. It could therefore be an effective use of land to convert the proposed land use of sites allocated for employment to a residential use, although it would be unlikely to accommodate the housing need in full. Other sources of land for residential development could potentially arise from existing parks, gardens, open spaces, natural and semi-natural greenspaces, children's play spaces or allotments. Residents living in urban locations would be likely to have to deal with higher levels of air, noise and light pollution, such as that associated with road transport or construction works, than those living in more rural locations (unless they are countryside sites near the A14), particularly those living near AQMAs in the centre of Ipswich where air quality is particularly dangerous.

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+/-	This option would be unlikely to satisfy the housing need in full and would need to be adopted in-combination with one or more other spatial options. Development on countryside sites on the periphery of Ipswich would be likely to situate new residents further away from the range of key services and facilities in urban locations. Unless good access through sustainable transport modes is also provided, there is a risk of some residents feeling excluded from the community. However, they would be well integrated into an existing community and would be unlikely to feel excluded. Providing new services or facilities could be less feasible in some sites, given their size and condensed position within the urban areas.
2 - To meet the housing requirements of the whole community	+	This option would have the capacity to satisfy the significant majority of the Borough's housing need, although it may need to be pursued in-combination with other approaches should opportunities for development on other land be somewhat limited.
3 - To improve the health of the population overall and reduce health inequalities	+	Converting employment use sites to residential use would be likely to situate a large portion of new residents into relatively urban locations. These residents would have excellent access to a broad range of services and facilities, including health centres. Where higher density developments be required, it may be increasingly difficult to deliver services or facilities on-site. New residents would therefore be reliant upon existing services or facilities, which could lead to capacity related concerns in some locations.
4 - To improve the quality of where people live and work	+/-	Those living in the more rural locations would benefit from high quality open spaces a short distance from home. Homes in rural locations are often accompanied by a higher quantity of outdoor green space, as well as greater floorspace indoors, that may permit higher quality living environments. It is uncertain the extent to which this may be the case given the relatively small size of sites available and the likely density requirements for housing in the local plan. Other potential sources of land such as open spaces, allotments, play areas, parks and gardens currently play a pivotal role in the local community, providing residents with the opportunity to pursue high quality, active and healthy lifestyles outdoors and to engage with their neighbours. Residential development in these locations would result in the direct loss of such land and potentially diminish the resilience of the existing local community.
5 - To improve levels of education and skills in the population overall	+	Converting employment use sites to residential use would be likely to situate a large portion of new residents into relatively urban locations. These residents would have excellent access to a broad range of services and facilities, education centres. Where higher density developments be required, it may be increasingly difficult to deliver services or facilities on-site. New residents would therefore be

		reliant upon existing services or facilities, which could lead to capacity related concerns in some locations.
6 - To conserve and enhance water quality and resources	-	In rural areas, it may be more difficult to avoid adversely impacting water quality such as by concreting over permeable soils. However, the majority of Ipswich is within groundwater SPZs and any development is likely to pose some risk to the quality of groundwaters without the adoption of avoidance measures such as SuDS.
7 - To maintain and where possible improve air quality	+/-	Residents in countryside or rural locations are typically higher pollutants than those in more urban locations, in large part due to their higher reliance on personal car use to travel longer distances more frequently. In contrast, redevelopment of employment land for residential use would be likely to situate a large portion of new residents in proximity to services, facilities and sustainable transport modes, thereby permitting a relatively low-emission lifestyle.
8 - To conserve and enhance soil and mineral resources	+/-	Redevelopment of existing buildings could also be an opportunity to reduce the amount of land lost to development and provide a high quantity of brownfield land that limits the loss of ecologically and agriculturally valuable soils. Residential development on countryside land or allotments and parks would have the opposite effect.
9 - To promote the sustainable management of waste	+/-	Redevelopment of existing buildings could also be an opportunity to re-use buildings and reduce the consumption of materials. Residential development on countryside land or allotments and parks would have the opposite effect.
10 - To reduce emissions of greenhouse gases from energy consumption	-	Residents in countryside or rural locations typically have a higher carbon footprint than those in more urban locations, in large part due to their higher reliance on personal car use to travel longer distances more frequently. In contrast, redevelopment of employment land for residential use would be likely to situate a large portion of new residents in proximity to services, facilities and sustainable transport modes, thereby permitting a relatively low-carbon lifestyle.
11 - To reduce vulnerability to climatic events and flooding	+/-	Vulnerability to flood risk largely depends on the precise distribution of development. This option may permit greater choice over where to situate new development than other options and it may therefore be more feasible to situate new development away from land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+/-	Focussing development in employment sites would be likely to help avoid adverse impacts on the coast and estuaries in most locations. Conversely, development in the countryside may make it more difficult to avoid adverse effects in all cases.
13 - To conserve and enhance biodiversity and geodiversity	-	Residential development on sites in the countryside would be likely to result in adverse effects on the biodiversity objective in many cases. The sites in the countryside locations are relatively small and so the adverse impacts may be somewhat limited. However, development in these locations would be likely to result in the loss of greenfield land that could potentially be supporting protected species and habitats. Converting employment site allocations to residential use would situate a large portion of new homes in predominantly urban locations. Development at these sites would be likely to have negligible impacts on biodiversity or the natural environment and, depending on the development design or layout, could be an opportunity to enhance the biodiversity value of these locations. Other potential sources of land such as open spaces, allotments, play areas, parks and gardens currently provide high biodiversity value to the local area. They provide an essential stepping stone or wildlife corridor function that connects habitats in the local ecological network. Residential development in these locations could have an adverse impact when considered against biodiversity objective.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	-	The centre and urban areas of Ipswich are home to a higher density of cultural heritage assets than countryside locations, including Listed Buildings, Scheduled Monuments and the Conservation Area. Whilst residential development would be largely in-keeping with the existing built form, and the lay of the land would prevent development from impacting long distance views, it may be difficult to avoid adverse impacts on heritage assets in all cases. It is unlikely that such impacts would be more severe than any impacts caused by developing the sites for employment purposes.
15 - To conserve and enhance the quality and local	-	Other potential sources of land such as open spaces, allotments, play areas, parks and gardens currently play a pivotal role in the local landscape and townscape,

distinctiveness of landscapes and townscape		generally making a very positive contribution. Residential development in these locations could have an adverse impact when considered landscape objective. Residential development on sites in the countryside would be likely to result in adverse effects on the landscape objective in many cases. The sites in the countryside locations are relatively small and so the adverse impacts may be somewhat limited. However, development in these locations would be likely to result in the loss of greenfield land that may make a positive contribution towards the local landscape character. Tall buildings would exacerbate this effect and could potentially have a major impact on long distance views.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	**+**	Residential development in the countryside at the periphery of Ipswich would situate a large portion of new residents relatively distant from key employment areas, particularly more so in some locations than others. Converting employment sites for residential use would reduce the quantity of employment land in the Borough. Based on current trends, there should still be an adequate supply of employment land to satisfy the Borough's needs by 2036 despite this. However, this option would not facilitate significant economic growth ambitions and potentially fails to take into account the need for the Council to provide employment sites in a range of locations and of a range of sizes.
17 - To maintain and enhance the vitality and viability of town and retail centres	**+**	Residential development in the countryside at the periphery of Ipswich would situate a large portion of new residents relatively distant from key employment areas, particularly more so in some locations than others. This may help to rejuvenate the vitality or vibrancy of centres of settlements in rural areas around Ipswich but may also limit opportunities for enhancing the vitality of central areas in Ipswich. Where higher density developments be required, it may be increasingly difficult to deliver services or facilities on-site, although where they are delivered, they could potentially be more viable due to the greater quantity of potential customers.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	**+/-**	Residents in countryside or rural locations typically have a higher carbon footprint than those in more urban locations, in large part due to their higher reliance on personal car use to travel longer distances more frequently. In contrast, redevelopment of employment land for residential use would be likely to situate a large portion of new residents in proximity to services, facilities and sustainable transport modes, thereby permitting a relatively efficient pattern of movement.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	**+/-**	It is considered to be likely that residents situated on employment sites would have relatively good access to digital infrastructure and good internet speeds. Those situated in the countryside or other land may have more limited access should new infrastructure not be provided for.

Spatial Option 4

Continuation of existing approach (East Suffolk)

The distribution of development under this option would be based on the monitoring of delivery across the Borough since the adoption of the Core Strategy, which seeks to focus development in communities around Ipswich. Under this approach, development is focussed in settlements that offer a good range of services and facilities. This has resulted in approximately:

- *27% of development being directed towards East of Ipswich;*
- *26% towards Felixstowe;*
- *21% towards Key and Local Service Centres;*
- *8% towards Leiston;*
- *7% towards Saxmundham;*
- *6% towards Framlingham;*
- *3% towards Woodbridge;*
- *1% towards Aldeburgh; and*
- *1% towards other parts of the district.*

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	Option 4 would continue to help ensure new residents have good access to key services and facilities and are therefore able to pursue high quality and active lifestyles, integrated in a local community and with minimal risk of feeling excluded. As the trend of development in these locations would continue, there could be an ever-increasing burden on local communities, services and facilities to accommodate growing numbers of locals.
2 - To meet the housing requirements of the whole community	++	It is likely that this option would help to deliver a quantity of housing that satisfies Ipswich's need. The delivery of affordable housing is largely uncertain although it is assumed that the minimum need would be satisfied.
3 - To improve the health of the population overall and reduce health inequalities	++	Option 4 would continue to help ensure new residents have good access to key services and facilities including health centres as well as a diverse range of natural habitats and open spaces. The distribution of development would help to alleviate over-capacity concerns at particular centres.
4 - To improve the quality of where people live and work	+	A large portion of development would be situated away from areas of high noise, air and light pollution. Residential development in rural locations may offer greater access to outdoor spaces and to provide higher quantities of outdoor amenity space.
5 - To improve levels of education and skills in the population overall	+	Option 4 would continue to help ensure new residents have good access to key services and facilities including schools. The distribution of development would be likely to help alleviate over-capacity concerns at particular schools.
6 - To conserve and enhance water quality and resources	+/-	In rural areas, it may be more difficult to avoid adversely impacting water quality such as by concreting over permeable soils. However, the majority of Ipswich is within groundwater SPZs and any development is likely to pose some risk to the quality of groundwaters without the adoption of avoidance measures such as SuDS.
7 - To maintain and where possible improve air quality	-	Residents in countryside or rural locations are typically higher pollutants than those in more urban locations, in large part due to their higher reliance on personal car use to travel longer distances more frequently. In contrast, redevelopment of employment land for residential use would be likely to situate a large portion of new residents in proximity to services, facilities and sustainable transport modes, thereby permitting a relatively low-emission lifestyle.
8 - To conserve and enhance soil and mineral resources	-	Redevelopment of existing buildings could also be an opportunity to reduce the amount of land lost to development and provide a high quantity of brownfield land that limits the loss of ecologically and agriculturally valuable soils. Opportunities for doing this may be greater in East of Ipswich than elsewhere. Residential development on in more rural locations may necessitate the loss of large quantities of greenfield land and the agriculturally and ecologically valuable soils it contains.
9 - To promote the sustainable	+/-	Opportunities for reusing buildings or recycled materials may be more limited in areas outside Ipswich.

management of waste		
10 - To reduce emissions of greenhouse gases from energy consumption	-	Residents in countryside or rural locations are typically higher pollutants than those in more urban locations, in large part due to their higher reliance on personal car use to travel longer distances more frequently. In contrast, redevelopment of employment land for residential use would be likely to situate a large portion of new residents in proximity to services, facilities and sustainable transport modes, thereby permitting a relatively low-emission lifestyle.
11 - To reduce vulnerability to climatic events and flooding	+/-	Vulnerability to flood risk largely depends on the precise distribution of development. This option may permit greater choice over where to situate new development than other options and it may therefore be more feasible to situate new development away from land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	-	Felixstowe is adjacent to the River Orwell and in some cases, it may be difficult to avoid harm to the distinctive character, valuable biodiversity or sensitive cultural heritage of land associated with the coast and estuaries.
13 - To conserve and enhance biodiversity and geodiversity	-	Many of the settlements that development would continue to be directed towards are in proximity to biodiversity and landscape constraints. Felixstowe is adjacent to the River Orwell SPA and SSSI as well as the Suffolk Coastal and Heaths AONB. Leiston is in proximity to the Suffolk Coastal and Heaths AONB as well as Minsmere to Walberswick Heaths and Marshes SAC and multiple stands of Ancient Woodland. It is likely that in some cases adverse harm to sensitive biodiversity designations cannot be avoided. Many of the above settlements, including the Key Service Centres, are in rural locations. Development in these locations is therefore likely to result in the loss of greenfield land that make a positive contribution towards the local character and which could potentially be supporting protected species and habitats. Such development would also be expected to increase the distance between habitats in some locations, thereby reducing connectivity of the local ecological network.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	-	Impacts on cultural heritage depend on the distribution of development and the extent to which it accords with the local character and existing setting. In most cases, the majority of development would be adjacent or within an existing built form with which it will likely accord. However, some of the settlements are relatively small and there is a risk of development here having an adverse impact on the setting of sensitive heritage assets such as Listed Buildings.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	-	Many of the settlements that development would continue to be directed towards are in proximity to biodiversity and landscape constraints. Felixstowe is adjacent to the River Orwell estuary and the Suffolk Coastal and Heaths AONB. Leiston is in proximity to the Suffolk Coastal and Heaths AONB as well as multiple stands of Ancient Woodland.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	+	The continuation of this strategy could help to improve the vitality and vibrancy of town centres where development is located, particularly in circumstances where additional services or facilities are provided for. Many residents could potentially be situated fairly distant from employment areas within Ipswich, although they would have reasonable access to such areas via the local road network and bus and rail. Directing residential development to locations outside of the Borough would better enable the Council to allocate available land within the Borough for employment purposes, where it is needed most.
17 - To maintain and enhance the vitality and viability of town and retail centres	+	Many residents could potentially be situated fairly distant from employment areas within Ipswich, although they would have reasonable access to such areas via the local road network and bus and rail. With nearly all development directed away from central areas of Ipswich it is unlikely that there would be many opportunities for regenerating derelict land in central areas.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	-	Residents in more rural locations may find they need to travel relatively far relatively frequently to access all services, amenities and employment areas. In some locations, there is good sustainable transport access which may alleviate increases in road traffic. However, sustainable transport links are more limited in other locations and residents here are likely to have a relatively high reliance on person car use.
19 - To ensure that the digital infrastructure	+/-	By situating the majority of new development in or adjacent to existing settlements, there will likely be relatively good access to digital infrastructure in most locations.

available meets the needs of current and future generations		However, some of the settlements are relatively small and it is uncertain the extent to which high internet speeds are provided for or the extent to which the digital infrastructure here will successfully adapt to future technologies such as 5G.

Spatial Option 5

Focus on Ipswich and A14 transport corridor (East Suffolk)

Option 5 would direct the majority of new development towards locations well-linked with Ipswich and the A14 transport corridor, with approximately:

- *50% of development directed towards East of Ipswich;*
- *15% directed towards Felixstowe;*
- *15% directed towards Saxmundham; and*
- *8% directed towards Woodbridge.*

Focusing development in these locations would help to reinforce links between Ipswich and the district of Suffolk Coastal. It would be likely to facilitate larger schemes that can provide for additional services and facilities, whilst also ensuring residents can travel efficiently to Ipswich via the nearby A14 transport corridor where several bus routes are also available. Development in Saxmundham and Woodbridge, where strategic development could feasibly be sought, would further boost the rail connections between these towns and Ipswich.

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	Development is unlikely to be excessively dense in each location and, overall, it is likely that this Option would enable new residents to pursue high quality and active lifestyles and to feel included within the local community. In some locations, such as Felixstowe and Saxmundham, the scale of residential development may alter the sense of the local community by contributing towards continued local population growth and distorting existing residents' sense of place.
2 - To meet the housing requirements of the whole community	++	Option 5 would be expected to facilitate a quantity of housing that satisfies the OAN and the diverse range of needs of Ipswich's residents.
3 - To improve the health of the population overall and reduce health inequalities	++	Option 5 would situate the majority of new residents in existing settlements that provide a good range of services and facilities including health centres. Over capacity issues would likely be avoided as these settlements would facilitate strategic settlements that provide new services and facilities. Access to open spaces and a diverse range of natural habitats would also generally be good.
4 - To improve the quality of where people live and work	+	A large quantity of development would be expected to direct new residents away from areas of particularly poor noise, air and light pollution.
5 - To improve levels of education and skills in the population overall	+	Option 5 would situate the majority of new residents in existing settlements that provide a good range of services and facilities, including education centres. Over capacity issues would likely be avoided as these settlements would facilitate strategic settlements that provide new services and facilities.
6 - To conserve and enhance water quality and resources	+/-	In rural areas, it may be more difficult to avoid adversely impacting water quality such as by concreting over permeable soils. However, the majority of Ipswich is within groundwater SPZs and any development is likely to pose some risk to the quality of groundwaters without the adoption of avoidance measures such as SuDS.
7 - To maintain and where possible improve air quality	-	Focussing development in these locations would help to ensure the significant majority of new residents have good access to sustainable modes of transport, including bus and rail, and are therefore able to travel to and from places of work, education or leisure. This would help to limit their emissions. However, in some cases they have relatively long distances to travel coupled with somewhat poor access to sustainable transport modes, depending on their location.
8 - To conserve and enhance soil and mineral resources	-	Under Option 5, a relatively large portion of new development would be directed towards existing settlements in rural locations, including Saxmundham and Felixstowe. Development at each settlement would be likely to result in the loss of previously undeveloped greenfield land that leads to a significant loss of agriculturally and ecologically valuable soils. currently make a positive contribution towards the local landscape and townscape character.
9 - To promote the sustainable management of waste	+/-	Opportunities for reusing buildings or recycled materials may be more limited in areas outside Ipswich.

10 - To reduce emissions of greenhouse gases from energy consumption	-	Focussing development in these locations would help to ensure the significant majority of new residents have good access to sustainable modes of transport, including bus and rail, and are therefore able to travel to and from places of work, education or leisure. This would help to limit their carbon footprint. However, in some cases they have relatively long distances to travel coupled with somewhat poor access to sustainable transport modes, depending on their location.
11 - To reduce vulnerability to climatic events and flooding	+/-	Vulnerability to flood risk largely depends on the precise distribution of development. This option may permit greater choice over where to situate new development than other options and it may therefore be more feasible to situate new development away from land at risk of flooding.
12 - To safeguard the integrity of the coast and estuaries	+/-	Felixstowe is adjacent to the River Orwell estuary and in some cases, it may be difficult to avoid harm to the distinctive character, valuable biodiversity or sensitive cultural heritage of land associated with the coast and estuaries.
13 - To conserve and enhance biodiversity and geodiversity	-	Under Option 5, a relatively large portion of new development would be directed towards existing settlements in rural locations, including Saxmundham and Felixstowe. Development at each settlement would be likely to result in the loss of previously undeveloped greenfield land that could be supporting protected species or habitats whilst providing an important corridor or stepping stone function in the local ecological network. This Option may therefore make it difficult to avoid adverse impacts on biodiversity in all cases, particularly where strategic sites are located.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	-	Impacts on cultural heritage depend on the distribution of development and the extent to which it accords with the local character and existing setting. In most cases, the majority of development would be adjacent or within an existing built form with which it will likely accord. However, some of the settlements are relatively small and there is a risk of development here having an adverse impact on the setting of sensitive heritage assets such as Listed Buildings.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	-	Under Option 5, a relatively large portion of new development would be directed towards existing settlements in rural locations, including Saxmundham and Felixstowe. Development at each settlement would be likely to result in the loss of previously undeveloped greenfield land that currently make a positive contribution towards the local landscape and townscape character. This Option may therefore make it difficult to avoid adverse impacts on landscape in all cases, particularly where strategic sites are located. Felixstowe is in proximity to the Suffolk Coastal and Heaths AONB.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	+	This Option would help to ensure the significant majority of new residents have good access to major employment areas via public transport modes. Some residents would be somewhat distant from major employers. Those in East of Ipswich would be particularly close to a broad range of good employment opportunities. Those living further afield under this option may have further to travel but would be provided with excellent access via rail, bus and road.
17 - To maintain and enhance the vitality and viability of town and retail centres	+	The proposed development in areas outside of Ipswich would also help to provide a boost to the vitality and vibrancy of centres throughout the FEA, as opposed to just inside the Borough, although this may limit opportunities for improving the vitality and vibrancy of central areas in Ipswich.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	-	Focussing development in these locations would help to ensure the significant majority of new residents have good access to sustainable modes of transport, including bus and rail, and are therefore able to travel to and from places of work, education or leisure. This would help to limit their carbon footprint. However, in some cases they have relatively long distances to travel and there may be a relatively high uptake of personal car use in some circumstances. It is likely that a large portion of new residents would be unable to walk or cycle to work.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	+/-	By situating the majority of new development in or adjacent to existing settlements, there will likely be relatively good access to digital infrastructure in most locations. However, some of the settlements are relatively small and it is uncertain the extent to which high internet speeds are provided for or the extent to which the digital infrastructure here will successfully adapt to future technologies such as 5G.

Spatial Option 6

A12 transport corridor and dispersed rural focus (East Suffolk)

Option 6 would focus new development in rural locations, particularly those linked with the A12 such as Saxmundham, Wickham Market and Yoxford. This would be likely to help improve road and rail connections between Ipswich and Lowestoft. The greater dispersal of sites would be likely to help further encourage future development of a scale appropriate to each community, thereby sustaining existing rural communities.

SA Objective	Score	Commentary
1 - To reduce poverty and social exclusion	+	The majority of new residents under this Option would be situated in existing settlements in rural locations. They would be likely to have good access to services and facilities whilst also being able to pursue high quality and active lifestyles outdoors. Depending on the size of the community or the extent to which the location is rural, it may be difficult to avoid social exclusion in all cases. Development in rural settlements can sometimes be an opportunity to rejuvenate and further sustain the local community, particularly as this option would ensure the development is of an appropriate scale.
2 - To meet the housing requirements of the whole community	++	This option would be expected to facilitate a quantity of housing that satisfies the OAN and the diverse range of needs of Ipswich's residents.
3 - To improve the health of the population overall and reduce health inequalities	+	The majority of new residents under this Option would be situated in existing settlements in rural locations. They would be likely to have good access to services and facilities, including health centres, within the adjacent settlement.
4 - To improve the quality of where people live and work	+	Most new residents would have excellent access to outdoor natural and semi-natural greenspaces and with relatively large quantities of amenity space at home. Air, noise and light pollution is generally a much less severe concern in rural areas than urban.
5 - To improve levels of education and skills in the population overall	+	The majority of new residents under this Option would be situated in existing settlements in rural locations. They would be likely to have good access to services and facilities, including schooling, within the adjacent settlement.
6 - To conserve and enhance water quality and resources	+/-	In rural areas, it may be more difficult to avoid adversely impacting water quality such as by concreting over permeable soils. However, the majority of Ipswich is within groundwater SPZs and any development is likely to pose some risk to the quality of groundwaters without the adoption of avoidance measures such as SuDS.
7 - To maintain and where possible improve air quality	-	Focussing development in these locations would help to ensure the significant majority of new residents have good access to sustainable modes of transport, including bus and rail, and are therefore able to travel to and from places of work, education or leisure. This would help to limit their emissions. However, in some cases they have relatively long distances to travel coupled with somewhat poor access to sustainable transport modes, depending on their location.
8 - To conserve and enhance soil and mineral resources	--	Development in these rural locations would result in the loss of greenfield land that contain agriculturally and ecologically valuable soils.
9 - To promote the sustainable management of waste	-	Development in rural locations may limit opportunities for the reuse of buildings of recycled materials.
10 - To reduce emissions of greenhouse gases from energy consumption	-	Residents in rural locations typically have a higher carbon footprint than those in urban locations, largely due to the further distances they have to travel to reach services, facilities and places of employment and the typically high reliance on personal car use for doing so. This strategy would result in a large quantity of rural living residents who could have relatively high carbon footprints, although they would have excellent access to bus and rail links that may help to limit this.
11 - To reduce vulnerability to climatic events and flooding	-	There is a relatively large extent of land at risk of flooding in the A12 corridor due to the area's proximity to the coast and several major watercourses.

12 - To safeguard the integrity of the coast and estuaries	**+**	This option would direct the majority of development away from the coast and estuaries and would therefore help to protect their distinctive character and sensitive biodiversity value from the impacts of development.
13 - To conserve and enhance biodiversity and geodiversity	**-**	With most development occurring in rural locations under Option 6, it may be difficult to avoid adverse impacts on natural environment constraints and assets in all cases. In addition to wildlife sites and SSSIs, stands of Ancient Woodland as well as areas supporting protected species and habitats are widely distributed throughout the rural regions in the A12 corridor. It is also likely that development in these locations would result in the loss of greenfield land that otherwise make positive contributions towards the local landscape character whilst playing an important role in local habitat connectivity.
14 - To conserve and where appropriate enhance areas and assets of historical and archaeological importance	**-**	Impacts on cultural heritage depend on the distribution of development and the extent to which it accords with the local character and existing setting. In most cases, the majority of development would be adjacent or within an existing built form with which it will likely accord. However, some of the settlements are relatively small and there is a risk of development here having an adverse impact on the setting of sensitive heritage assets such as Listed Buildings.
15 - To conserve and enhance the quality and local distinctiveness of landscapes and townscape	**-**	Development in rural locations would result in the loss of greenfield land that otherwise make positive contributions towards the local landscape character. Development would be more likely to discord with the existing landscape and townscape character whilst adversely impacting distinctive countryside views for local residents.
16 - To achieve sustainable levels of prosperity and growth throughout the plan area	**+**	New residents would have good access to major employment areas via the A12 or rail and bus links, although they may in some cases face relatively long commuting distances to do so.
17 - To maintain and enhance the vitality and viability of town and retail centres	**+/-**	The proposed development in areas outside of Ipswich would also help to provide a boost to the vitality and vibrancy of centres throughout the FEA, as opposed to just inside the Borough. This Option would help to provide large scale development in rural settlements, thereby helping to provide a boost to their vitality and long-term viability. Development in rural settlements can sometimes be an opportunity to rejuvenate and further sustain the local community. However, this option may limit opportunities for enhancing the vitality or vibrancy of central areas within Ipswich.
18 - To encourage efficient patterns of movement, promote sustainable travel of transport and ensure good access to services	**-**	Residents in rural locations typically have longer distances to travel to reach services, facilities and places of employment and a typically high reliance on personal car use for doing so. The settlements target for development offer a good range of services and amenities, but in some cases is likely that residents would need to travel further afield such as to central areas of Ipswich. They may also be relatively distant from places of employment. This strategy would result in a large quantity of rural living residents, although they would have excellent access to bus and rail links that may help to limit increase in road traffic.
19 - To ensure that the digital infrastructure available meets the needs of current and future generations	**+/-**	By situating the majority of new development in or adjacent to existing settlements, there will likely be relatively good access to digital infrastructure in most locations. However, some of the settlements are relatively small and it is uncertain the extent to which high internet speeds are provided for or the extent to which the digital infrastructure here will successfully adapt to future technologies such as 5G.