

SUSTAINABILITY APPRAISAL SCOPING REPORT  
FOR THE GREATER NORWICH LOCAL PLAN

MARCH 2017



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## INTRODUCTION

### Purpose of the SA

The effect of local plans on the environment and people's quality of life, both now and in the future, is an essential consideration in plan making.

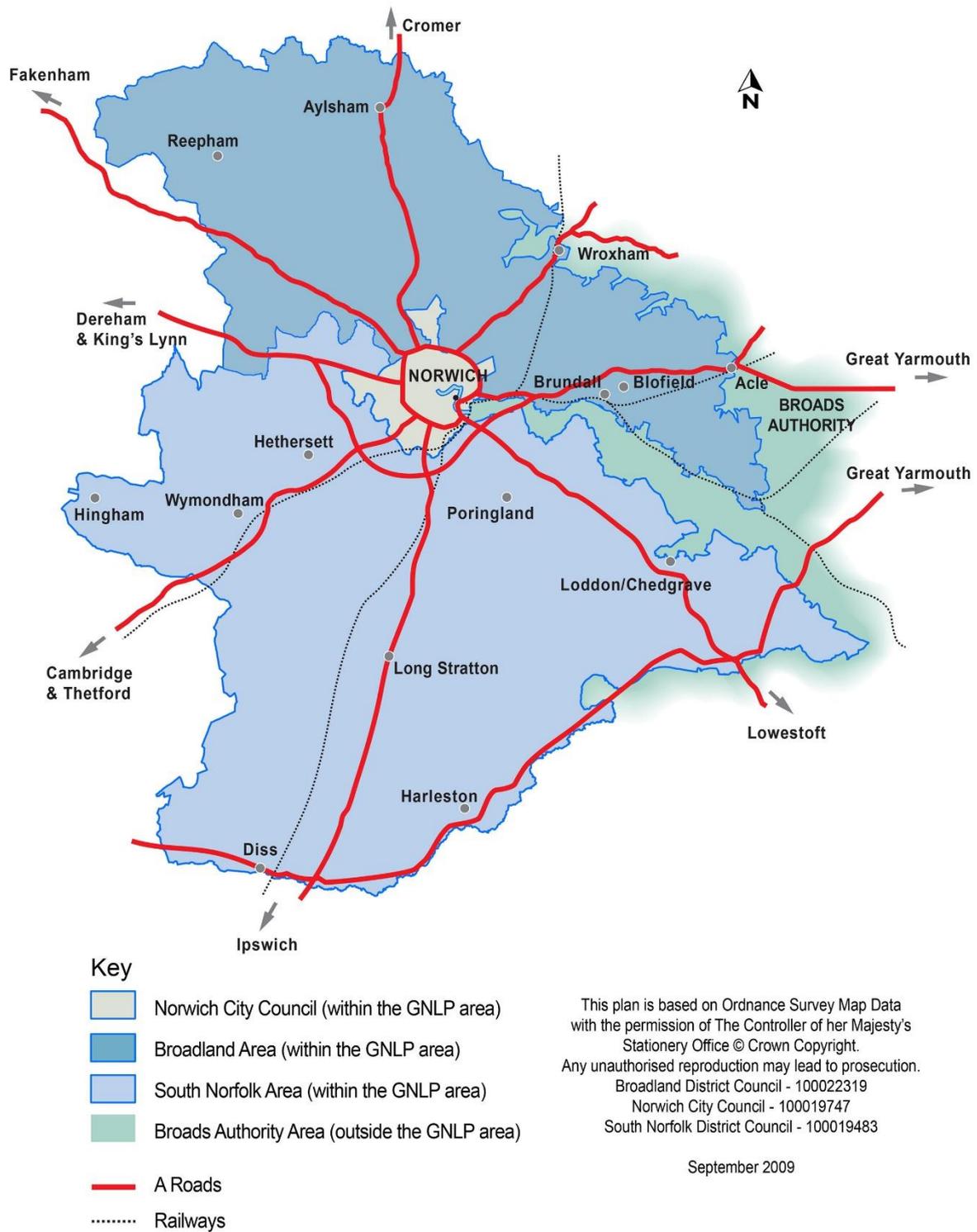
To help address this, a Sustainability Appraisal (SA), incorporating a Strategic Environmental Assessment (SEA), must be carried out alongside the preparation of local plans. The SA aims to ensure that environmental, social and economic sustainability objectives are complied with and to avoid or minimise any potential adverse impacts of the plan.

This report is the first stage of the Sustainability Appraisal, the Scoping Report, of the Greater Norwich Local Plan (GNLP). The Scoping Report identifies the scope and level of detail of the information to be included in the sustainability appraisal report. It sets out the context, objectives and approach of the assessment and identifies relevant sustainability issues and objectives. Its main output is a sustainability framework. GNLP policies will be tested against this framework to assess their likely sustainability effects.

The GNLP will guide development in Greater Norwich up to 2036, providing both strategic policies and site allocations to meet evidence based needs for land for development. It is being produced by the three councils of Broadland, Norwich and South Norfolk, supported by Norfolk County Council. It takes the adopted Joint Core Strategy for Broadland, Norwich and South Norfolk (JCS), which covers all three districts from 2008 up to 2026, as its starting point.

Figure 1 below is a map showing the local plan area. The GNLP will not cover the Broads Authority area which is a separate planning authority.

Figure 1 The GNLP area



## Legislative Requirements

### Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA)

Section 19 of the Planning and Compulsory Purchase Act 2004 requires local planning authorities to carry out a sustainability appraisal of local plans and to prepare a report of the findings. As stated under Section 39 of the Act 2004, this is “with the objective of contributing to the achievement of sustainable development” by assessing the extent to which the emerging plan, when judged against reasonable alternatives, will help to achieve relevant environmental, economic and social objectives”.

There is also a requirement for development plan documents to undergo an environmental assessment, known as a Strategic Environmental Assessment or SEA, under European Directive 2001/42/EC (transposed into UK legislation by the Environmental Assessment of Plans and Programmes Regulations 2004).

Under UK law, Sustainability Appraisal incorporates SEA. This means that in addition to environmental issues, on which an SEA focuses, social and economic matters are also addressed as part of the overall assessment of sustainability, within a single joint appraisal.

To comply with these legal requirements, the SA of the Greater Norwich Local Plan will:

- Adopt a long-term view of development within the area covered by the plan, with particular focus on the social, environmental, and economic effects of the proposed plan;
- Develop an effective system for ensuring that sustainability objectives are transformed into sustainable planning policies;
- Reflect global and national concerns, as well as concerns at the local level;
- Provide an audit trail of how the local plan has been revised to take into account the findings of the sustainability appraisal;
- Incorporate the requirements of the SEA Directive (see Appendix 2) Demonstrating Compliance with SEA Directive – this appendix will be completed and included in the SA Report to accompany submission of the GNLP;
- Involve consultation on this Scoping Report early in the plan making process.

To demonstrate compliance with the SEA Directive, the SA Report which accompanies the draft plan at publication should

include an outline of the plan's content including its strategic objectives.

Since the specific objectives for the GNLP are yet to be established, at this stage it is only possible to set out broad objectives based on NPPF local plan requirements.

The broad objectives of the documents which comprise the councils' Local Plan are: "The Local Plan will set out policies for the use and development of land to 2036. The GNLP will set out strategic and site allocations policies for the three districts to provide for:

- homes, jobs, retail, leisure and other commercial development needed in the area;
- Infrastructure needed to support development including green infrastructure, transport, telecommunications, waste management, water supply, waste water, flood risk and energy;
- health, community and cultural infrastructure and other local facilities;
- climate change mitigation and adaptation; and
- conservation and enhancement of the natural and historic environment, including landscape."

Each district will separately produce a development management policies document that will sit alongside the GNLP and set out land use policies necessary to address district specific issues.

#### The Habitats Directive

Local plans must also ensure that they comply with the requirements of the Directive on Conservation of Natural Habitats and of Wild Fauna and Flora 92/43/EEC (Habitats Directive). This involves undertaking an Appropriate Assessment into any potential effects of the plan on 'European sites' or 'Natura 2000 sites' of nature and habitat value, namely Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar sites of international wetland importance. There are a number of such sites within and close to Greater Norwich.

Even a plan that is not directly concerned with protected sites can still indirectly affect Natura 2000 sites. Consequently, Appropriate Assessment must determine the likely significance of the plan on protected sites and suggest alternatives where possible. A plan should seek to avoid adverse effects on the integrity of designated sites, mitigate those impacts that remain and, if necessary, put in place compensatory measures. The reasons for designation as a protected site, such as the habitats and species present, and the conservation objectives of

management plans in place to preserve these are assessed. If these are compromised directly by the plan or through 'in combination' effects with other plans or developments, the plan must explain how it intends to avoid or mitigate the impacts. If the initial Appropriate Assessment shows that further work will be required, "reasonable alternative" approaches to addressing Habitats Directive requirements will need to be addressed through the SA process.

Work to address Habitats Directive requirements for the Greater Norwich Local Plan will be done at a later stage of the overall GNLP process, after the production of this Scoping Report.

### The SA Process

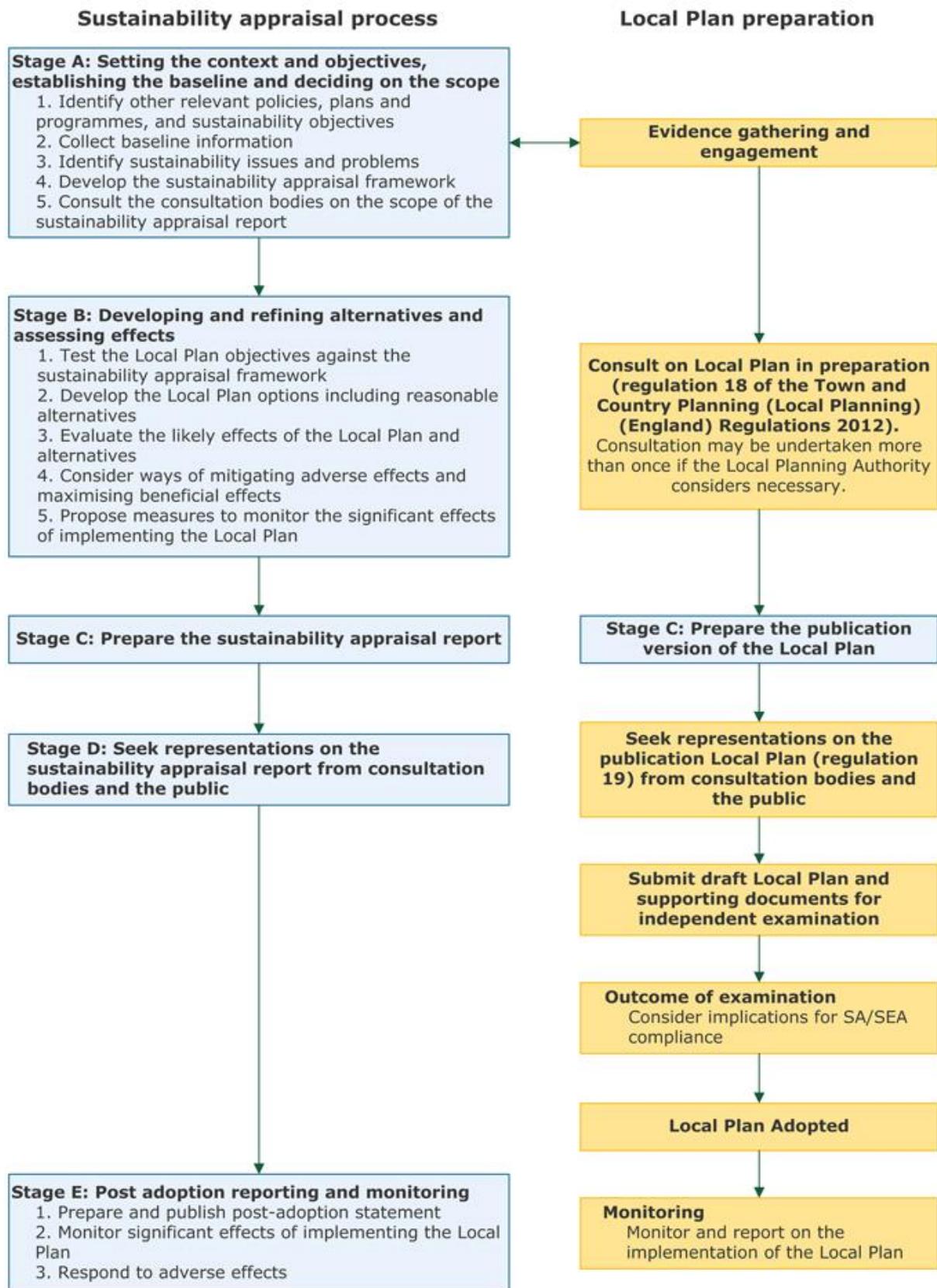
This SA Scoping Report forms the starting point for the sustainability appraisal which will guide the evolution and assessment of the emerging GNLP. A key aim of scoping is to help ensure the sustainability appraisal is proportionate and relevant to the local plan being assessed.

SA is an iterative process which runs concurrently with local plan making (see figure 2). After the initial scoping for the SA has been carried out the next stage are developing and refining of options and assessing their effects. The sustainability appraisal framework produced as part of the Scoping Report will be used to consider the effects of the different plan options, the "reasonable alternatives" required to be assessed by SEA Directive, to assist in the identification of the plan's favoured option. The framework includes sustainability objectives, along with indicators to assess progress.

A local plan draft containing a favoured option and the reasonable alternatives to that option, along with a draft sustainability appraisal report assessing the plan, will be consulted on prior to the publication of the local plan for submission. The "final" SA report will then be submitted with the GNLP to the Secretary of State for examination in public.

The Government's Planning Practice Guidance (PPG) on sustainability appraisal of local plans, as set out in figure 2 below, establishes a five-stage SA process to be undertaken alongside plan making. This report, the Scoping stage, is Stage A of the SA:

Figure 2 The SA and local plan preparation processes



## The Scoping Stage (Stage A)

The Scoping stage of SA production comprises the five steps set out in figure 2 and detailed further below.

### Step 1 - Identifying relevant plans and programmes

Step 1 provides an analysis of the context in which the plan is being prepared. It includes a summary of the key plans and programmes along with the elements relevant to the specific topic of the National Planning Policy Framework (NPPF).

The purpose of the NPPF is to promote sustainable development through planning. The NPPF takes into account the International and European Directives, along with the UK Sustainable Development Strategy, stating that

**'International and national bodies have set out broad principles for sustainable development. Resolution 42/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs. The UK Sustainable Development Strategy Securing the Future set out five 'guiding principles of sustainable development : living with the planet's environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly'.**

Since the adopted JCS applies until 2026 and provides both current strategic policy context for the area the starting point for the GNLP and , the JCS's **policies and objectives, along with** other relevant local plan policies, are covered on a topic by topic basis. The plan objectives for the GNLP itself are not available to inform the SA scoping stage, but will be incorporated into the SA report when available.

Appendix 1 provides a summary of other relevant policies, plans, programmes, strategies and initiatives with an influence on the content of the plan. Where relevant this includes their sustainability objectives.

The above sources inform the identification of sustainability issues and the development of the sustainability framework for this SA.

### Step 2 - Collecting Baseline Data

The second step of stage A involves collecting data on the existing environmental, economic and social characteristics of the Greater Norwich area likely to be affected by the local plan and the likely evolution of that baseline without the implementation of the GNLP. The baseline information referred to in this scoping report is intended to act as a 'benchmark' for

the appraisal and monitoring of 'significant' effects<sup>1</sup>. In determining the likely significance of effects there is a requirement to consider the:

- Probability, duration, frequency and reversibility of the effects;
- Cumulative nature of effects;
- "the transboundary nature of effects"
- Risks to human health or the environment;
- Magnitude and spatial extent of effects (geographical area and size of the population likely to be affected);
- Value and vulnerability of the area likely to be affected due to:
  - Special natural characteristics or cultural heritage,
  - Exceeded environmental quality standards or limit values,
  - Intensive land-use
  - The effects on areas or landscapes which have a recognised national community or international protection status.

### Step 3 - Identifying Sustainability Issues

The third step is to establish the relevant sustainability issues the SA will concentrate on. This has clear parallels with plan-making process where the aim is to identify key issues for the area and focus the plan on addressing these. The iterative SA process will take account of emerging evidence as it is produced to support plan making, as well as the scoping evidence in this report.

### Step 4 - Developing the SA Framework

The fourth step of stage A is to develop the SA Framework. This will be used in stage B of the SA to appraise the reasonable alternative options identified in plan making and to assist in identifying the favoured option. The framework will also contribute to identifying the best means of monitoring the effects of the plan.

### Step 5 - Consulting on the Scope of the Sustainability Appraisal

The fifth and final step of the Scoping Report is the legal requirement to consult on the SA's scope with the organisations prescribed by regulations, Historic England, Natural England and the Environment Agency. In addition, selected stakeholders will be notified of the consultation, which will be published on the Greater Norwich website and open to all to respond to.

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<sup>1</sup> Annex II – SEA Directive

## **The Scoping Report's format**

Taking account of the requirements in this introduction, sections 1 to 15 of the Scoping Report provide commentary and data on a topic by topic basis. The sections cover:

- Air Quality and Noise
- Climate Change (including flood risk)
- Biodiversity, Geodiversity and Green Infrastructure
- Landscape
- Water
- Built Heritage
- People and Communities
- Deprivation
- Health
- Crime
- Education
- Transport and Access to Services
- Natural Resources, Waste and Contaminated Land
- Employment and the Economy
- Housing

Taken together, the topics cover the main sustainability issues relevant to the Greater Norwich Local Plan. This approach follows advice in the PAS Good Plan Making Guide (2014)<sup>2</sup> and the PAS SA Advice note (2010) as an effective way of facilitating stakeholder engagement.

For each of sections there is a common format: introduction; context; current and projected baseline; and issues.

Introduction: This provides an outline of topic area covered in the section.

Context: This draws from the relevant plans, policies, strategies and initiatives at national and local level focusing on the issues, objectives or aspirations as outlined above. This section is augmented by appendix 1.

Current and Projected Baseline: This section reviews the current situation and policy approaches to predict how the area is likely to change without a new plan beyond 2026, the end date for the JCS. This 'baseline information' helps to enable identification of the key sustainability issues that should be a particular focus of the appraisal in order to provide benchmarks for the appraisal of 'significant effects'. As well as Office of National Statistics (ONS) data from the Census and other national and local data sources, much of which is sourced from the Annual Monitoring Report (AMR) of the Joint Core Strategy for Broadland, Norwich and South Norfolk (JCS), particular use is made of data from the

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<sup>2</sup> PAS – Good Plan Making Guide (2014)

English Indices of Deprivation 2015. This is a consolidated dataset which compiles a wide range of statistical data to derive a common Index of Multiple Deprivation (IMD) – a ranking showing in relative terms how deprived a given area is. The Index enables reliable comparisons of levels of deprivation and disadvantage to be made across standard administrative areas and other geographies. The index is made up of several separate and distinct aspects (domains) of deprivation. The domains are:

- Income deprivation;
- Employment deprivation;
- Education, skills and training deprivation;
- Health deprivation and disability;
- Crime;
- Barriers to housing and services; and
- Living environment.

The baseline sections make as much use of mapped data, much of it from the IMD, as possible to aid understanding.

Issues: This section draws together the context and baseline to identify the issues that the GNLP should seek to address in order to help deliver sustainable development in the three districts, focusing on the specific character of the area where relevant.

Section 16 sets out the limitations in the data that has been used for the report and section 17 is a summary table of the issues identified in sections 1 to 15.

Section 18 is the Sustainability Framework, the main output of this Scoping Report. It will be used in later stages of the SA/SEA process to assess the sustainability of the strategy, policies and possible growth locations set out in the GNLP.

## 1. SECTION 1 – AIR QUALITY AND NOISE

1.1.2. This section covers air quality issues and the noise environment in Greater Norwich.

### 1.2. Context

#### 1.2.1. National

1.2.2. The Environment Act 1995 introduced a system of Local Air Quality Management (LAQM). This required local authorities to assess air quality within their boundary and to evaluate development and transport plans against these assessments.

1.2.3. National Air Quality Objectives are set out in regulations. If an objective is unlikely to be met, the local authority must designate an Air Quality Management Area (AQMA) and draw up an Air Quality Action Plan.

1.2.4. The Air Quality Strategy (2007) establishes the policy framework for ambient air quality management and assessment in the UK which includes the National Air Quality Objectives.

1.2.5. In 2009, Defra issued Local Air Quality Management Policy Guidance, Practice Guidance and Technical Guidance to help local authorities carry out their duties under the Environment Act 1995. The combined guidance covers a wide range of topics, from how to declare an AQMA, to the locations of monitoring sites, duration of monitoring and implementing low emissions zones.

1.2.6. The Air Quality Standards Regulations 2010 (which enact the EC Air Quality Directive 2008/50/EC) require the assessment of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter, lead, benzene and carbon monoxide in ambient air.

1.2.7. **In regards to issues of Air Quality, in April 2015 the Supreme Court required the Government to publish a plan to achieve compliance with EU air quality standards for nitrogen dioxide in the shortest time possible in accordance with Article 23 of the Air Quality Directive (2008/50/EC). In December 2015 the Government published a plan which purported compliance with the Supreme Court's Order. In November 2016 the Supreme Court further ruled that the December 2015 plan was inadequate. The Supreme Court has given Government until 24 April 2017 to produce a new draft plan to comply with the Air Quality Directive and until 31 July to produce a final one.**

1.2.8. The NPPF sets out a number of requirements:

- Paragraph 17 states: .... planning should: ...contribute to conserving and enhancing the natural environment and reducing pollution."

- Paragraph 109 states: “The planning system should contribute to and enhance the natural and local environment by: ... preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.”
- Paragraph 124 states: “Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas is consistent with the local air quality action plan.”

1.2.9. These requirements are supplemented by the PPG, which states that local plans may need to consider:

- The potential cumulative impact of a number of smaller developments on air quality...;
- The impact of pollution that originates from one place;
- Ways in which new development would be appropriate in locations where air quality is or likely to be a concern and not give rise to unacceptable risks from pollution. This could be through, for example, identifying measures for offsetting the impact on air quality arising from new development.

1.2.10. On the subject of noise, paragraph 123 of the NPPF states:

*“Planning policies and decisions should aim to:*

- *Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;*
- *Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;*
- *Recognise that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established; and*
- *Identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.”*

1.2.11. The footnote to paragraph 123 of the NPPF refers to Defra’s Noise Policy Statement for England (March 2010) for a definition of ‘significant adverse impacts’. The statement sets out the long term vision of government noise policy, to promote good health and a good quality of life through the management of noise. Its aim is to “clarify the underlying principles and aims in existing policy

*documents, legislation and guidance that relate to noise."* It requires noise to be properly considered, but does not ignore the wider benefits of development which may have noise implications.

1.2.12. This statement also incorporates the Environmental Noise Regulations 2006 which requires non-major airports such as Norwich International Airport to produce strategic noise maps and a noise action plan to show how noise effects will be mitigated where the Lden noise level exceeds 55dBA.

1.2.13. The PPG suggests that light pollution could be an issue where a new development could materially alter light levels outside the development; where existing light installation makes the proposed location for development unsuitable; if the development is in or near a protected area of dark sky or an intrinsically dark landscape; where there could be ecological impacts.

1.2.14. Local

1.2.15. Technical Guidance on Air Quality and Land Use Planning was developed by Norfolk Local Air Quality Management Group. It sets out the circumstances when an assessment may be required and provides details of the information required to undertake such an assessment.

1.2.16. Norfolk's adopted 3<sup>rd</sup> Transport Plan describes the county's strategy and policy framework for delivery up to 2026. The plan identifies six priorities for transport, including reducing emissions.

1.2.17. Norwich Area Transport Strategy (NATS) is the means of co-ordinating and delivering transport infrastructure investment in and around the Norwich Urban Area. It also aims to reduce emissions.

1.2.18. Norwich International Airport (NIA) has an Environmental Policy and a Noise Policy and has three noise monitors on the site boundary at Catton, Spixworth and Hellesdon. Defra have determined that NIA is not required to produce a Noise Action Plan.

1.2.19. Spatial planning objective 9 of the JCS includes protection, management and enhancement of the natural, built and historic environment. One of the indicators for monitoring this through the JCS relates to designated Air Quality Management Areas (AQMAs).

1.3. Current Baseline

1.3.1. There are no AQMAs in South Norfolk or Broadland, but there is one AQMA covering central Norwich, which broadly encompasses the area inside the inner ring road. The AQMA was declared as a result of continued exceedance of the annual objective for nitrogen dioxide (NO<sub>2</sub>), but for no other pollutant. Road traffic is the most significant source of NO<sub>2</sub> and, more specifically diesel vehicles including many buses and taxis are the main contributor. The 2015

Draft Action concentrates significantly on road changes, with the overall aim of diverting non-essential traffic out of the city centre by way of restricted road access measures and re-routing of main traffic flows, augmented by improvements to bus lanes and cycle routes to give greater connectivity.

- 1.3.2. Improvements to air quality across the whole of Norwich are supported by ongoing actions such as schools and workplace travel plans, promoting alternative fuel use, land use planning, continued support for Norfolk's car sharing and Car Club schemes, Travelwise initiative and promoting freight distribution centres.

Figure 3 Map showing Norwich Central AQMA Boundary

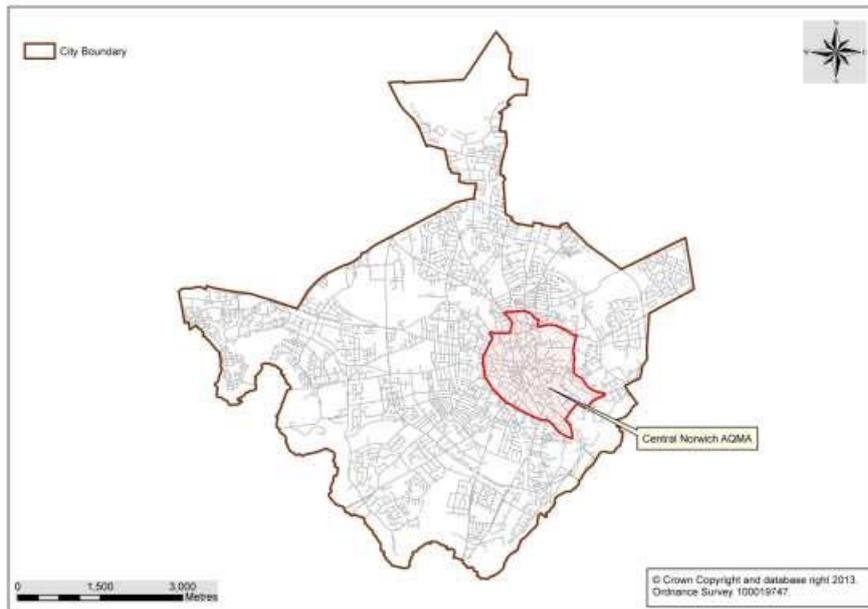
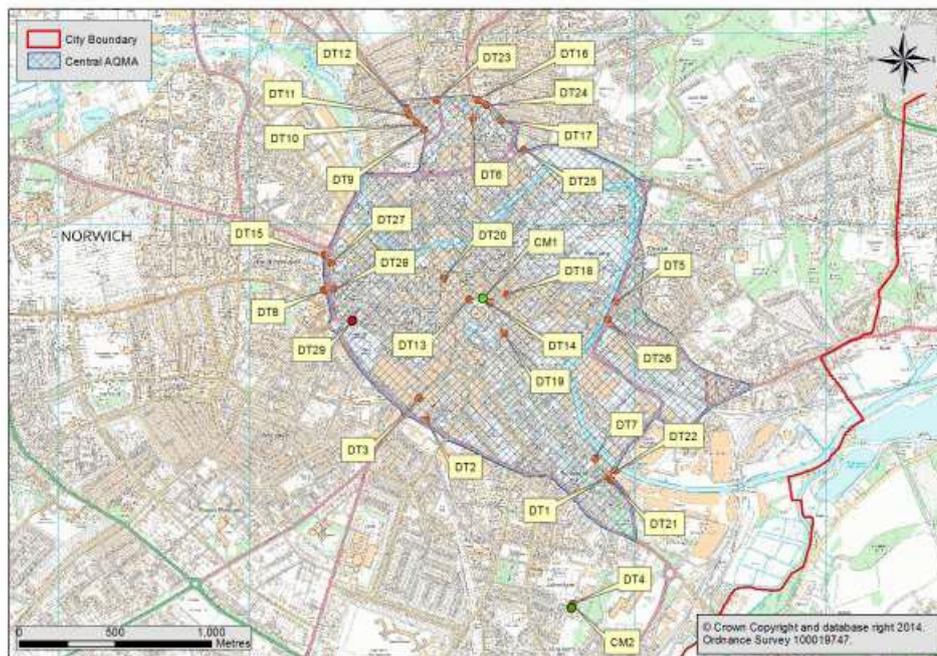
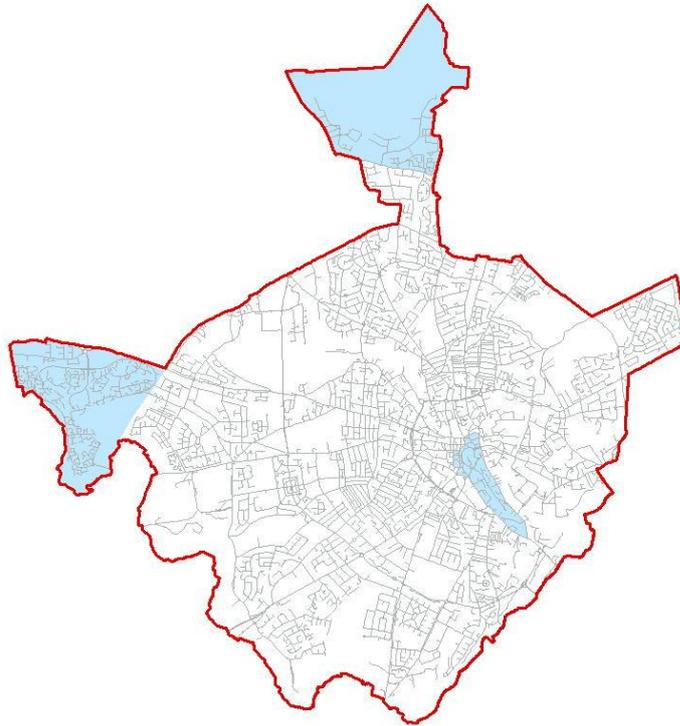


Figure 4 Map showing Norwich automatic and non-automatic monitoring locations



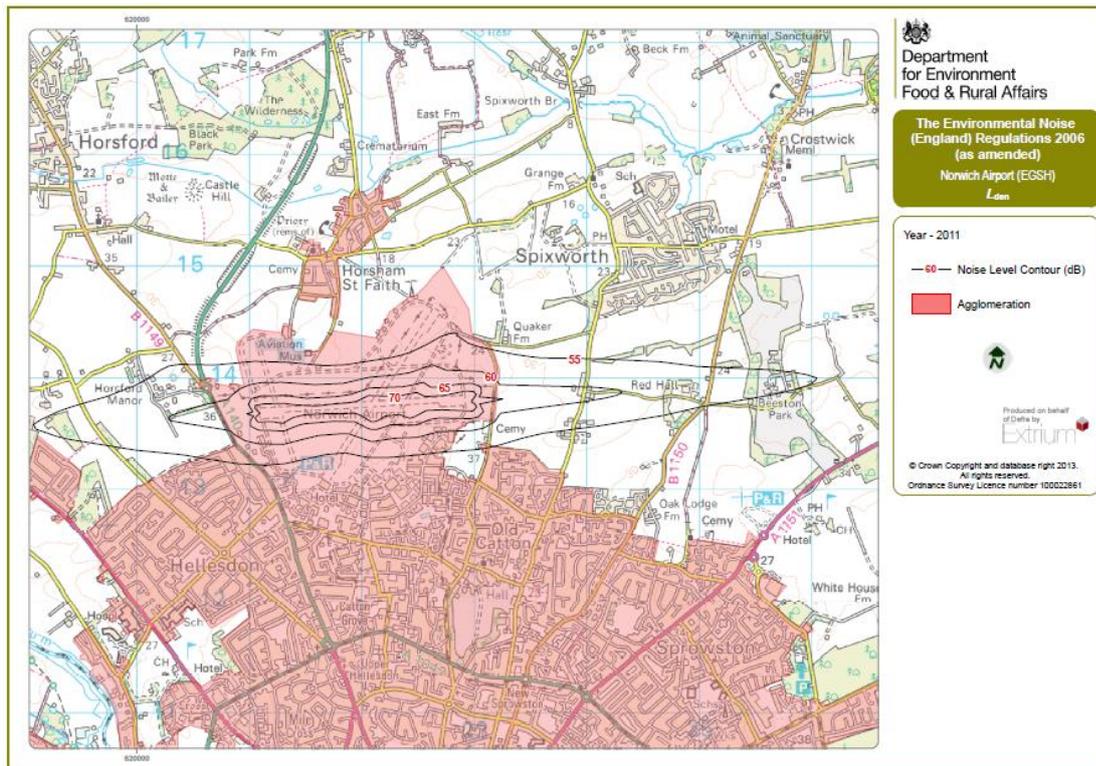
- 1.3.3. There is also an AQMA in Hoveton, which is just outside the boundary of the study area. Hoveton (in North Norfolk) and Wroxham (in Broadland) are separated only by the River Bure. Therefore, development in Wroxham may impact on the air quality of Hoveton, and the air quality in Hoveton may impact on the residents of Wroxham.
- 1.3.4. Other than the above AQMAs, there are isolated sites of reduced air quality around, for example, sewage treatment works, intensive farming sites and landfill sites. These are monitored by the Environment Agency.
- 1.3.5. There are no smoke control areas in South Norfolk or Broadland, but there are three areas in Norwich – at King Street, Bowthorpe, and Norwich Airport which have been in place since 1968, 1972, and 1972 respectively.

Figure 5 Map showing three Norwich smoke control areas



- 1.3.6. The principal noise sources in the Greater Norwich area are from road traffic, most particularly on the A11 and A47 trunk roads, the A140, outdoor events, and Norwich International Airport (NIA). Approximately 100 dwellings are currently within the 55dBA Lden contour of the airport (see figure 6 below). Expansion of airport operations is planned and the Norwich Northern Distributor Road (NDR) is under construction, with completion scheduled for early 2018.

Figure 6 Norwich Airport Noise Contour Map (2011)



1.3.7. There are no protected dark sky areas around Greater Norwich, but the rural parts of the area and the adjacent areas would benefit from consideration of light pollution.

1.3.8. Evolution of the baseline

1.3.9. While air quality in Norwich city centre is likely to remain a major issue during the plan period to 2036, improvements may be expected resulting from traffic management measures set out in NATS and promoted by the JCS (see section 1.2.17 of this report) and by other measures prioritised by Norwich city centre AQMA Action Plan. The Government<sup>3</sup> is committed to ensuring that nearly all cars and vans in the UK will be zero emission vehicles by 2050, meaning all car and van sales need to be zero emission vehicles by 2040. Government is providing over £600 million of support this Parliament, aimed at achieving growth in the early market for ultra-low emission cars and vans and preparing for mass market uptake in the 2020s, which is during the GNLP plan period. Consequently, there is expected to be an increasing uptake of ultra-low emission vehicles during the lifetime of the GNLP. Norwich City Council has recently agreed a motion that policies over provision of electric car parking points when planning permission is granted should be updated where appropriate. This may help improve air quality in Norwich

<sup>3</sup> HM Government, October 2016, Government response to the Committee on Climate Change: Progress on meeting carbon budgets, pg19-20

(and elsewhere). Noise from Norwich International Airport and existing and new main roads is also likely to remain a long term issue which should be taken account of in the location of new development.

1.4. Issues

- There are Air Quality Management Areas (AQMA) in Norwich City Centre and in Hoveton, adjacent to the plan area, along with other isolated sites of reduced air quality.
- There are high noise levels around Norwich International Airport and main roads in the area and light pollution from urbanised areas.

## 2. SECTION 2 – CLIMATE CHANGE

2.1.1. This section considers both climate change mitigation and adaptation. Mitigation focuses on details of current carbon emission within the Greater Norwich area, while adaptation concentrates on flood risk issues.

### 2.2. Context

#### 2.2.1. National and International

2.2.2. The UK government is committed to tackling climate change “as one of the most serious risks we face<sup>4</sup>”.

2.2.3. Taking account of international agreements set out in appendix 1, Climate Change policy is integral to the NPPF:

- Paragraph 7 emphasises the importance of planning in helping to address climate change as part of delivering sustainable development;
- Paragraph 94 states: “Local planning authorities should adopt proactive strategies to mitigate and adapt to climate change...”.
- Paragraph 95 states: “to support the move to a low carbon future, local planning authorities should plan for new development in locations and ways which reduce greenhouse gas emissions...”.
- Paragraph 97 states: “To help increase the use and supply of renewable and low carbon energy, local planning authorities should... have a positive strategy to promote energy from renewable and low carbon sources...”.
- The NPPF also states that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere (paragraph 100).

2.2.4. The Planning Act 2008 requires that “Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authorities area contribute to the mitigation of, and adaption to, climate change. The footnote to paragraph 94 of the NPPF refers to the Climate Change Act 2008. This establishes a legally binding climate change target to reduce the UK's greenhouse gas emissions by at least 80% (from a 1990 baseline) by 2050. To ensure that regular progress is made towards this long-term target, the Act also establishes a system of five yearly carbon budgets. The first five budgets, leading to 2032, have now been set in law. The UK is currently in the second carbon budget period (2013-2017) where a target of 29% reduction below 1990 levels was set. The third carbon budget requires a 34%

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<sup>4</sup> HM Government, October 2016, Government response to the Committee on Climate Change.

reduction by 2020, the fourth a 50% reduction by 2025 and the fifth a 57% reduction by 2030. The Carbon Plan, published by the Department of Energy and Climate Change in December 2011, sets out how the Government aims to achieve these reductions.

- 2.2.5. The Committee on Climate Change state that in 2014 UK emissions were 35% below 1990 levels, and that provision figures indicate that emissions fell a further 3% in 2015. Consequently the first carbon budget (see paragraph 2.2.4) has been met. Also that the UK is currently on track to outperform the second and third carbon budgets. However, the UK government<sup>4</sup> recognises that emissions are currently projected to be 10% greater than the budget level over the fourth carbon budget (2023-2027), and 18% greater over the fifth carbon budget (2028-2032).
- 2.2.6. The Committee on Climate Change explain that almost all of the fall in emissions from 1990 levels so far has been from the power sector, as a result of reduced use of coal and increased generation of electricity from renewables. It is the view of the committee that emission reductions in any single sector will not be enough to meet the fourth and fifth carbon budgets.
- 2.2.7. The UK government is currently working towards its emissions reduction plan. This plan will set out how the UK intends to decarbonise over the 2020s to meet its carbon budgets. Notwithstanding the above, the UK Government accepts<sup>5</sup> that to meet carbon budget targets there will need to be transitions across all sectors of the economy. To this end, the UK government remains committed to: continuing to reduce power sector emissions; improving the efficiency of homes and other buildings; decarbonising industry, agriculture, land use and land use change and forestry; reducing emissions from transport, which will be increasingly important to meet carbon budget commitments; and, supporting innovation.
- 2.2.8. The Flood Risk Regulations 2009 implement the European Floods Directive, and require the Environment Agency (EA) to assess, map and plan for flood risk from the sea, main rivers and large raised reservoirs, and Lead Local Flood Authorities (LLFAs) for all other sources of flooding, including where the two interact. The output of EA work in this area is to identify strategic flood risk areas from, for example, main rivers. The LLFA is responsible for identifying local sources of flooding, such as surface water flooding from heavy rainfall events.
- 2.2.9. The Flood and Water Management Act 2010 gives the EA a strategic overview of the management of flood and coastal erosion risk in England; and gives LLFAs responsibility for putting in place flood management strategies. The Act defines 'risk' and includes district councils as Risk Management Authorities. It also sets out

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<sup>5</sup> HM Government, October 2016, Government response to the Committee on Climate Change.

approaches to flood risk management, including: at section 32, sustainable drainage requirements; and at section 40, changing Building Regulations to incorporate greater flood resilience.

- 2.2.10. Under this Act, Defra issued guidance and information notes on a number of different aspects, and the Environment Agency has produced tools to help LLFAs consider the impacts of climate change on sources of local flood risk.
- 2.2.11. The National Flood & Coastal Erosion Risk Management Strategy for England was published in 2011. The strategy builds on existing approaches to flood and coastal risk management and promotes the use of a wide range of measures to manage risk. It identifies the wider benefits of managing floodwater by utilising the environment (wetlands and other areas suitable for inundation) including improved biodiversity and water quality. The strategy encourages more effective risk management by enabling people, communities, business, infrastructure operators and the public sector to work together. In practice, this means that Local Plans should be consistent with Flood and Coastal Erosion Risk Management strategies and plans.
- 2.2.12. Local
- 2.2.13. The overall ambition of the New Anglia Local Enterprise Partnership (LEP) Green Economy Pathfinder is to achieve sustainable, low carbon growth, skills development and employment in Norfolk and Suffolk. Priorities set out in the manifesto include reducing carbon and greenhouse gas emissions and encouraging investment in renewable and low-carbon technologies.
- 2.2.14. *Tomorrow's Norfolk, Today's Challenge, Norfolk's Climate Change Strategy* was produced by Norfolk Climate Change Partnership, and identifies priorities for transport, energy, housing and the economy to which all district councils have signed up, including increasing resilience of new development to the impacts of climate change.
- 2.2.15. The Carbon Reduction Target for Norwich City Council, set in its second Carbon Management Plan, is to achieve a total reduction of 40% in carbon emissions from the 2006/7 baseline by 2019<sup>6</sup>. South Norfolk's Carbon Management Plan sets a target of 20% reduction from a 2008/9 baseline by 2013/14<sup>7</sup> for its own operations. Broadland has an Environmental Strategy and Action Plan which aims to reduce carbon emissions (but no target has been agreed<sup>8</sup>).

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<sup>6</sup> <http://www.norwich.gov.uk/Environment/Ecolssues/Documents/CarbonFootprintReport.pdf>

<sup>7</sup> <http://www.south-norfolk.gov.uk/CARMS/meetings/cab2010-04-19ag11app1.pdf>

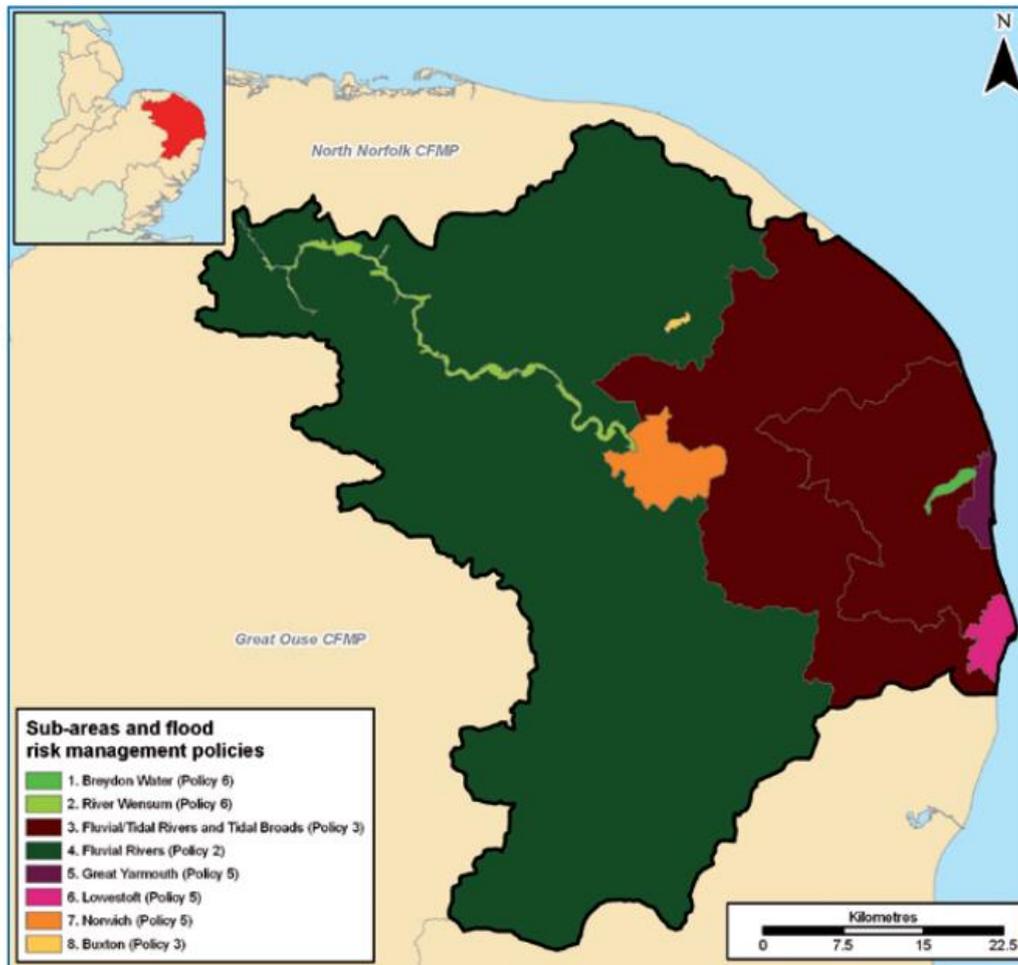
<sup>8</sup> [http://www.broadland.gov.uk/PDF/Environmental\\_strategy\\_low\\_res\\_1\(1\).pdf](http://www.broadland.gov.uk/PDF/Environmental_strategy_low_res_1(1).pdf)

- 2.2.16. Although there is no coast within the greater Norwich area, the flat and low-lying nature of some of the surrounding landscape means the impact of coastal erosion is an issue which should be considered. There are two Shoreline Management Plans for Norfolk: SMP 5 Hunstanton to Kelling and SMP 6 Kelling to Lowestoft Ness<sup>9</sup>. These long-term plans promote greater sustainability of the shoreline and one more in keeping with the natural character of this coast. The purpose of an SMP is limited to coastal defence, and it does not seek to address the consequences of coastal change; however it does seek to highlight those issues that will need to be addressed.
- 2.2.17. The Broadland Rivers Catchment Flood Management Plan (BRCFMP) was produced by the Environment Agency in 2009 and covers the Greater Norwich area. This deals mainly with fluvial flooding, and sets policies for managing flood risk within the catchment and should inform the production of the Local Plan. Policies affecting the Greater Norwich area (and the actions proposed) are: Policy 2 – Fluvial Rivers (mitigation on land, protect flood plain, flood resilience); Policy 3 – Buxton (investigate alternative flood risk management actions); Policy 5 – Norwich (flood resilience, emergency response plan); Policy 3 – Fluvial/Tidal Rivers and Tidal Broad (maintain flood embankments, flood storage, resilience plan for most at risk properties); and Policy 6 – River Wensum (flood storage on natural floodplain, river restoration, and flood resilience).

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<sup>9</sup> [http://www.eacg.org.uk/default\\_smp.asp](http://www.eacg.org.uk/default_smp.asp)

Figure 7 Map of the Broadland Rivers Catchment Flood Management Plan Sub-areas



2.2.18. The policies in the BRCFMP have been carried forward to the new Flood Risk Management Plan, about to be published. This document will co-ordinate the actions from all flood risk management authorities in the River Basin District.

2.2.19. Norfolk County Council, as Lead Local Flood Authority, is required to develop a Local Flood Risk Management Strategy (LFRMS). As the Environment Agency has responsibility for main rivers and the sea, this strategy addresses the risk from surface water run-off, groundwater and ordinary watercourses. Data has been collected through Surface Water Management Plans, and after producing a Preliminary Flood Risk Assessment, the LFRMS was adopted in 2015. It aims to inform all groups and individuals who may have an interest in, or an ability to influence or manage flood risk. It sets seven objectives covering a range of topics such as water quality, partnership working and flood risk and development. These objectives will filter through to the Flood Risk Management Plan mentioned in paragraph 67 above.

2.2.20. From April 2015, planning policy and decisions on planning applications for major developments have been required to ensure

that sustainable drainage systems (SuDS) are used for the management of surface water. Norfolk County Council is required to comment on planning applications for major developments in respect of surface water drainage.

2.2.21. Spatial Planning Objective 1 of the JCS is “To minimise the contributors to climate change and address its impact”. Accordingly, the objective promotes:

- high standards of design and sustainable access;
- reduction of greenhouse gases and adaptation to the impact of climate change;
- zero and low - carbon developments;
- guiding new development away from areas with a high probability of flooding. Where new development in such areas is desirable for reasons of sustainability (e.g. in the city centre), flood mitigation will be required and flood protection will be maintained and enhanced.

2.2.22. Policies throughout the JCS support these objectives, most notably policy 1 (Climate change), policy 2 (Good design) and policy 3 (Energy and water), with the latter requiring 10% of the energy supply for new development to be from renewable sources. Detailed approaches to mitigating flood risk in new development, agreed with the LLFA, are in development management policies for each district.

### 2.3. Current Baseline

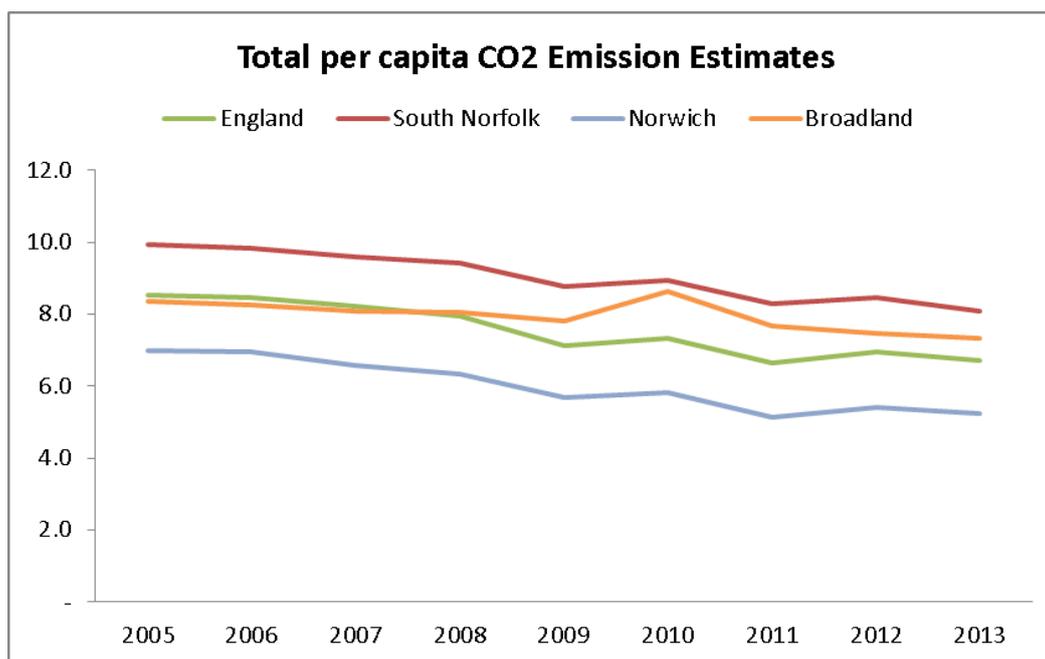
2.3.1. Broadland and South Norfolk CO<sub>2</sub> per capita emissions are above the national (England) average but have steadily reduced in recent years, in line with national trends. Emissions are lower in Norwich, reflecting the urban nature of the district with shorter and fewer car journeys needed.

Figure 8 2013 Per Capita CO<sub>2</sub> emission estimates<sup>10</sup>

Area	Industry & commercial	Domestic	Transport	Total
Broadland	2.9	2.2	1.9	7.3
Norwich	2.4	1.8	0.9	5.2
South Norfolk	2.2	2.2	3.1	8.1
Norfolk	3.0	2.2	2.2	7.5
East of England	2.0	2.0	1.9	6.0
England	2.8	2.0	1.9	6.7

<sup>10</sup> 2005 to 2013 UK local and regional CO<sub>2</sub> emissions, DECC & ONS

Figure 9 Per Capita Emission Trends

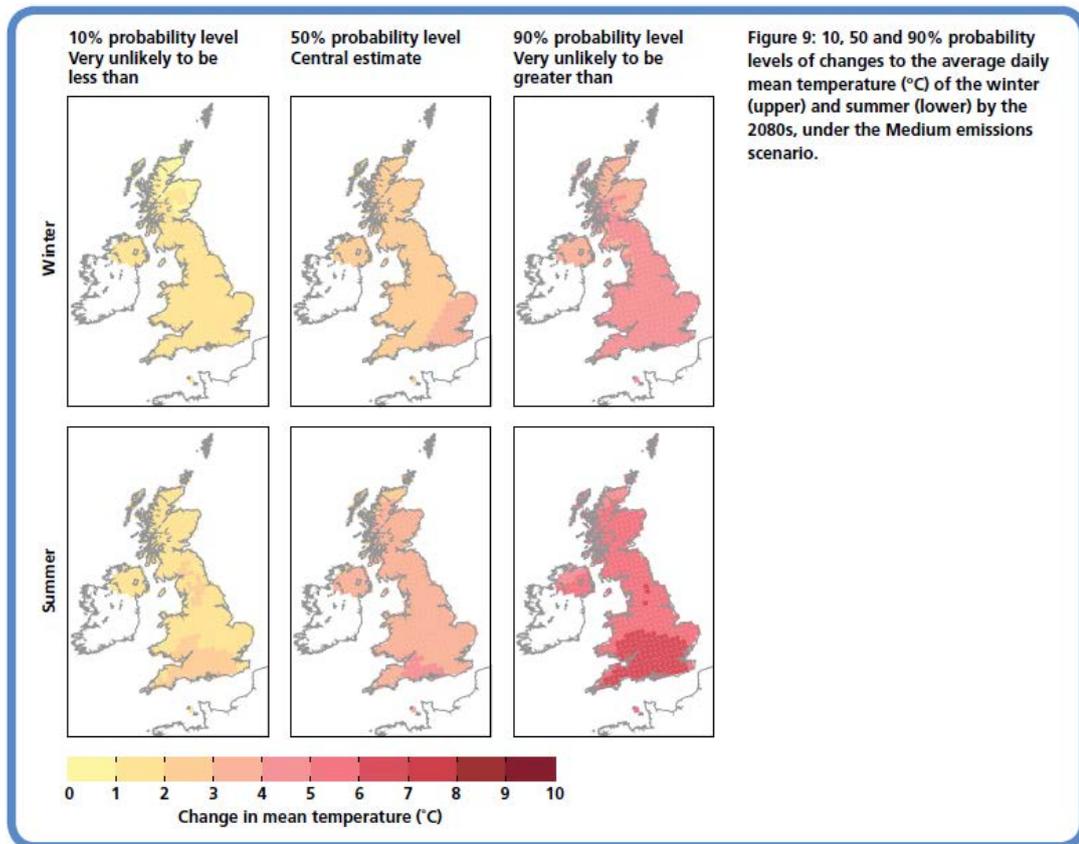


- 2.3.2. The general trend for CO<sub>2</sub> emissions is a reduction since 2005 at all geographic levels.
- 2.3.3. There are a number of factors that contribute to the scale of per-capita emissions in Greater Norwich, including transport. In regards to transport, it is acknowledged that the Examining Authorities Report into the Northern Distributor Road (NDR) found that the scheme will “lead to an immediate and ongoing increase in carbon emissions as compared with the “Do-Minimum” scenario”. However it was also acknowledged that these may be “mitigated by efficiency improvements promoted in future carbon budget rounds and that evidence submitted to the examination did not show that, in isolation, the scheme would affect the ability of the Government to meet its carbon reduction targets, nor the fulfilment of the overarching national carbon reduction strategy”<sup>11</sup>.
- 2.3.4. According to UK Climate projections 2009 (UKCP09)<sup>12</sup> overall the long term projection is that the area is likely to have wetter winters, drier summers, and higher average temperatures.

<sup>11</sup> The Planning Inspectorate, The Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T) Order, Examining Authorities Report of Findings and Conclusions and Recommendation to the Secretary of State for Transport, paragraph 4.283.

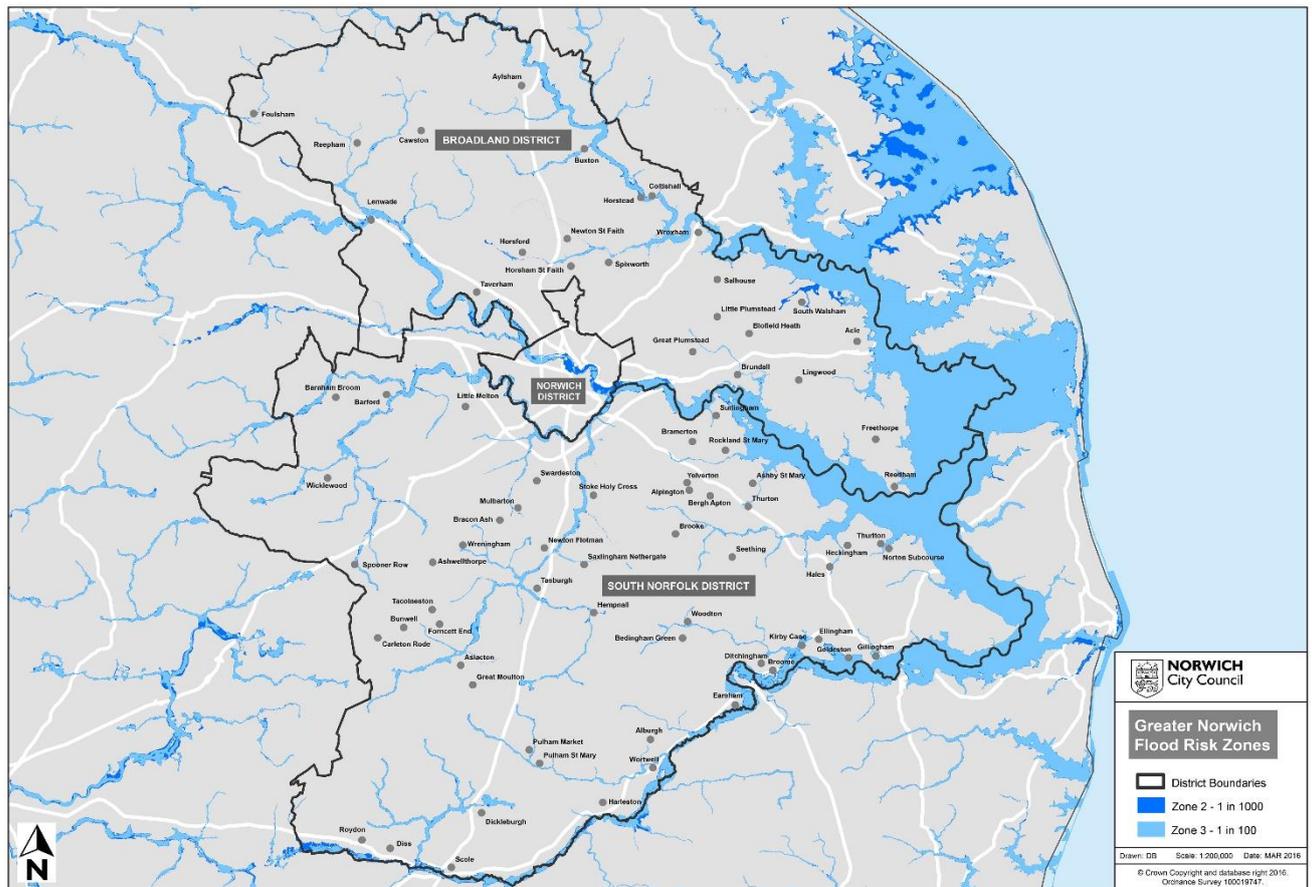
<sup>12</sup> <http://ukclimateprojections.metoffice.gov.uk/21678>

Figure 10 UK Climate projections 2009 temperature projections under various probability scenarios



- 2.3.5. Although the area has no coastline, as noted above, the low-lying nature of parts of the surrounding area mean that coastal erosion and tidal flooding could impact on both the Broads and Greater Norwich.
- 2.3.6. Figure 9 below illustrates the main areas at risk of flooding in Greater Norwich, as defined by the Environment Agency. Although protected, the Wensum valley in Norwich city centre is an area where flooding could be a risk to development potential. As the map demonstrates, there are areas of functional flood plain in and around Norwich city centre, to the west on the River Wensum and to the east and south on the River Yare. There are extensive areas where flood risk is relatively high, particularly along the rivers Waveney, Yare and Bure, though these are largely covered by the Broads as the local planning authority.

Figure 11 Environment Agency Flood Zones 2 & 3



2.3.7. The main sources of flood risk<sup>13</sup> in the area are identified as, among other things: flooding from the River Wensum in Norwich, the River Bure and Camping Beck at Buxton; combined river and tidal flooding in Wroxham/Hoveton and Brundall; failure or overwhelming of pumping stations causing localised flooding in Wymondham, Aylsham, and Upton; breaching/failure of embankments in Norwich; and surface water and sewer flooding in a range of places. Based on the whole catchment area, which is wider than the study area, the largest concentration of people currently at risk from the 1% annual probability river flood are located in Buxton with Lamas, but by 2100 the largest increase in flood risk from rivers is in Norwich.

2.3.8. Regarding local sources of flooding, such as surface water, ground water and ordinary water courses, no *nationally significant* indicative Flood Risk Areas have been identified in the Greater Norwich area by the Environment Agency. However, Norwich was identified as having approximately 14,000 people at risk of surface water flooding and was ranked 19<sup>th</sup> in a list of English settlements outside the indicative Flood Risk Areas<sup>14</sup>.

<sup>13</sup> Broadland Rivers Catchment Flood Management Plan

<sup>14</sup> According to the Norfolk Preliminary Flood Risk Assessment, 2011

2.3.9. The Norfolk Flood Risk Management Strategy identifies the top 39 settlements at risk from surface water flooding based on flood risk, and grouped them into four priority bands based on the potential numbers of people at risk. Those settlements in the Greater Norwich Area have been extracted into the following table:

Figure 12 Flood Risk Settlement Priority Ranking

Priority Band	Settlement	Potential impact within the Places above the Flood Risk Thresholds		
		Number of people	Critical Infrastructure	Non residential properties
1	Norwich (inc. Drayton, Taverham and Cringleford)	22,273	58	1,909
2	No settlements in Greater Norwich in this ranking			
3	Wymondham	1,381	0	177
4	Diss	534	2	111
5	Long Stratton	264	3	79
6	Aylsham	339	2	84
7	Harleston	597	2	23
8	Spixworth	241	2	0
9	Buxton	260	0	0

2.3.10. Potential measures to mitigate for and adapt to this risk are described in Appendix 1 of the Norfolk Local Flood Risk Management Strategy<sup>15</sup>. Such mitigation measures will be directed towards areas where the most benefit might be achieved, and include retrofitting sustainable drainage (SuDS), flood defences, increased capacity and conveyance of drainage systems and improved land management practices. They include:

Figure 13 Potential Flood Mitigation Measures

Settlement/area	Mitigation
Diss	Protection of 205 properties to a 1 in 100 standard
Harleston	Protection of 140 properties to a 1 in 100 standard
Catton Grove	Protection of 847 properties to a 1 in 100 standard
Drayton	Protection of 86 properties to a 1 in 100 standard
Nelson/Town Close	Protection of 667 properties to a 1 in 100 standard
Wymondham	Protection of 217 properties to a 1 in 100 standard

15

<http://norfolkcc.cmis.uk.com/norfolkcc/Meetings/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/401/Committee/18/Default.aspx>

2.3.11. There has been an increase in renewable energy generation in recent years, predominantly in the form of solar and wind, along with some biomass generation. In January 2016, the Department for Energy and Climate Change (DECC) Renewable Energy Planning Database<sup>16</sup> showed that there are eleven operational large scale renewable energy developments, two under construction and four awaiting construction in the Greater Norwich area.

2.3.12. Whilst the above developments illustrate that there is potential for major renewable energy development in the area, future growth in major renewable energy schemes is difficult to predict. It is likely to be dependent on government policy on planning and subsidies for the industry, changes in technology and the cost of other sources of energy, though a positive approach to renewable energy development through the GNLP would be likely to assist in bringing sites forward.

Figure 14 Renewable and Low Carbon Decentralised Energy Schemes

Operational	Under Construction	Awaiting Construction
Avenue Solar Farm, Yelverton	Scottow Moor Solar Farm phase 2	Banningham Road, Aylsham
Bungay Road Solar Farm, Tasburgh	White Horse Lane Solar Farm, Trowse	Brick Kiln Road Solar Farm, Mulbarton
Costessey Landfill Gas Project		New Road Solar Farm, Bawburgh
Old Airfield Solar Farm, Weston Longville		Oulton Airfield Solar Farm
Reepham Road Biomass		Rookery Business Park Solar Farm, Besthorpe
Salhouse Solar Farm		
Scottow Moor Solar Farm phase 1		
Spring Farm biomass, Taverham		
UEA Combined Gas Fired Heat and Power		
Weston Airfield Wind Farm, Weston Longville		
Woodforde Solar Farm		

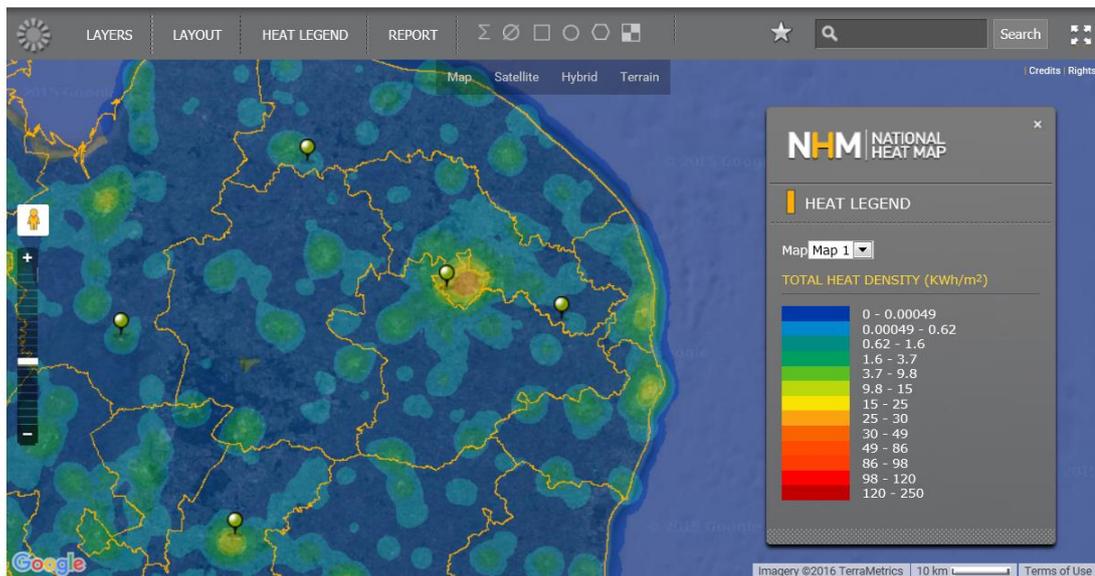
<sup>16</sup> <https://www.gov.uk/government/publications/renewable-energy-planning-database-monthly-extract>

2.3.13. The DECC interactive maps<sup>17</sup> show that in September 2015, although Norwich had fewer than the GB average domestic solar photovoltaic (PV) installations, both Broadland and South Norfolk had over the GB average number of installations. However, this still represents a minority of the housing stock.

2.3.14. As with major renewable energy generation, the potential for further growth in solar PV installations is difficult to predict. It is likely to be dependent on national issues such as government policy on subsidies, changes in technology, the cost of panels and the cost of other sources of energy.

2.3.15. The DECC national heat map<sup>18</sup> for Greater Norwich shows heat demand by area. It is primarily intended to help identify locations where local heat distribution is most likely to be beneficial and economic, and is a tool for prioritising locations for more detailed investigation. The map below also shows two Combined Heat and Power (CHP) installations in the area. The Utilities site in Norwich was **allocated for development that will "seek to maximise the use of renewable and low carbon energy sources including the provision of district wide heating and CHP. As such, consideration continues to be given to the potential for developing a CHP network in Norwich.**

Figure 15 Extract of National Heat Map



## 2.4. Projected Baseline

2.4.1. While the JCS contains policies to address climate change issues, including flood risk, since climate change is a global issue it is difficult to predict longer term changes in the baseline. However, it is important that after 2026, the end date of the JCS, the GNLP

<sup>17</sup> [http://tools.decc.gov.uk/en/content/cms/statistics/local\\_auth/interactive/domestic\\_solar/index.html](http://tools.decc.gov.uk/en/content/cms/statistics/local_auth/interactive/domestic_solar/index.html)

<sup>18</sup> <http://tools.decc.gov.uk/nationalheatmap/>

provides a strategic plan for the Greater Norwich area to minimise emissions in the area and to assist adaptation to climate change. Without such a plan, there is the potential for emissions to increase and for more development to be located in, for example, areas prone to flood risk or to not be adapted to climate change.

## 2.5. Issues

- Ensure consistency with interventions proposed within Governments forthcoming emissions reduction plan, supporting the wider policy imperative to reduce carbon emissions over time.
- Climate change is expected to increase the frequency and intensity of extreme weather events such as heat waves, drought and intense rainfall.
- Fluvial/tidal flooding is a risk affecting limited parts of the area, while surface water and sewer flooding is a risk in a number of places.
- Although per capita CO<sub>2</sub> emissions have been declining in line with national trends, they are above the national average in rural parts of the area.
- There is potential to increase renewable energy production chiefly from solar, wind and biomass developments, as well as from micro-renewables.

### 3. SECTION 3 – BIODIVERSITY, GEODIVERSITY AND GREEN INFRASTRUCTURE

3.1.1. This section identifies the biodiversity and geodiversity assets, including designated sites and wider information on the natural environment, including the green infrastructure network, in the Greater Norwich area.

#### 3.2. Context

##### 3.2.1. National/International

3.2.2. The EU Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) requires the UK to create an ecological network to protect threatened habitats and species. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) form part of this network. However, if a development affects European protected species Natural England could issue a licence and seek proportionate mitigation and compensation measures.

3.2.3. The NPPF recognises the need for planning to contribute to and enhance the natural and local environment. It emphasises the need to minimise the impact on, and provide net gains in, biodiversity. The planning system should establish coherent ecological networks that are more resilient to current and future pressures. The NPPF also identifies how the planning system should protect and enhance geological conservation interests.

3.2.4. The Natural Environment and Rural Communities Act of 2006, **Section 40: Duty to conserve biodiversity states: "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity"**. In **Section 41, the Act requires a list of species and habitats which are of principal importance for conserving biodiversity.**

3.2.5. The Natural Environment White Paper of 2011 states the need to stop the decline in biodiversity and the degradation of ecosystems and services, and restore them as far as is feasible, and seek to deliver net gains in biodiversity where possible. One of the commitments was to publish a biodiversity strategy for England.

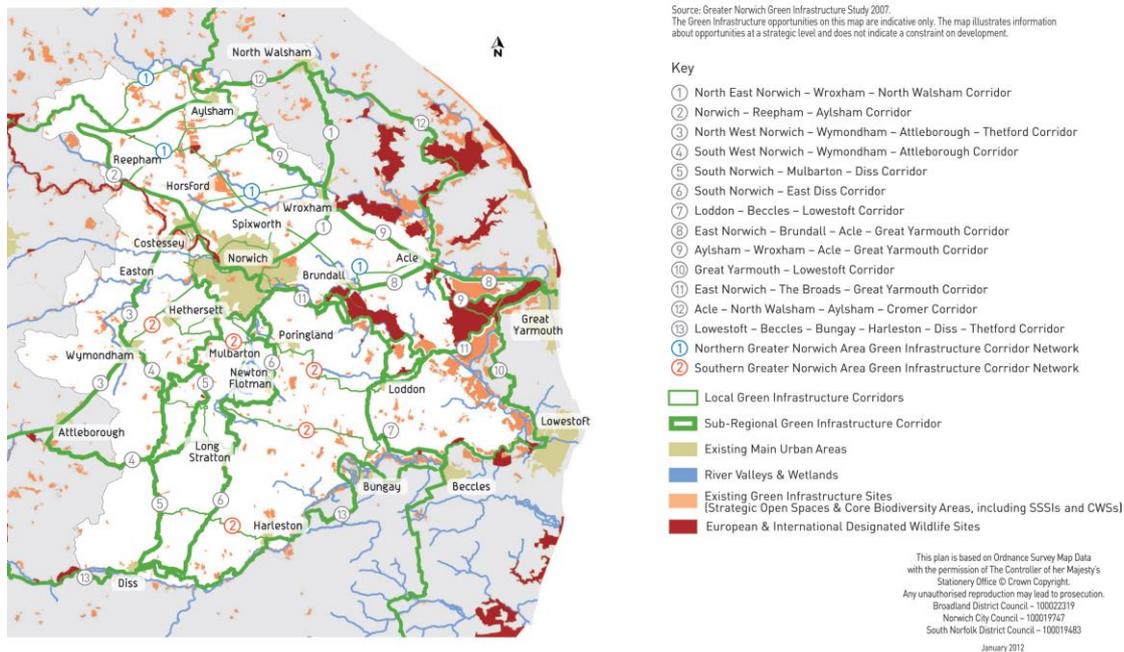
3.2.6. **Biodiversity 2020 is the Government's strategy for England's wildlife and ecosystems.** It encapsulates the aims of the EU Biodiversity Strategy and seeks to achieve, by 2020:

- More, bigger and less fragmented areas for wildlife, no net loss of priority habitat and a net increase in priority habitats.
- Restoration of at least 15% of degraded ecosystems as a contribution to climate change mitigation and adaptation.
- An overall improvement in the status of species and prevention of further human-induced extinctions.
- Improved engagement in biodiversity issues.

- 3.2.7. The UK post-2010 Biodiversity Framework was published in 2012. It covers the period to 2020 and replaces the UK Biodiversity Action Plan process. However, many of the tools and background information developed under UK BAP still form the basis of much biodiversity work.
- 3.2.8. The EU published guidance in 2013 on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment. This **suggests that an SEA should focus on ensuring “no net loss” of biodiversity** before considering mitigation and compensation. The assessment should also take account of ecosystem services and the links between the natural environment and the economy.
- 3.2.9. The UK Geodiversity Action Plan provides a shared context and direction for geodiversity through a common aim, themes, objectives and targets, linking national, regional and local activities. To help deliver this in England, the Geodiversity Charter (2015), developed by the English Geodiversity Forum, sets out the ambition that geodiversity is recognised as an integral and vital part of the environment, economy and heritage that must be safeguarded and managed for current and future generations.
- 3.2.10. Good Practice Guidance for Green Infrastructure and Biodiversity (2012) while not a strategy, has been endorsed by a range of organisations including the Town and Country Planning Association and the Wildlife Trusts. It emphasises the importance of a strategic approach to green infrastructure (GI), which should be **multi-functional and emphasise the area's locally distinctive character**. GI should protect, enhance, restore and create wildlife habitats, and connect sites at a strategic and a local level.
- 3.2.11. Local
- 3.2.12. **The Local Nature Partnership, Wild Anglia's core strategic document** is their manifesto, setting out four strategic aims: economic growth; exemplary green infrastructure; strengthening nature; and a healthy, happy society.
- 3.2.13. The Norfolk Biodiversity Partnership has collated the 22 habitat action plans and 15 species action plans for the most threatened species/habitats in the Greater Norwich Area. These form a useful foundation for related policies. The Biodiversity Supplementary Planning Guidance for Norfolk was produced in 2004. Despite its age, it contains useful practical examples of how biodiversity can be incorporated into development.
- 3.2.14. The River Wensum Restoration Strategy (2009) was a pilot for Natural England's **national approach to whole-river restoration planning**. This identifies and prioritises physical restoration measures that will help **to achieve the SAC's conservation objectives** in the most cost-effective way.

- 3.2.15. Norfolk Geodiversity Partnership has produced the Norfolk Geodiversity Action Plan (2010-2015). Among other aims, the document seeks to embed geo-conservation in official plans and policies. A Supplementary Planning Guide, Geodiversity in Planning, has also been produced. This recommends reference to British Geological Survey maps and the Norfolk Geodiversity Audit for plan-making purposes.
- 3.2.16. The Greater Norwich Green Infrastructure Strategy was part of the evidence base of the Joint Core Strategy. It brings together various strands of green infrastructure work across the Greater Norwich area into a single vision, and makes recommendations for investing in the provision of multi-functional green infrastructure. Among other things, it identifies indicative sub-regional and local green infrastructure corridors. The Greater Norwich Green Infrastructure Delivery Plan post-dates the Greater Norwich Green Infrastructure Strategy, providing a more focussed study of the key growth areas of south-west and north-east of Norwich.
- 3.2.17. The JCS identifies "Enhancing our special environment and mitigating against any adverse impacts of growth" as one of the 'grand challenges' it faces. To address this, the strategy aims both to locate development in places that will minimise adverse impact on the environment and to look after and improve the natural qualities of the area, taking the opportunities which development brings to expand and create even more.
- 3.2.18. To enable this, policy 1 of the JCS sets out the proposed green infrastructure network for the Greater Norwich area (see figure 16 below), including links with neighbouring areas. As Greater Norwich is located adjacent to the Broads and other areas of national and international importance, the JCS and other Local Plan documents seek to provide sufficient high quality green infrastructure to provide buffer zones and alternative destinations to help manage visitor pressure on biodiversity.
- 3.2.19. Due to proximity to Natura 2000 protected habitats in the Broads, Local Plan policies in Broadland require developments to provide Suitable Alternative Natural Greenspace (SANG). The aim of this policy approach is to provide viable alternatives to Natura 2000 sites to meet every day recreational needs.

Figure 16 Proposed green infrastructure network for the Greater Norwich area



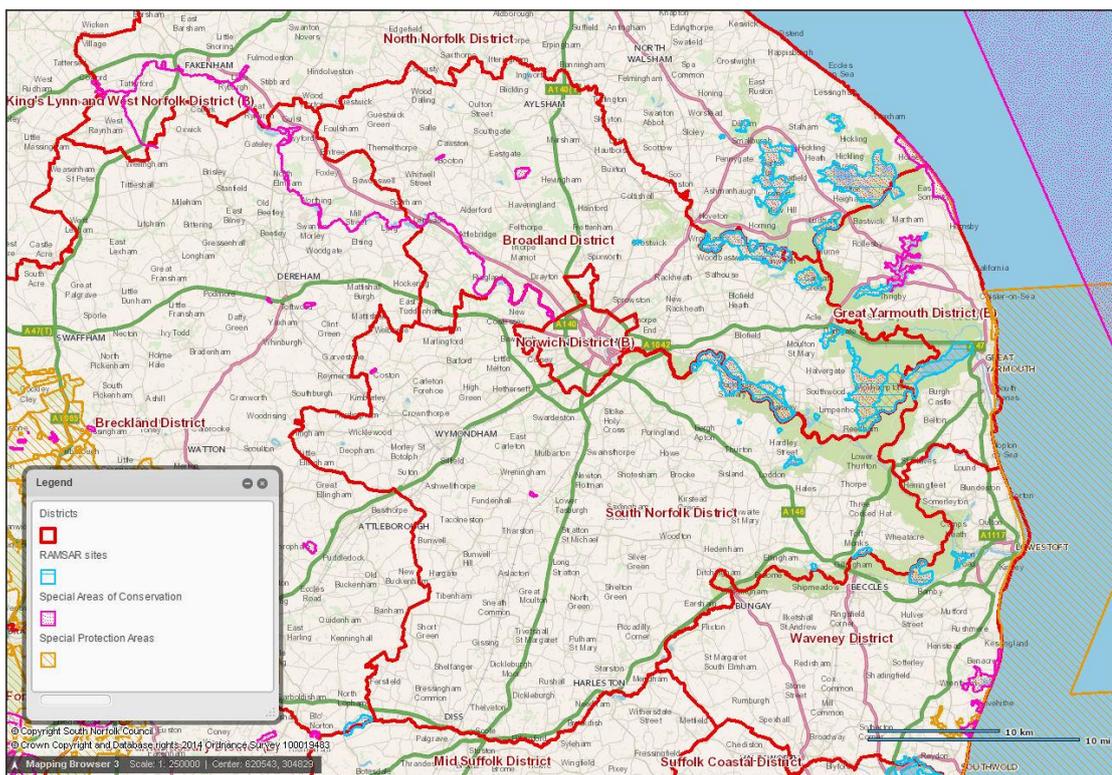
### 3.3. Current Baseline

3.3.1. The Greater Norwich area is home to some significant nature conservation interests. The table below summarises these and establishes the baseline. There are large areas of internationally important wildlife sites across the area designated for both habitat and species protection, these being Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites for wetland importance. Most of these are marshland, rivers or broads, so water quality is a key issue. There are also many nationally important Sites of Special Scientific Interest (SSSIs) and national and local wildlife sites dispersed widely across the area. Their number and locations are set out in figures 17 to 21 below.

Figure 17 Numbers of locally, nationally and internationally designated nature conservation sites, 2015<sup>19</sup>

Feature	Norwich	Broadland	South Norfolk	Greater Norwich
SAC	0	3 (2 shared)	2 (2 shared)	3
SPA	0	2 (1 shared)	1 (shared)	2
Ramsar	0	2 (1 shared)	1 (shared)	2
SSSI	6	15 (3 shared)	27(3 shared)	45
National Nature Reserves	0	2 (1 shared)	1 (shared)	2
Local Nature Reserves	8	2	8	18
Roadside Nature Reserves	1	8	43	52
County Wildlife Sites	30 <sup>20</sup>	130 <sup>21</sup>	268 <sup>22</sup>	428

Figure 18 SAC, SPA & Ramsar sites in Greater Norwich



<sup>19</sup> Sources: Norfolk County Council Biodiversity Information Service and Natural England. Some sites have several designations, so will be counted more than once in the table.

<sup>20</sup> <http://www.nbis.org.uk/sites/default/files/documents/CWSinNorwich2013.pdf>

<sup>21</sup> <http://www.nbis.org.uk/sites/default/files/documents/CWSinBroadland2013.pdf>

<sup>22</sup> <http://www.nbis.org.uk/sites/default/files/documents/CWSinSouthNorfolk2013.pdf>

Figure 19 SSSIs in Greater Norwich

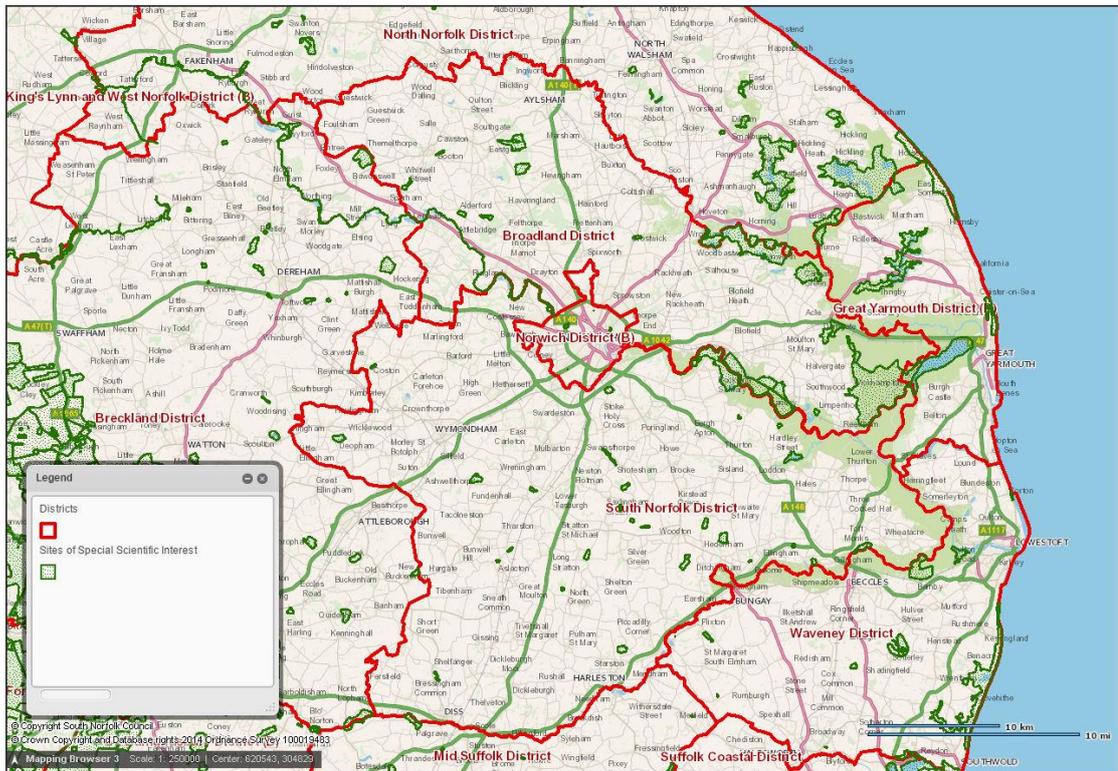
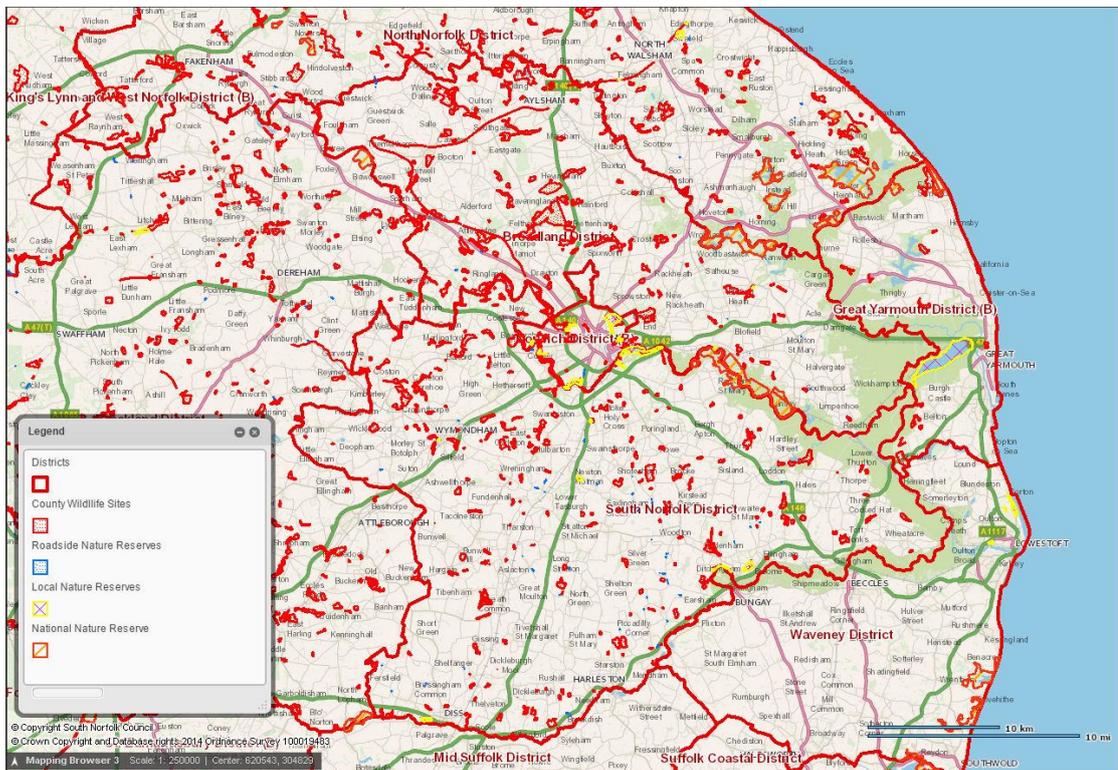


Figure 20 National Nature Reserves, Local Nature Reserves, Roadside Nature Reserves & County Wildlife Sites in Greater Norwich



3.3.2. Natural England's database of SSSIs includes those for geo-diversity, and records their condition<sup>23</sup>. There are 45 SSSIs in the Greater Norwich area, including 6 geological designations. Of the 45 SSSIs, 11 have elements that are either in 'unfavourable – no change' or 'unfavourable – declining' condition.

**Figure 21 The percentage of SSSIs in 'favourable condition' or 'unfavourable recovering condition' and CWS/CGS in 'positive conservation management', at March 2015<sup>24</sup>**

District	SSSI	CWS/CGS
Broadland	94%	75%
Norwich	75%	93%
South Norfolk	78%	70%

3.3.3. Norfolk Biodiversity Partnership defines 22 habitats and 15 species which are the most threatened species/habitats in the Greater Norwich Area (previously described as BAP habitats and species). These are shown in, figure 22, below<sup>25</sup>.

Figure 22 Most threatened habitats and species on Greater Norwich area

Habitat Action Plans	Species Action Plans
Allotments	Mammals
Cereal field margins	Birds
Churchyards and cemeteries	Butterflies
Coastal and floodplain grazing marsh	Crustaceans
Coastal sand dunes	Molluscs
Fens	Sea Anemone
Hedgerows	Fungus
Littoral and sublittoral chalk	Lichen
Lowland calcareous grassland	Liverwort
Lowland heathland and dry acid grassland	Vascular Plants
Lowland meadow and pastures	Beetles
Lowland mixed deciduous woodland	Stoneworts
Lowland wood-pasture and parkland	Fish
Maritime cliff and slopes	Dragonflies
Mesotrophic lakes	Amphibians
Open mosaic habitats on previously developed land	

<sup>23</sup>

<https://designatedsites.naturalengland.org.uk/SiteList.aspx?siteName=&countyCode=29&responsiblePerson=>

<sup>24</sup> JCS AMR 2014/15

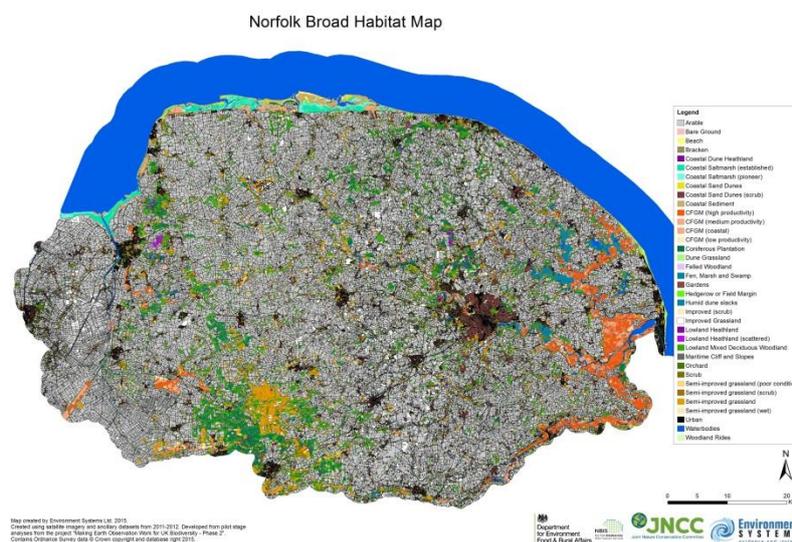
<sup>25</sup> <http://www.norfolkbiodiversity.org/actionplans/>

Ponds	
Reed beds	
Saline lagoons	
Seagrass beds	
Traditional orchards	
Wet woodlands	

3.3.4. Norfolk Biodiversity Information Service (NBIS) has mapped habitat in Norfolk at a field-by-field scale. The resultant map, shown at figure 23 below, is currently being ground-truthed<sup>26</sup>. The map can be viewed in more detail using this link:

[www.nbis.org.uk/sites/default/files/images/Norfolk\\_main\\_map\\_150dpi.png](http://www.nbis.org.uk/sites/default/files/images/Norfolk_main_map_150dpi.png).

Figure 23 Norfolk Broad Habitat Map



3.3.5. Across the Greater Norwich Area, there are 114 audited significant geological and geomorphological sites and features, including SSSIs<sup>27</sup>. There is also a designated County Geological Site (CGS) at Pinebanks Pit, Thorpe St Andrew<sup>28</sup>.

3.3.6. Work, which it is anticipated will continue into the long term, has begun on implementing the Green Infrastructure network, both through the design of new development providing new green infrastructure and the use of CIL funding to provide new and improve existing green infrastructure. For example, demonstration projects are underway to strengthen the role of Marriotts Way; to

<sup>26</sup> [http://www.nbis.org.uk/sites/default/files/images/Norfolk\\_main\\_map\\_150dpi.png](http://www.nbis.org.uk/sites/default/files/images/Norfolk_main_map_150dpi.png)

<sup>27</sup> <https://sites.google.com/site/norfolkgeodiversity/action-ngap/1-understanding>

<sup>28</sup> <http://www.nbis.org.uk/CGS>

provide a pedestrian bridge across the River Yare between Bowthorpe and Colney; and to develop the Wensum River Parkway.

- 3.3.7. The delivery of an effective GI network can have multi-functional benefits that are not only limited to conserving and enhancing the natural environment but can include: promoting recreational activities and social interaction thereby supporting healthy communities; helping create a sense of place as a key part of good design; creating and high quality environment which are attractive to businesses and investors; and, mitigating and adapting to the impact of climate change through storing carbon, contributing to sustainable drainage and reducing the heat island effect.

3.4. Projected Baseline

- 3.4.1. Beyond the JCS end date in 2026, long term prospects for protecting and enhancing the wealth of habitats and species in the area, and for further developing the existing green infrastructure network, would be reduced without a strong policy framework being established in the Greater Norwich Local Plan.

3.5. Issues

- There is a need to protect and enhance nationally and internationally protected nature conservation interests and geodiversity sites in and adjacent to the area, with particular emphasis on reducing visitor pressure on and improving water quality in Natura 2000 sites and the wider habitats of the Broads.
- There are a number of locally important biodiversity sites that should be protected and enhanced.
- Local changes in air quality resulting from increased emissions, such as from increased traffic movements, could affect designated sites.
- Ensuring that the impact on GI from new development is minimised and benefits from new GI are maximised.
- Long term investment in improvements to the defined green infrastructure network is required.

#### 4. SECTION 4 – LANDSCAPE

- 4.1.1. This chapter covers the character of the landscape in Greater Norwich.
- 4.2. Context
  - 4.2.1. National/International
    - 4.2.2. The European Landscape Convention, 2000, promotes the protection, management and planning of landscapes, and is the first international treaty to be exclusively concerned with all dimensions of the European landscape.
    - 4.2.3. The NPPF states at paragraph 156 that Local Planning Authorities should set out strategic policies within the Local Plan for the 'conservation and enhancement of the natural and historic environment, including landscape'.
    - 4.2.4. Natural England has produced National Character Area profiles, which provide a valuable resource for understanding the wider landscape context. They provide a strong environmental evidence base and inform local Landscape Character Assessments.
  - 4.2.5. Local
    - 4.2.6. Objective 9 of the Joint Core Strategy aims to protect, manage and enhance key landscapes in Greater Norwich. Policies 1 and 2 recognise the importance of maintaining strategic gaps between settlements, respecting landscape settings and of development making efficient use of land, including developing brownfield sites.
    - 4.2.7. A Local Landscape Designations Review for South Norfolk Council concluded that there is a strong justification for retaining Strategic Gaps/Important Breaks, between Wymondham and Hethersett and Hethersett and Cringleford to maintain a separation between settlements which are under threat of coalesce<sup>29</sup>. This approach is **implemented through South Norfolk's Local Plan policy DM 4.7**. The location of the gaps is shown in figures 24 and 25 below.
    - 4.2.8. The South Norfolk Local Landscape Designations Review also covered four additional planning policy tools. These are 1) the Norwich Southern Bypass Landscape Protection Zone (which has important part in safeguarding the landscape setting of Norwich); 2) **Key Views (which are "cones" where long views to and from Norwich are identified, which should not be obstructed)**; 3) Undeveloped Approaches (several road and rail corridors approaching Norwich that have a very distinctive rural character and that afford views across the surrounding countryside and to

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<sup>29</sup> [http://www.south-norfolk.gov.uk/planning/media/11115104R\\_Strategic\\_Gaps\\_Review\\_FINAL\\_SK\\_28-09-2012.pdf](http://www.south-norfolk.gov.uk/planning/media/11115104R_Strategic_Gaps_Review_FINAL_SK_28-09-2012.pdf)

Norwich); and 4) Gateways, which are key points of transition or “arrival” in Norwich where the landscape and townscape changes. South Norfolk’s Local Plan Policy DM 4.6 sets out the approach to development which may affect these four policy tools.

Figure 24 Strategic Gap between Wymondham and Hethersett

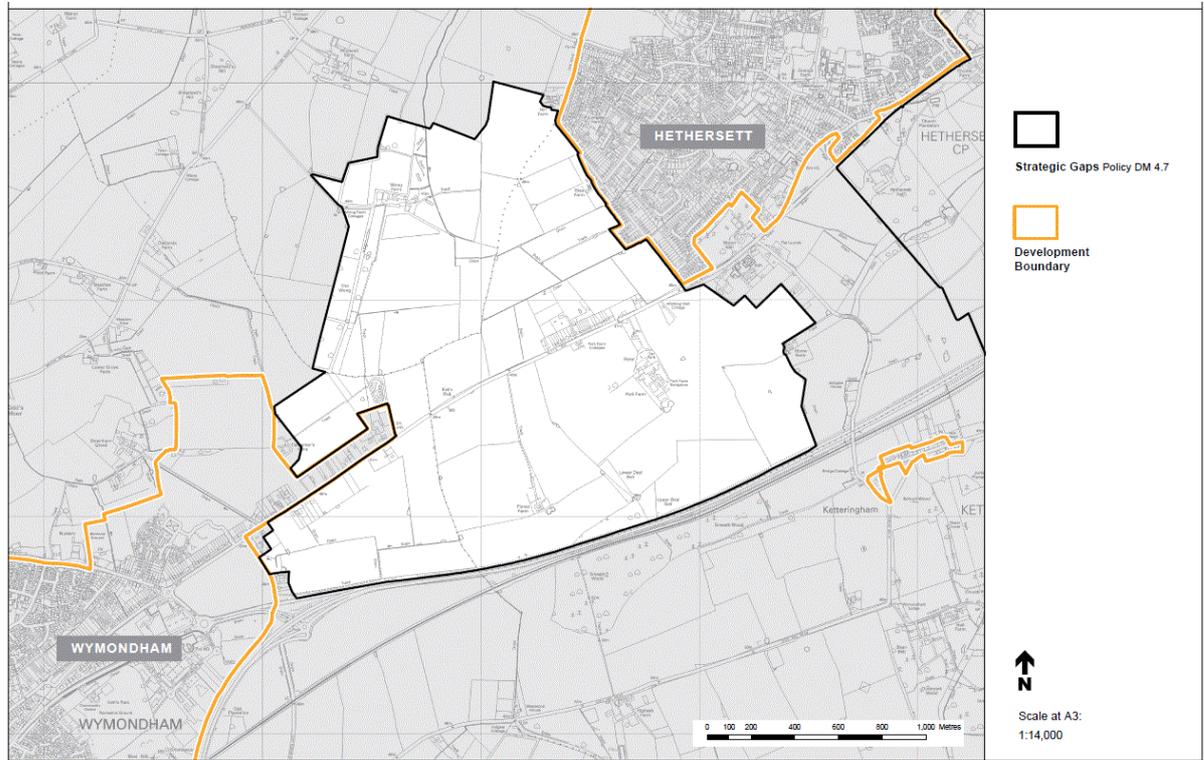
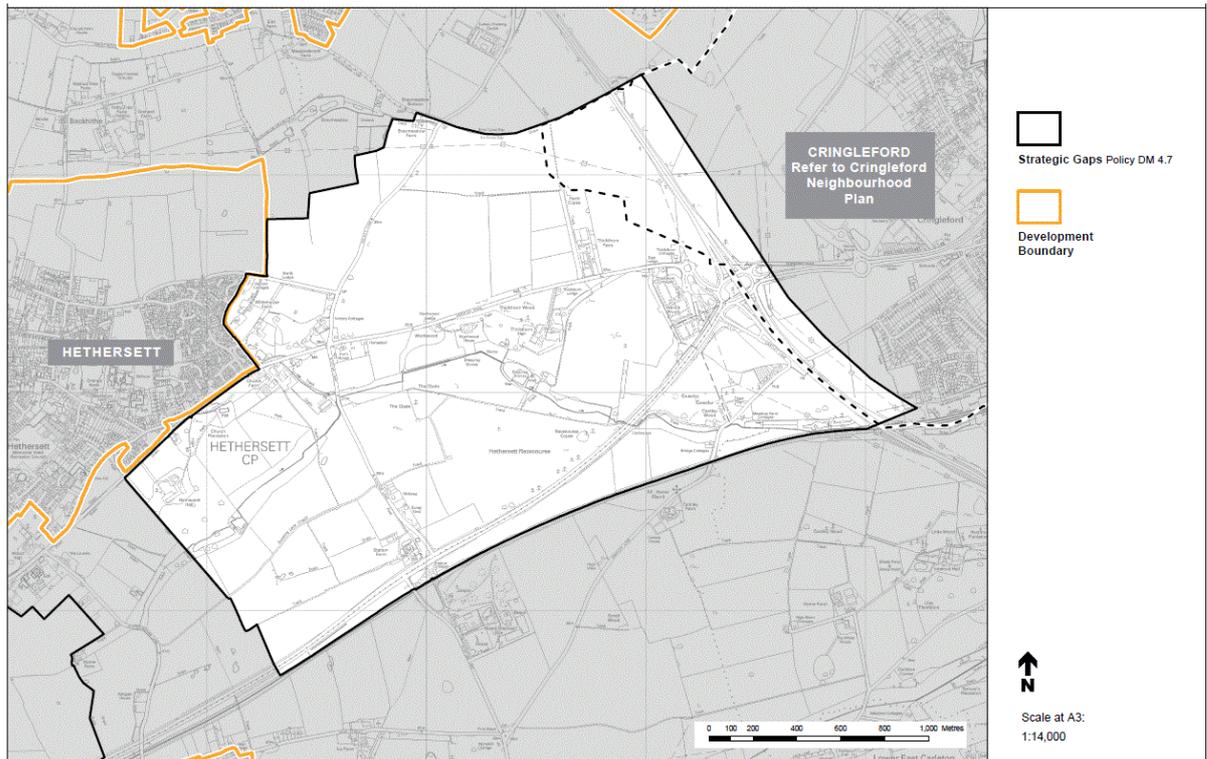


Figure 25 Strategic Gap between Hethersett and Cringleford



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4.2.9. Broadland District Council's Landscape Character Assessment Supplementary Planning Document (SPD) and South Norfolk's Local Landscape Designation Review provide an up-to-date integrated assessment of the landscape character of the districts in accordance with current guidance and best practice. Between them they cover both districts, excluding the Broads Authority Executive Area and can be used to inform and underpin planning policy and decision making. Norwich City Council has a draft Trees and Landscape SPD.

#### 4.3. Current Baseline

4.3.1. Broadland district is predominantly rural, covering an area of 55,167 hectares to the north and east of Norwich. It embraces large areas of low lying arable land, and to a lesser extent, pasture farmland. It also contains numerous woodlands and plantations along the areas of historic parkland. For the most part, the boundaries of the district are roughly defined by the river valleys of the Bure, Wensum and Yare. In the west, the boundary follows the edge of and the elevated Till Plateau<sup>30</sup>.

4.3.2. South Norfolk is also a predominantly rural district which is 90,891 hectares in area. While its northern boundary borders Norwich, the district is largely a rural area of subtle contrasts, ranging from large scale and open plateau landscapes to the more enclosed and intimate character of the low-lying river valley landscapes. The

<sup>30</sup> Based on the Broadland Landscape Character Assessment SPD, paragraph 1.2.2, page 1 [http://www.broadland.gov.uk/housing\\_and\\_planning/618.asp](http://www.broadland.gov.uk/housing_and_planning/618.asp)

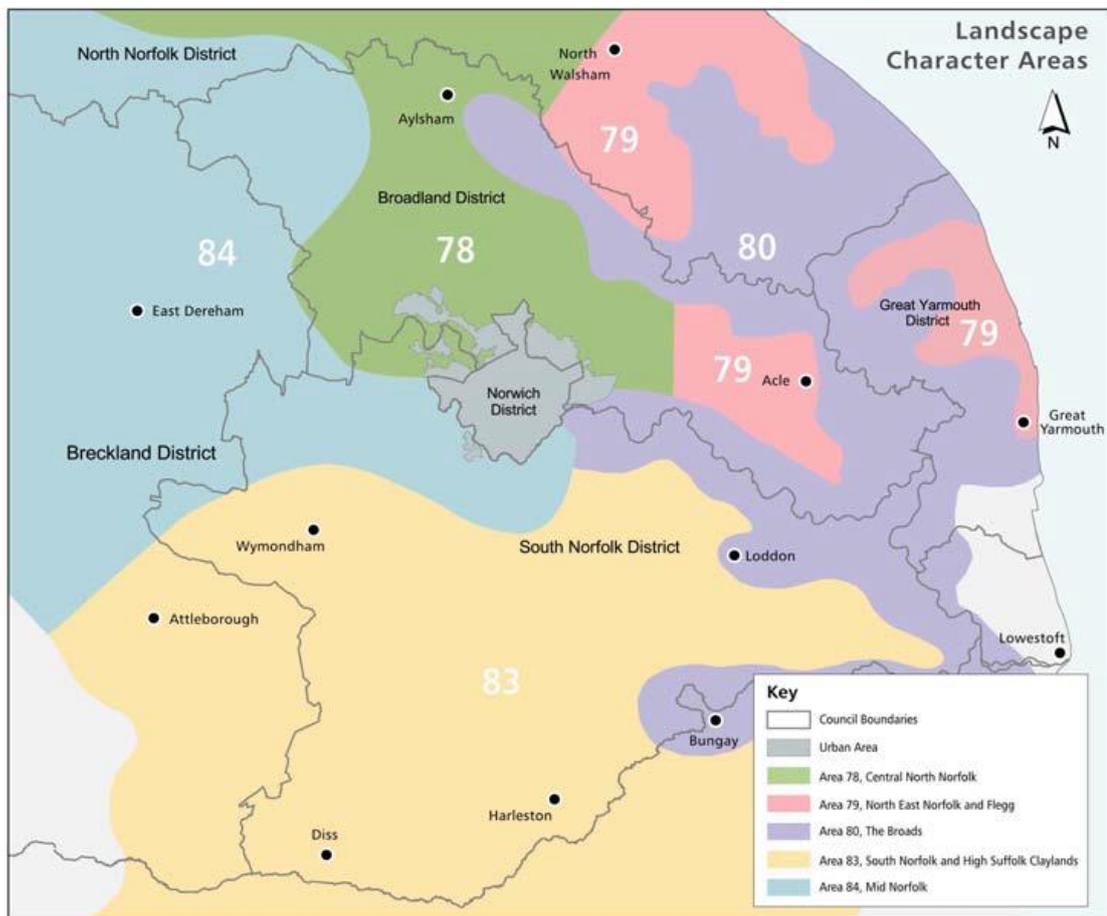
landscape is predominantly arable farmland, interspersed with woodland, historic parkland and settlements<sup>31</sup>.

- 4.3.3. Norwich is a more urbanised environment, but its historic landscape is visible in its parks and the remnants of historic woodland and heathland, including Mousehold Heath.
- 4.3.4. The eastern edges of both Broadland and South Norfolk are within the executive area of the Broads Authority, which is the local planning authority for this nationally important landscape designated by Government which has an equivalent status of a National Park. Although the Broads Executive Area is outside the area covered by the Greater Norwich Local Plan, it contains some of the primary environmental assets within the region. Regard must be had to its national status as a landscape, nature and recreation resource, the implications of which extend beyond the Broads area boundary to include its setting. The Broads Authority Local Plan will work to preserve these qualities, but it will need support from its neighbours.
- 4.3.5. The diversity of landscapes in the Greater Norwich area is reflected by the fact that five nationally defined landscape character areas converge around Norwich, a level of complexity unique within the region. Figure 26 below illustrates this. The National Landscape Character Areas cover:
  - the fens and marshes of the Broads (character area 80);
  - rolling landscapes of varied geology including woodland, heath and former parkland estates in the west and north of the area (78 and 84);
  - an extensive open clay plateau incised by rivers in the south (83); and
  - a more intimate landscape of small fields and hedgerows in the east (79).

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<sup>31</sup> Based on South Norfolk Local Landscape Designations Review 2012 [http://www.south-norfolk.gov.uk/planning/media/11115101R\\_Final\\_DW\\_06-12.pdf](http://www.south-norfolk.gov.uk/planning/media/11115101R_Final_DW_06-12.pdf)

Figure 26 National Landscape Character Areas covering the Greater Norwich area



4.3.6. At a local level, the landscape has been defined as various local Landscape Character Areas as figures 27 to 28 below illustrate.

Figure 27 Landscape Character Areas in Broadland<sup>32</sup>

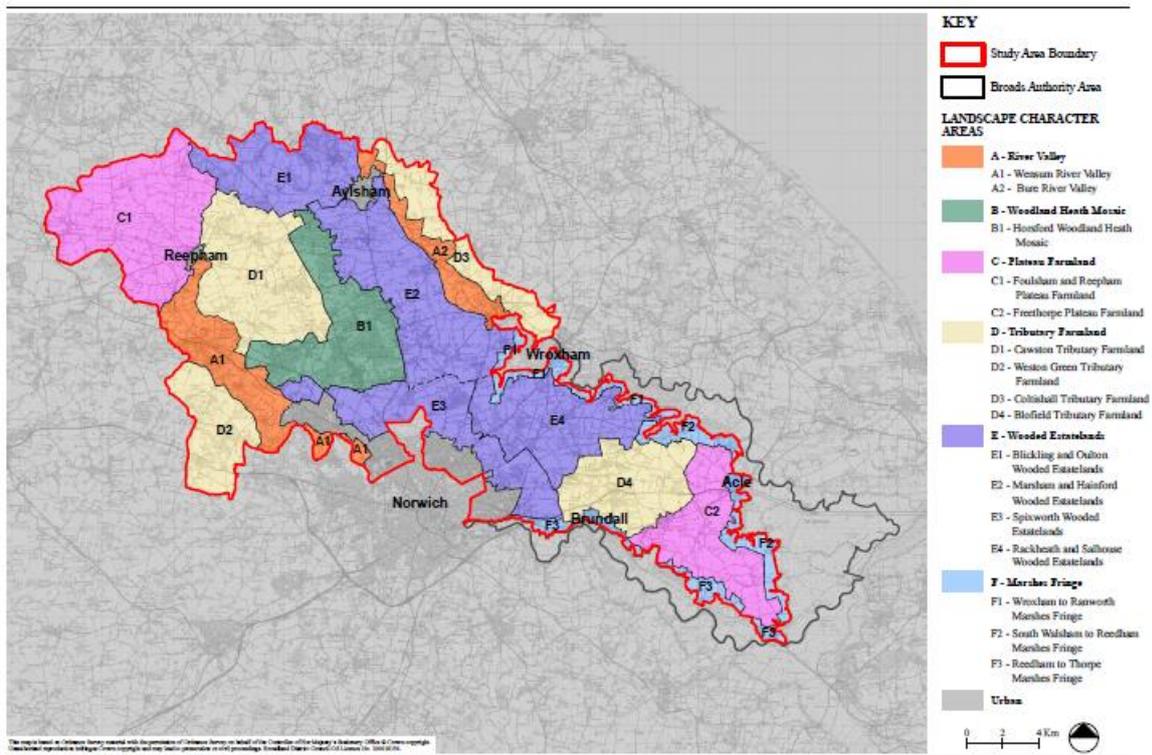
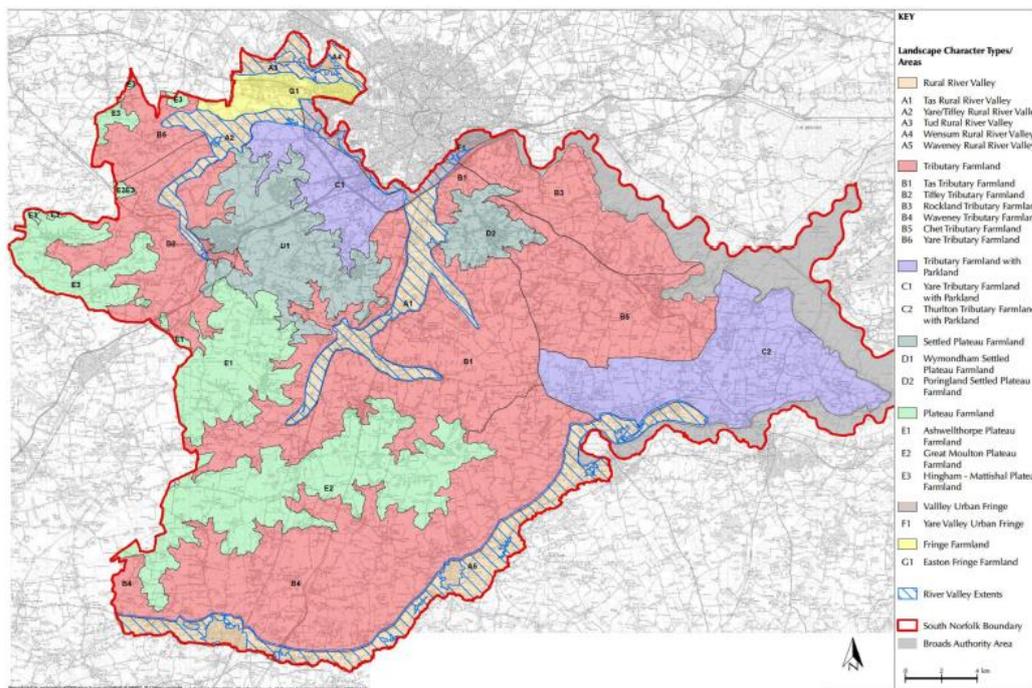


Figure 28 Landscape Character Areas in South Norfolk<sup>33</sup>



<sup>32</sup> [http://www.broadland.gov.uk/PDF/LCA\\_SPD\\_Adopted\\_FINAL.pdf](http://www.broadland.gov.uk/PDF/LCA_SPD_Adopted_FINAL.pdf)

<sup>33</sup> [http://www.south-norfolk.gov.uk/planning/media/11115101R\\_Final\\_DW\\_06-12.pdf](http://www.south-norfolk.gov.uk/planning/media/11115101R_Final_DW_06-12.pdf)

4.3.7. An important element of the character of the landscape of Greater Norwich is the range of historic parks, gardens and woodlands, and the number of important trees in each district, as set out and mapped in figures 29 to 32 below.

Figure 29 Numbers of Historic Parks and Gardens and Ancient Woodlands in Greater Norwich

Feature	Norwich	Broadland	South Norfolk	Greater Norwich
Historic Parks & Gardens <sup>34</sup> (Historic England)	9	5	7	21
Historic Parks & Gardens <sup>35</sup> (locally listed)	10	18	17	45
Ancient Woodland	2	44 (1 shared)	108 (1 shared)	153
TPO trees <sup>36</sup>	438	651	538	1627

<sup>34</sup> <http://historicengland.org.uk/listing/the-list/results>

<sup>35</sup> <http://www.heritage.norfolk.gov.uk/advanced-search>

<sup>36</sup> TPO trees can be individual trees or tree groups so the number in the table is not indicative of the number of individual trees which are covered by TPOs in each district.

Figure 30 Map of Historic Parks and Gardens and Ancient Woodlands in Broadland

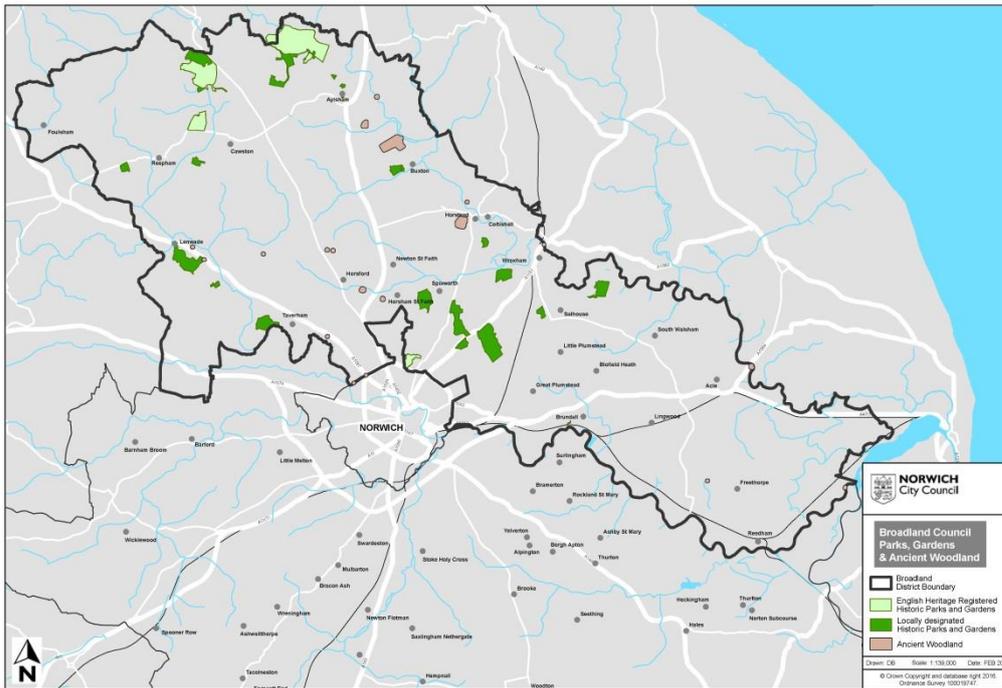


Figure 31 Map of Historic Parks and Gardens and Ancient Woodlands in Norwich

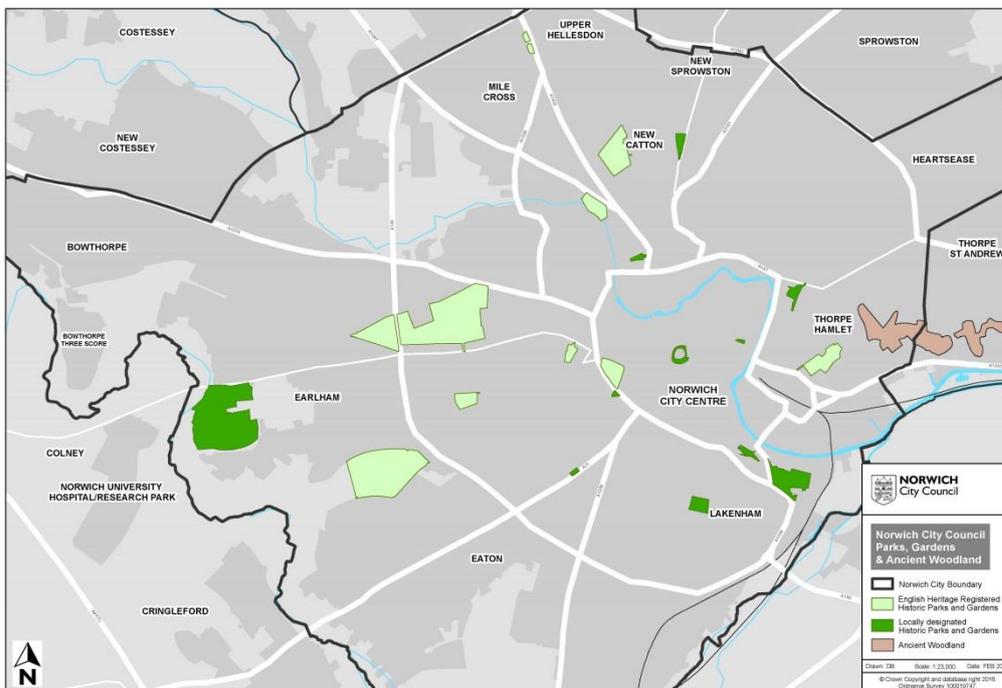
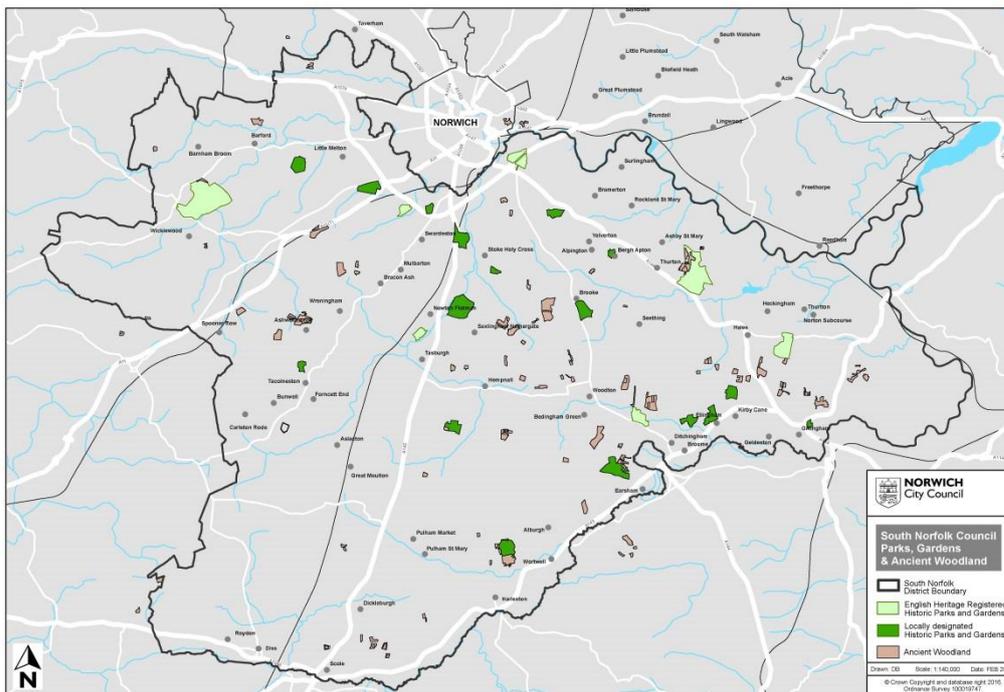


Figure 32 Map of Historic Parks and Gardens and Ancient Woodlands in South Norfolk



#### 4.4. Projected Baseline

4.4.1. Long term protection of the distinctive landscapes of the area will require policy protection beyond the end date of the JCS in 2026.

#### 4.5. Issues

- Development should maintain important aspects of Greater Norwich's varied landscapes, including historic parks and gardens and ancient woodlands.
- Defined strategic gaps, including those between Wymondham and Hethersett and Hethersett and Cringleford, are important to maintain the settlement pattern in rural areas.
- Regard must be had to the distinctive landscape of the Broads.

## 5. SECTION 5 - WATER

5.1.1. This section covers issues relating to water availability, waste water and water quality. Flooding is covered in section 2 on climate change.

### 5.2. Context

#### 5.2.1. National

5.2.2. The legislative responsibility for an integrated approach to water management is set out in the European Water Framework Directive (WFD), which seeks to reverse deterioration of water quality and to improve environmental standards.<sup>37</sup> The aim is for each inland and coastal water area to achieve at least Good Ecological Status over a range of different timescales between 2015 and 2027.

5.2.3. The policy-making context for managing water resources is set by the Government's strategy Future Water, published in 2011. The strategy aims to achieve "sustainable delivery of secure water supplies, an improved and protected water environment, fair, affordable and cost-reflective water charges, reduced water sector greenhouse gas emissions and more sustainable and effective management of surface water."<sup>38</sup>

5.2.4. The organisation responsible for the protection and management of groundwater in England is Environment Agency. Their strategy Groundwater Protection: Principles and Practice (GP3) is intended for anyone interested in proposing or carrying out an activity that may cause groundwater impacts<sup>39</sup>. The document sets out the Environment Agency's approach to management and protection of groundwater, its position on applying relevant legislation, and technical guidance for those dealing with groundwater issues. Essential to the Environment Agency's work is addressing climate change and its consequences, working with people and communities to create better places, and working with businesses and other organisations to use resources wisely.

5.2.5. The NPPF provides several points in relation to water resources. Paragraph 99 states Local Plans should take account of climate change, including its relationship to water supply. Paragraph 109 says that both new and existing development should not place an unacceptable risk upon water resources. Paragraph 156 requires local planning authorities to set out strategic priorities for water supply and the management of waste water for their area.

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<sup>37</sup> The EU Water Framework Directive - Integrated River Basin Management for Europe  
[http://ec.europa.eu/environment/water/water-framework/index\\_en.html](http://ec.europa.eu/environment/water/water-framework/index_en.html)

<sup>38</sup> *Future Water - The Government's Water Strategy for England*  
<https://www.gov.uk/government/publications/future-water-the-government-s-water-strategy-for-england>

<sup>39</sup> Environment Agency, *Groundwater Protection: Principles and Practice GP3*  
<https://www.gov.uk/government/publications/groundwater-protection-principles-and-practice-gp3>

#### 5.2.6. Local

- 5.2.7. In response to the Water Framework Directive (WFD), England and Wales are divided into 10 River Basin Districts, each of which is managed through a River Basin Management Plan (RBMP). The Anglia RBMP was first published in 2009 to provide a framework to protect and enhance the water environment. In 2015 the plan was updated to identify progress since the 2009 plan, and assess the current state and pressures on the environment. Key themes in the RBMP are water quality, water quantity, wildlife habitat and creation. Greater Norwich is situated within the Broadland Rivers catchment which is one of 11 catchments within the Anglian Rivers Basin District. The catchment is described as follows.
- 5.2.8. "...a relatively flat area of approximately 3,188 km<sup>2</sup>. The area is mostly rural with a few larger urban areas including the City of Norwich, Great Yarmouth and Lowestoft. The main land use in the catchment is arable agriculture there are pockets of water-dependent industries around Norwich. Tourism and water-based recreational pursuits such as boating and angling are vitally important to the Broadland River economy. The tidal rivers in the Broadland Rivers area form the third largest in navigation in Britain."<sup>40</sup>
- 5.2.9. The main rivers in the area are the Rivers Wensum, Yare, Tud, Ant and Bure to the north and the Rivers Tas and Waveney to the south. The Broadland rivers catchment area encompasses the Broads Executive Area (status equivalent to a National Park Area) and has a high density of local and nationally important protected sites, including the Broads and River Wensum SACs and the Broadland SPA, which are protected under European law (the Habitats Directive).<sup>41</sup>
- 5.2.10. *The Broadland Rivers Catchment Partnership implements the RBMP at catchment level. It is made up of a group of organisations with an interest in improving the environment in the local area. Through the Broadland Rivers Catchment Plan, they identify local issues and priorities and access funding to implement various programmes and measures. The WFD status of water bodies outside the local plan area but within the Broadland Rivers catchment is of interest due to the nature of rivers and river catchments.*

#### 5.3. Current Baseline

- 5.3.1. Relatively low rainfall totals mean that the whole area covered by Anglian Water, the company responsible for water supply and

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<sup>40</sup> Ibid, 43

<sup>41</sup> Greater Norwich Development Partnership Water Cycle Study – Stage 2b, page 148

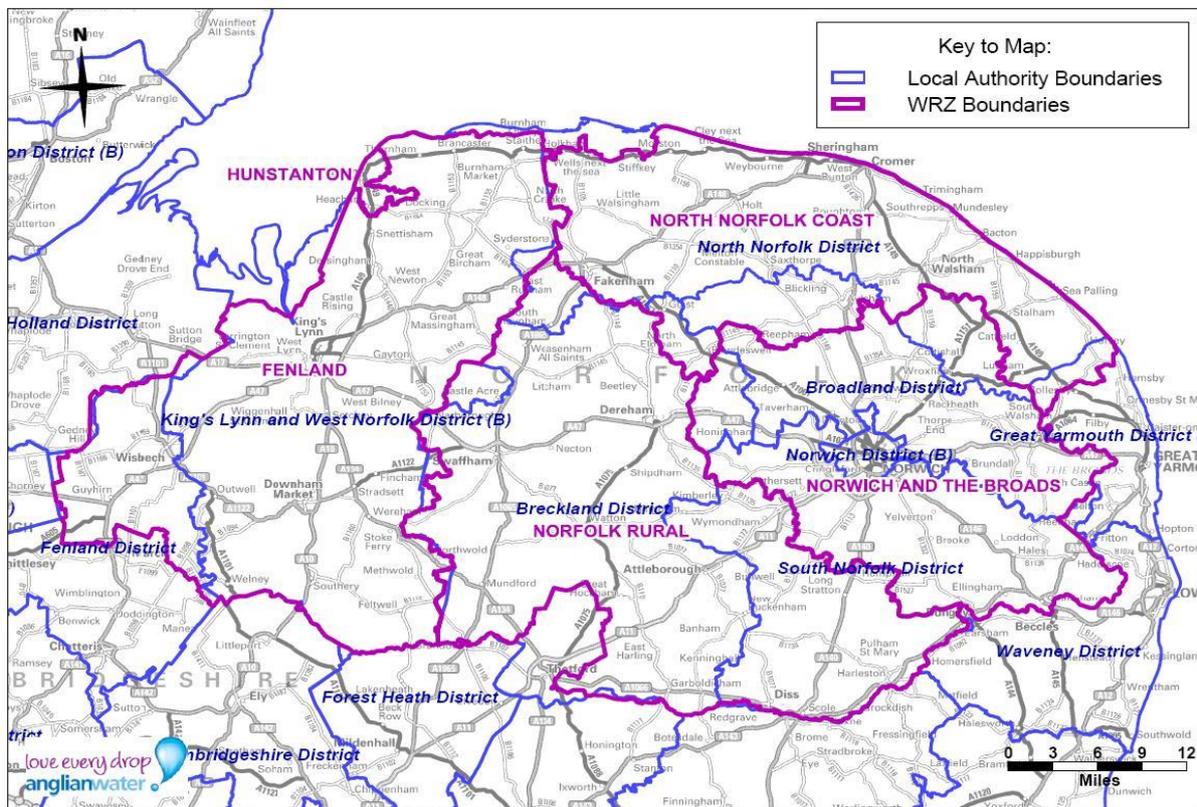
waste water disposal in Greater Norwich, is defined by the Environment Agency as suffering from serious water stress<sup>42</sup>.

- 5.3.2. As well having low rainfall, the rurality of much of Greater Norwich means there are challenges in dealing with the pollution of fertilisers and pesticides from agriculture that can leach into ground water and surface water sources. This has particular significance locally as water quality is a key issue for the Broads, the only lowland area in the country with the equivalent status to a national park.
- 5.3.3. As a consequence the Greater Norwich authorities have worked closely with Anglian Water, along with the Environment Agency and Natural England, on water issues for a number of years. This close working partnership included the production of a Water Cycle Study between 2008 and 2010 as part of the evidence base for the JCS. This evidence has led to the JCS placing a particular focus on promoting water efficiency in new development (see paragraph 147) and on the relevant agencies promoting improved water quality (see paragraph 151).
- 5.3.4. Anglian Water published its Water Resources Management Plan (WRMP) in 2015 which covers the period to 2040. Most of Greater Norwich is covered by Anglian Water's Norwich and the Broads Water Resources Zone (WRZ), whilst the north of Broadland (including Aylsham) is in the North Norfolk Coast area and the south and west of South Norfolk (including Wymondham and Diss), is in the Norfolk Rural area. Figure 33 below shows the WRZ boundaries.

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<sup>42</sup> Water Stressed area – final classification, Environment Agency 2013  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/244333/water-stressed-classification-2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244333/water-stressed-classification-2013.pdf)

Figure 33 Map of district boundaries and Water Resource Zones (WRZs)



### 5.3.5. Water Supply

5.3.6. Anglian Water supplies from a combination of surface and groundwater sources, the most significant of these being from the River Wensum at Costessey to the west of Norwich. Raw water abstracted is transferred to Heigham Water Treatment Works in Norwich for treatment and pumping into the network<sup>43</sup>. The distribution network serving Greater Norwich includes a large diameter ring main in Norwich and a number of strategic mains that branch off to supply surrounding settlements. The network is also supported by abstractions from boreholes at Colney, on the River Yare, and at Thorpe St Andrew. Water from Heigham supplies Aylsham, Long Stratton, Reepham and Wymondham as well as the Norwich urban area<sup>44</sup>.

5.3.7. The 2015 WRMP concludes that no significant water supply investment will be required in the North Norfolk and Norfolk Rural WRZs. However, large deficits are forecast in the Norwich and the Broads WRZ for the AMP6 period (2015-20) as a result of the need to reduce the amount of water taken from the River Wensum Special

<sup>43</sup> Broadland District North East Growth Triangle (Supply and Demand Balance) (GTB37) [http://www.broadland.gov.uk/housing\\_and\\_planning/5984.asp](http://www.broadland.gov.uk/housing_and_planning/5984.asp)

<sup>44</sup> Greater Norwich Development Partnership Stage 2b Water Cycle Study, 2010 <http://www.greaternorwichgrowth.org.uk/>

Area of Conservation (SAC), which is an internationally protected lowland chalk river habitat.

- 5.3.8. Consequently, investment of £18.9 million is planned between 2015 and 2020 on a scheme to relocate the abstraction point on the Wensum from Costessey to Heigham, which is outside the SAC. Investment of £5.5 million in metering and £1.3 million on water efficiency is also planned. Taken together, these measures form approximately 60% of the total expenditure in the AMP 6 period in the whole WRMP area, which covers much of eastern England. This investment is necessary to address current water quality issues to ensure that Habitats Regulations Assessment requirements for the River Wensum SAC are met and to support growth.
- 5.3.9. To complement efforts by Anglian Water to reduce water usage within the existing housing stock, Objective 1 of the JCS prioritises water efficiency in new and existing development, while policy 3 requires new development to be as water efficient as higher nationally set housing standards allow. An advice note published by the Greater Norwich authorities sets out how development can be made water efficient and emphasises the importance of maximising water efficiency.<sup>45</sup>
- 5.3.10. Waste Water Disposal
- 5.3.11. There are 14 wastewater treatment works in Greater Norwich. Significant parts of Greater Norwich are served by the Whitlingham works, to the east of Norwich, which discharges water into the tidal River Yare.
- 5.3.12. Other treatment works, with the rivers they discharge into, are at:
- Acle-Damgate, Aylsham, Belaugh (River Bure);
  - Rackheath (Dobbs Beck, a tributary of the Bure);
  - Diss and Harleston (River Waveney);
  - Long Stratton (Hempnall Beck);
  - Sisland and Poringland (River Chet);
  - Reepham (Blackwater Drain, a tributary of the Wensum);
  - Stoke Holy Cross (River Tas);
  - Swardston-Common (Intwood Stream, a tributary of the Yare); and
  - Wymondham (River Tiffey).
- 5.3.13. Capacity for the treatment of waste water varies across the area. In some locations there is ample capacity relative to current demand and coping with increased demand from new development is unlikely to be a significant issue. In other locations, such as Long Stratton, demand and capacity are much closer, and so a process

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<sup>45</sup> GNGB, Water Efficiency Advice Note <http://www.greaternorwichgrowth.org.uk/dmsdocument/2147>

of detailed analysis and infrastructure planning is needed between the organisations responsible<sup>46</sup>.

#### 5.3.14. Water Quality

5.3.15. There are 93 river water bodies and 18 lakes in Broadland Rivers Catchment. The priority river basin management issues for the catchment are diffuse pollution from the rural area, physical modification of rivers and lakes and pollution from waste water. In addition, the River Wensum, which is a Natura 2000 site, is currently in unfavourable ecological condition. The factors causing this are the high levels of phosphate which affect water quality, water abstraction affecting water resources, siltation (caused mainly by agricultural run-off) and modifications to deepen, widen and straighten the channel<sup>47</sup>. An alliance of organisations including Anglian Water, the Environment Agency and Natural England are working towards the improvement of the river and, as set out above, efforts are being made to reduce the water abstraction levels from the Wensum. Likewise, in the Broads a programme is taking place to improve water quality, reducing the harmful nutrients and contaminants<sup>48</sup>.

5.3.16. **The Broadland Rivers Catchment Plan<sup>49</sup> identifies the following issues within the catchment area: Over 90% of rivers fail to meet WFD targets; expensive treatment is needed at times to treat some drinking water; some protected habitats still do not meet Habitats Directive Standards; water levels are too high or too low in some areas; there is localised flooding from various sources.**

#### 5.4. Projected Baseline

5.4.1. Over the coming years, demand from development, climate change, and attempts to reduce ecological impact will reduce the amounts of water that can be sustainably abstracted in the Greater Norwich area.

5.4.2. The WRMP contains longer term proposals for the Norwich and the Broads WRZ to reduce leakage and consider alternative sources of water supply from 2035/40, which may include water re-use, involving treating waste water to a high standard before pumping it upstream to support further abstraction from the River Wensum.

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<sup>46</sup> Joint Anglian Water – Environment Agency Position Statement on Growth in Long Stratton Water Recycling Centre [http://www.south-norfolk.gov.uk/planning/media/G12\\_Joint\\_Anglian\\_Water\\_and\\_Environment\\_Agency\\_statement\\_on\\_Long\\_Stratton\\_growth.pdf](http://www.south-norfolk.gov.uk/planning/media/G12_Joint_Anglian_Water_and_Environment_Agency_statement_on_Long_Stratton_growth.pdf)

<sup>47</sup> Natural England and Environment Agency, *Factsheet: The River Wensum Restoration Strategy* <http://www.norfolk.gov.uk/view/ncc089250>

<sup>48</sup> The Broads Water Quality <http://www.broads-authority.gov.uk/looking-after/managing-land-and-water/water-quality>

<sup>49</sup> <https://www.gov.uk/government/publications/anglian-river-basin-district-river-basin-management-plan> and <http://www.broads-authority.gov.uk/looking-after/managing-land-and-water/beyond-the-broads>

5.4.3. Beyond the end of the JCS plan period in 2026, it will be important that the GNLP continues the positive policy approach to promoting water efficient development and that programmes to improve water quality are continued.

5.5. Issues

- Since the area suffers from water stress, effectively managing the supply and demand balance is critical, taking into account the peaks in demands from homes, jobs and agriculture and the impact of abstraction on habitats and biodiversity. Ensuring water efficiency will have a key role locally.
- Water quality in Natura 2000 protected sites is an issue, particularly in relation to water abstraction from the River Wensum and water disposal at Long Stratton and into the River Yare. Consequently there is a need to improve water quality to achieve Water Framework Directive (WFD) targets and to protect habitats.
- There is a need to consider the measures within the Anglian River Basin Management Plan and the issues in the Broadland Rivers Catchment Plan.

## 6. SECTION 6 – HISTORIC ENVIRONMENT

6.1.1. This section focuses on the built character of Greater Norwich, including designated buildings, conservation areas and heritage at risk. Issues related to the landscape elements of the historic environment, such as historic parks and gardens, are considered in the Landscape Section of this report.

### 6.2. Context

#### 6.2.1. National

6.2.2. **The Government's statement on the Historic Environment for England (2010)** sets out its vision for the historic environment. It calls for those who have the power to shape the historic environment to recognise its value and to manage it in an intelligent manner in light of the contribution that it can make to social, economic and cultural life. Also of note is the reference to promoting the role of the **historic environment with the Government's response to climate change and wider sustainable development agenda.**

6.2.3. Section 12 of the National Planning Policy Framework details measures for Conserving and Enhancing the Historic Environment. In particular paragraph 126 states:

*“Local Planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance.”*

#### 6.2.4. Local

6.2.5. The Norfolk Historic Environment Record (NHER) is the comprehensive and definitive record of the historic environment of Norfolk<sup>50</sup>. The information held in the NHER provides a detailed framework to aid understanding of cultural heritage across Greater Norwich and provides an important tool that contributes to the planning decision-making processes, especially where issues affecting the landscape, both rural and urban, need to be considered.

6.2.6. Objective 8 of the JCS requires protection and enhancement of the character of the area, while objective 9 focuses specifically on protection, management and enhancement of the built and historic environment. Policy 2 (Promoting good design) requires development to create a strong sense of place and to respect local

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<sup>50</sup> <http://www.heritage.norfolk.gov.uk/>

distinctiveness, including the historic environment, townscapes and gateways between urban and rural areas. A particular focus is placed on the use of advice in conservation area appraisals to ensure that development in these protected areas is appropriate.

6.2.7. In addition, there are local requirements for archaeological assessments in defined areas of archaeological interest.

### 6.3. Current Baseline

6.3.1. Greater Norwich, as an area which has been relatively intensively settled historically, has a rich archaeological heritage. Centred on England's former second city, and containing a number of historic market towns and villages, it also has a rich built heritage reflecting its agricultural wealth and local industries, including cloth, leather and food production.

6.3.2. The Norfolk Mapping Browser identifies listed buildings and ancient monuments. District websites identify numbers of conservation areas, listed buildings and ancient monuments as set out in figure 34, below.

Figure 34 Numbers of Conservation areas, Listed Buildings and Ancient Monuments in Greater Norwich

Feature	Norwich	Broadland	South Norfolk	Greater Norwich
Conservation Areas	17	21	52	90
Listed Buildings	1500	980	3310	5790
Ancient Monuments	25	22	38	85

#### 6.3.3. Norwich

6.3.4. Norwich's built heritage is defined by its Norman cathedral, and from the same era, the Castle Keep, but more modern architecture makes an enormous contribution too. Norwich 12 is an initiative to develop 12 of Norwich's most iconic buildings into an integrated family of heritage attractions which act as an internationally recognised showcase of English urban and cultural development over the last 1,000 years.<sup>51</sup> The city has kept much of its historic street pattern, of which Elm Hill is a prime example.

6.3.5. Open space is important to the setting of the city, including the "Plains" in the city centre, several Grade II listed formal parks (including Eaton, Heigham, Wensum and Waterloo), along with extensive areas of natural open spaces, including Mousehold Heath and the Yare and Wensum valleys.

<sup>51</sup> 'A Journey Through the English City' <http://www.norwich12.co.uk/index.htm>

- 6.3.6. Norwich has 17 conservation areas which are varied in character and built form. The majority of these have conservation area appraisals and there is an ongoing programme to produce appraisals for all of the conservation areas.
- 6.3.7. The city centre conservation area, which is divided into 13 areas reflecting historic characteristics through its appraisal, is the largest and contains some of the oldest and most significant heritage assets.
- 6.3.8. Many of the conservation areas fall in areas of the city which historically were detached village settlements that over time been largely incorporated into the suburban outer area of the city beyond the medieval city walls. The outer conservation area settlements vary in date with Hellesdon village being one of the earliest with mention in the Domesday Book, Heigham Grove mainly having origins from 19th century Victorian development and most recently Mile Cross Conservation area largely dating from the early part of the 20th Century.
- 6.3.9. The following maps, figures 35 and 36, show where designated heritage assets are located in Norwich.

Figure 35 Map of Conservation Areas & Scheduled Ancient Monuments in Norwich

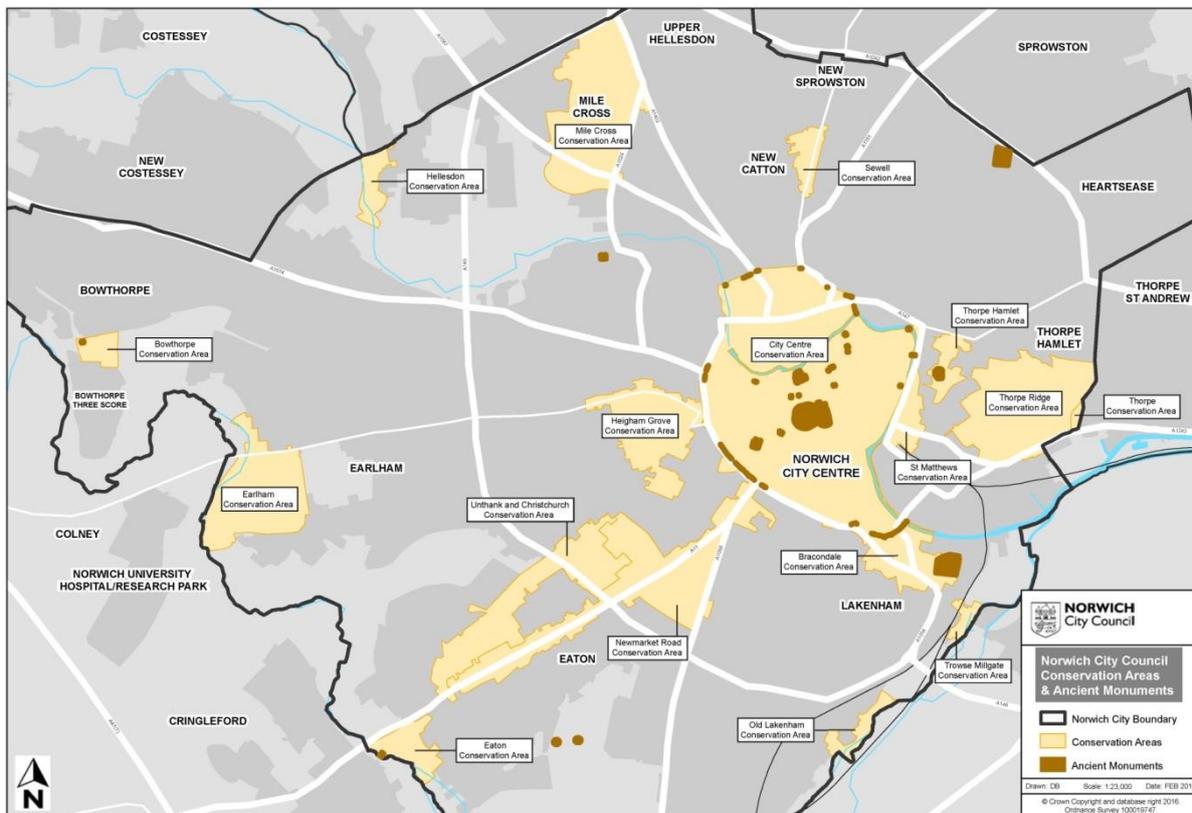
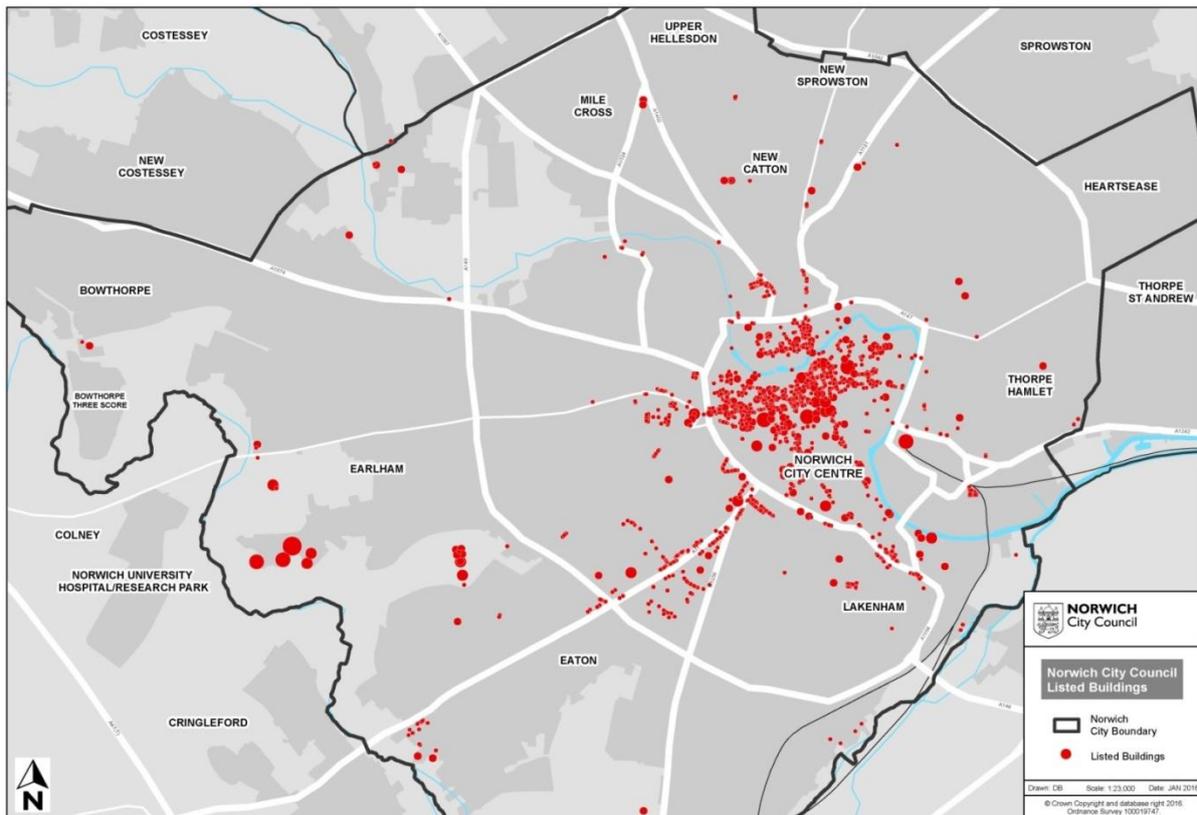


Figure 36 Map of Listed buildings in Norwich



6.3.10. Broadland

6.3.11. Broadland contains 21 conservation areas. The majority of these also have conservation area appraisals and there is an ongoing programme to produce appraisals.

6.3.12. The nature of these conservation areas is varied and reflects the diverse character of the district. Thorpe End was a planned garden village, Wroxham Conservation Area is unusual in containing a large 20th century open plan estate within a landscaped setting and RAF Coltishall (within both North Norfolk and Broadland districts) is a former airbase. Many of the district's town and village centres are designated as are country estates such as Blickling and Heydon and settlements such as Old Catton and Thorpe St Andrew which have become outer suburbs of Norwich. The district shares some of its conservation areas with the Broads Authority (for example Halvergate) and Norwich City Council (Helleston). The following maps, figures 37 and 38, show where designated heritage assets are located in Broadland.

Figure 37 Map of Conservation Areas & Scheduled Ancient Monuments in Broadland

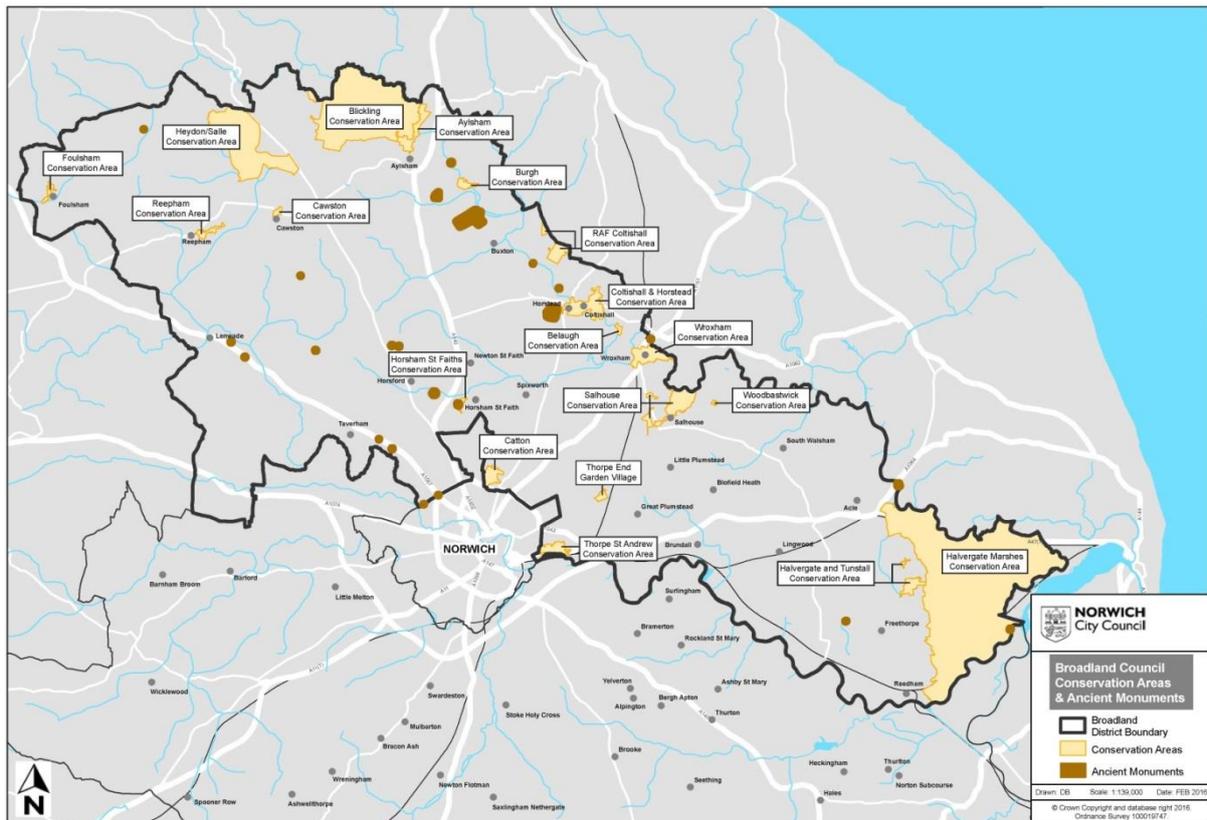
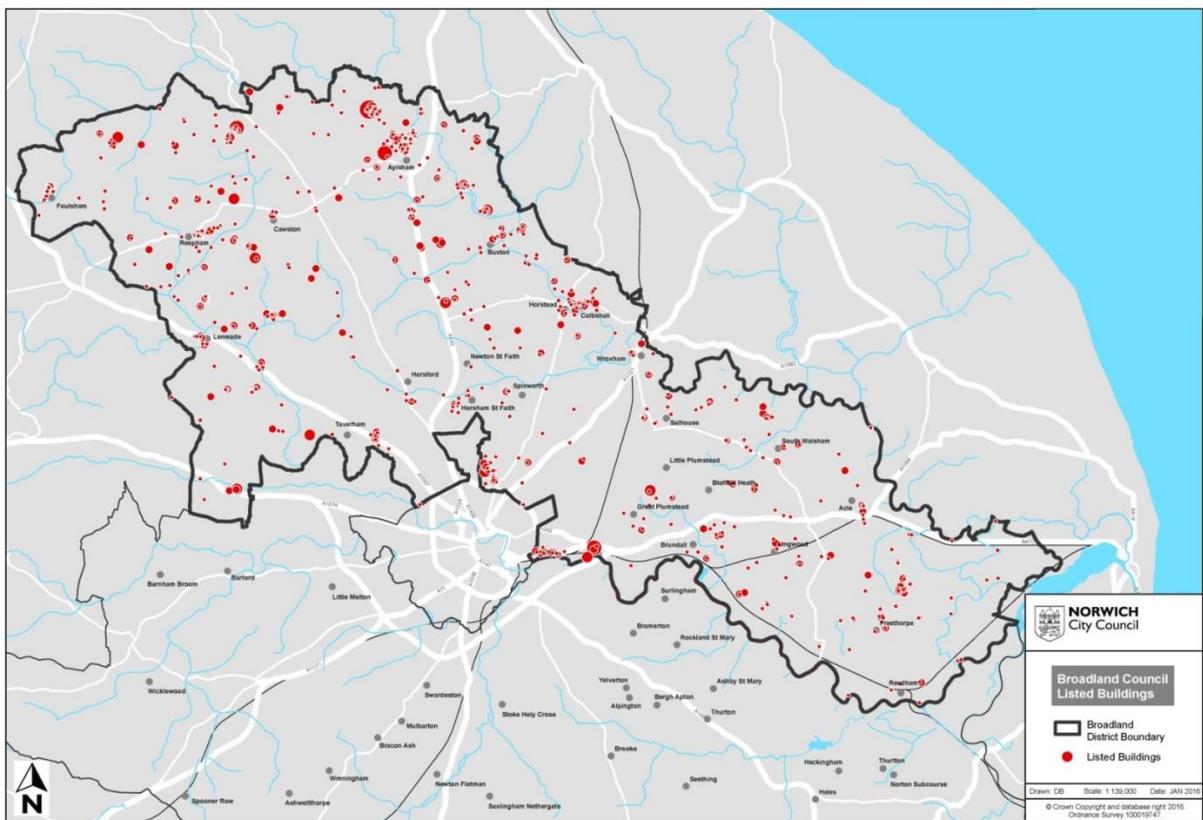


Figure 38 Map of Listed buildings in Broadland



### 6.3.13. South Norfolk

- 6.3.14. The district of South Norfolk contains 53 conservation areas. Only a limited number currently have appraisals, though there is a programme to produce them.
- 6.3.15. Four key market towns, Diss, Harleston, Loddon and Wymondham, have conservation areas with retail, service and residential uses and so have diverse urban characters and appearances. Hingham is another market town but its centre is largely residential.
- 6.3.16. The remaining conservation areas are mostly centred on villages throughout the district, some of the areas having more of a rural character than others. The villages of Fritton and Mulbarton have very large commons with houses widely dispersed in the surrounding area whereas Pulham Market has a much smaller common, which is enclosed by buildings on all sides. Shotesham is one of the most rural in character, much of the conservation area being the park/farm land belonging to the Shotesham Park Estate.
- 6.3.17. The conservation areas of Cringleford, Old Costessey and Loddon and Chedgrave all stand out as they are situated either on or adjacent to a river which contributes much to their distinctive character.
- 6.3.18. A number of the conservation areas are shared with the Broads Authority.
- 6.3.19. The following maps, figures 39 and 40, show where designated heritage assets are located in South Norfolk.

Figure 39 Map of Conservation Areas and Scheduled Ancient Monuments in South Norfolk

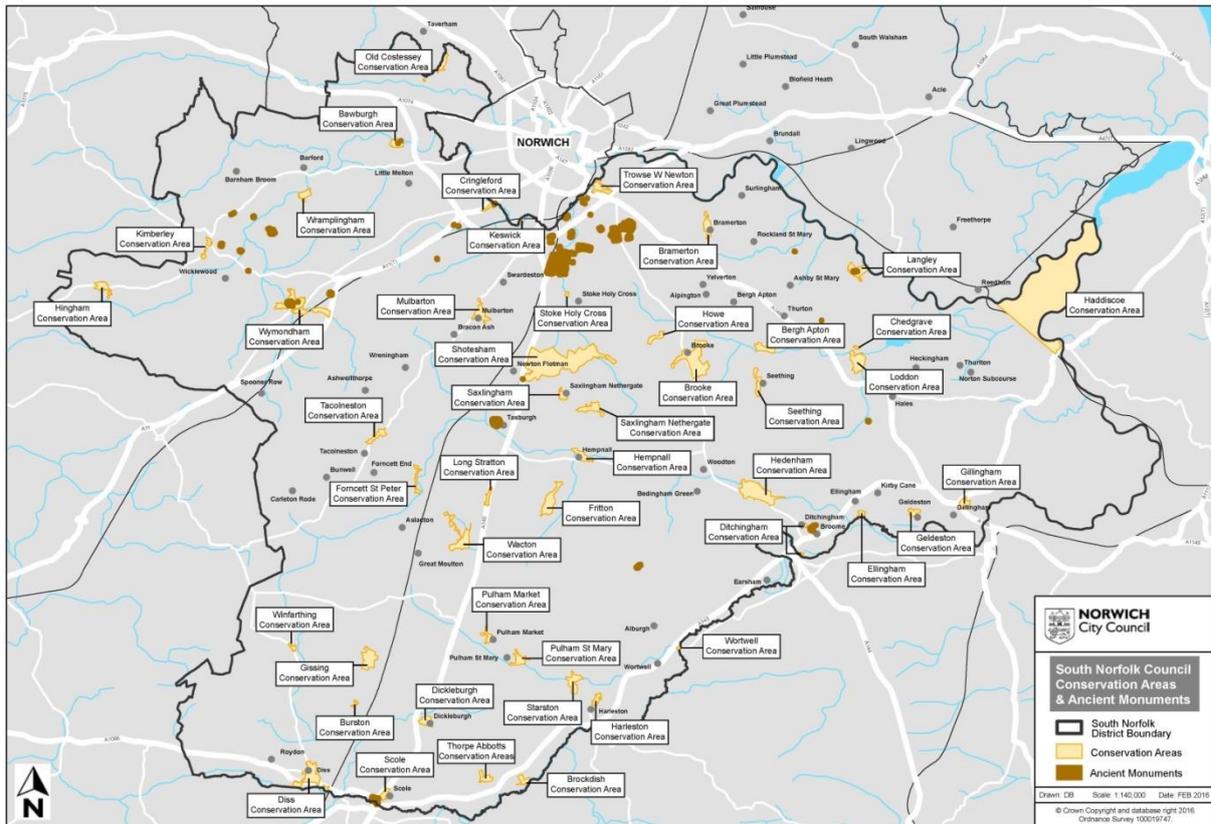
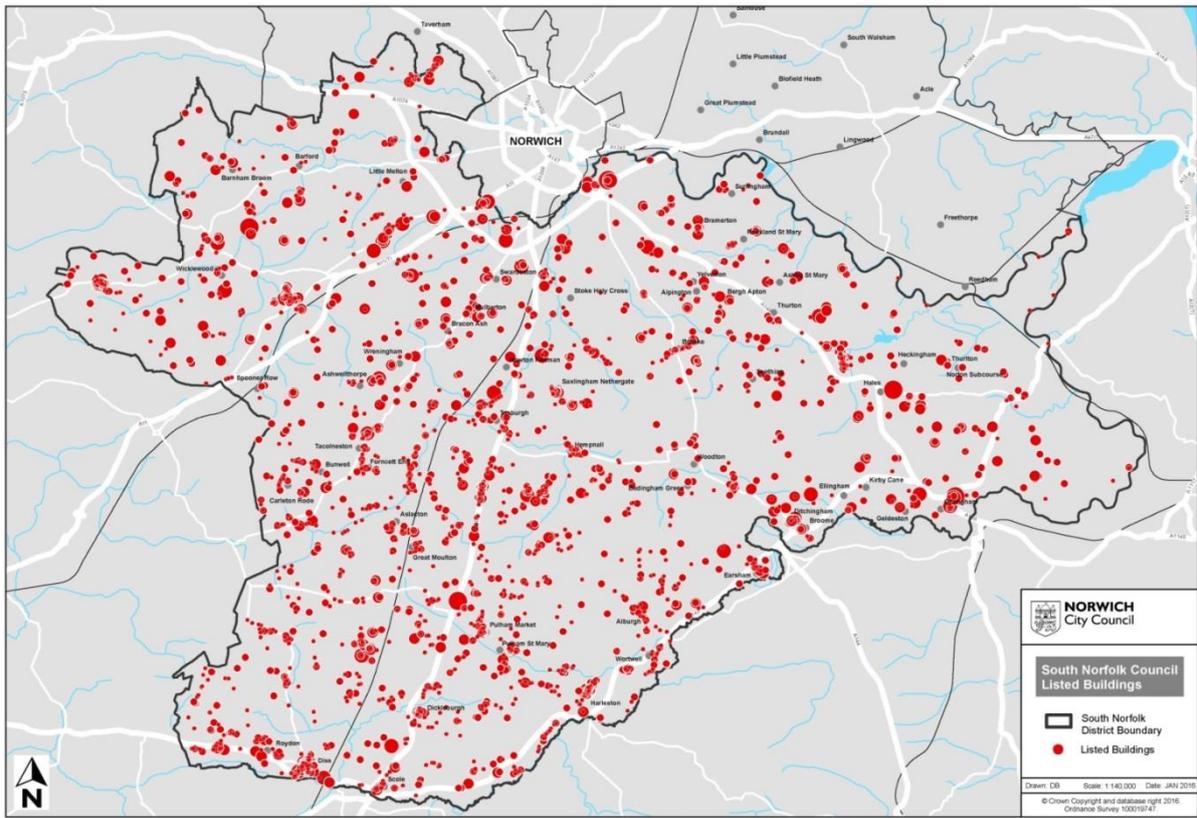


Figure 40 Map of Listed buildings in South Norfolk



#### 6.3.20. Heritage at Risk

- 6.3.21. There are 107 listed buildings recorded on the buildings at risk register within Greater Norwich.
- 6.3.22. In Norwich the 31 buildings and structures at risk, which range from the 16th century Church of St Mary the Less, on Queen Street, to the 20<sup>th</sup> century Pavilion at Waterloo Park<sup>52</sup>.
- 6.3.23. In Broadland there are the 36 buildings and structures at risk; examples of which are the brick and flint Bridewell building in Acle that dates from the 17<sup>th</sup> century; and, to Grade II\* and Scheduled Ancient Monument, Drayton Old Lodge, built in 1437.
- 6.3.24. In South Norfolk there are the 40 buildings and structures at risk that reflect the rural estates, agricultural heritage, and the many parish churches across the district. Examples of buildings at risk are: the Grade II remains of the Jacobean Melton Hall (in Greater Melton) that dates from the 17<sup>th</sup> century; the Grade II, but badly fired damaged, Church of St Wandregelius, Bixley; and, the Grade II timber-framed Kings Head Inn, Pulham St Mary, that has been unoccupied since 2007<sup>53</sup>.
- 6.3.25. It is reasonable to assume that those assets with no solution agreed could continue to be a risk in the future, although it is possible that funding could be secured to address such threats.

#### 6.4. Issues

- There is a great wealth of heritage assets in the area of both national and local significance. A limited number of these assets are on the heritage at risk register.
- Due to the long history of habitation in the area, there is significant potential for archaeological artefacts and finds throughout Greater Norwich.
- Conserve and enhance designated and non-designated heritage assets and the contribution made by their settings.
- Areas where there is likely to be further significant loss or erosion of townscape character or quality, or where development has had or is likely to have significant impact (direct and/or indirect) upon the historic environment and/or people's enjoyment of it.

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<sup>52</sup> Norwich Heritage at Risk Register

<http://www.norwich.gov.uk/Planning/HeritageAndConservation/Pages/BuildingsAtRisk.aspx>

<sup>53</sup> South Norfolk Buildings at Risk [http://www.south-norfolk.gov.uk/planning/1605\\_3330.asp](http://www.south-norfolk.gov.uk/planning/1605_3330.asp)  
[http://www.south-norfolk.gov.uk/planning/1605\\_3730.asp](http://www.south-norfolk.gov.uk/planning/1605_3730.asp) [http://www.south-norfolk.gov.uk/planning/1605\\_3730.asp](http://www.south-norfolk.gov.uk/planning/1605_3730.asp)

- Traffic congestion, air quality, noise pollution and other problems affecting the historic environment.

## 7. SECTION 7 – PEOPLE AND COMMUNITIES

7.1.1. The People and Communities chapter covers the population make-up of Greater Norwich and helps to inform the following chapters on deprivation, crime, education and health. The chapter sets out demographic evidence based on various sources including the 2011 Census and ONS estimates. No contextual review of plans and programmes is included as the topic area does not lend itself to such an approach.

### 7.2. Current Baseline

7.2.1. The estimated population of Greater Norwich in 2014 was 392,700<sup>54</sup>. Figure 41 below sets out the population for each district.

Figure 41 Estimated district populations, 2014

Area	Estimated population 2014
Broadland	126,000
Norwich	137,500
South Norfolk	129,200
Greater Norwich total	392,700

7.2.2. The population of the area increased by 31.7% between 1971 and 2011, from 289,500 to 381,200. This is an increase of 0.79% per year. While Broadland and South Norfolk's populations generally increased steadily through the 40 year period, Norwich's population declined slightly during the 1980s and 1990s, but has grown strongly since 2001.

7.2.3. The Greater Norwich annual rate of increase went up slightly in the last decade to 0.87%, with an increase of 30,400, or 8.7% between 2001 and 2011. This compares to a 7.7% increase in Norfolk and a 7 % increase in the United Kingdom.

7.2.4. This population rise was the result of a mixture of natural increase and migration, both internal and international. Natural change in both Broadland and South Norfolk was negative between 2001 and 2011, with internal migration from elsewhere in the United Kingdom being the main contributor to population increase in the last decade by a significant margin.

7.2.5. Figure 42 below shows the population of the largest settlements in Greater Norwich from the 2011 Census<sup>55</sup>. Approximately 70% of the

<sup>54</sup> Based on ONS estimates <http://www.norfolkinsight.org.uk/dataviews/view?viewId=53> as reported on the Norfolk Insight website, extracted 23/12/2015

<sup>55</sup> Source – ONS census 2011 from Appendix 1 Norfolk Compendium 2014 (\* Note: population figures for Horsford and Blofield are from the 2001 census). As the Norwich urban area is a single entity in terms of the planning settlement hierarchy, suburbs within Broadland and South Norfolk, such as Drayton, Cringleford and Sprowston, are not listed separately.

residents of Greater Norwich live in these larger settlements, with the remaining 30% living in smaller settlements.

Figure 42 Population of the largest settlements in Greater Norwich, 2011

Settlement	Population 2011 census
Norwich urban area	210,743
Wymondham	14,405
Diss	7,572
Aylsham	7,378
Brundall	5,790
Long Stratton	4,395
Horsford	3,965*
Blofield	3,537*
Acle	2,824
Reepham	2,709
Loddon	2,633

#### 7.2.6. Age structure of the population

7.2.7. Figures 43 to 45 below show the change in the age structure of the population for each Greater Norwich district between 2001 and 2011.

7.2.8. Norwich's age structure is markedly different from those of Broadland and South Norfolk, which display similar patterns.

7.2.9. Broadland and South Norfolk's age structures have two peaks, 60-64 year olds and 40-49 year olds. These result from, respectively, the baby booms of the late 1940s and the late 1960s/early 1970s.

7.2.10. As a city which has a large population of students and other younger adults, Norwich has a different pattern, with its peaks being the 20 to 34 year olds. The percentage of 20 to 29 year olds rose significantly between 2001 and 2011. This will have implications for housing provision for younger adults in Norwich.

7.2.11. The most significant change between 2001 and 2011 overall in Greater Norwich by age was the increasing numbers of older adults in the population, in particular 60-69 year olds. There is a higher proportion of older people than nationally and a significantly higher proportion of females than males in the oldest age groups as men tend to die at younger ages than women.

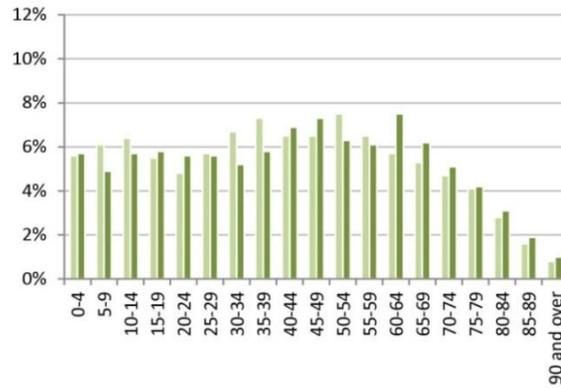
7.2.12. The birth rate increased between 2001 and 2011 and there are more 0 to 4 year olds than previously. During the same period the proportion of 5 to 14 year olds in the population fell.

Figures 43 to 45 Change in the age structure of the population for each Greater Norwich district between 2001 and 2011<sup>56</sup>

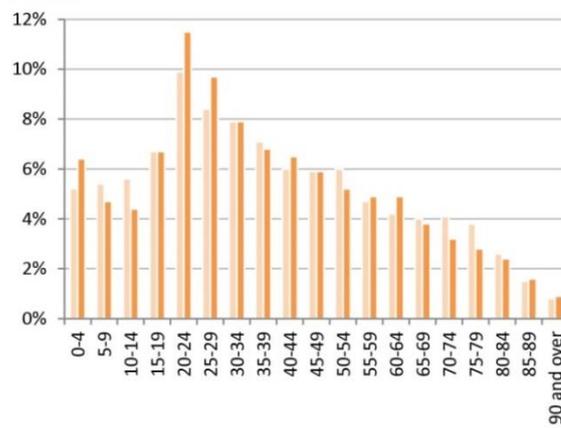
(Note: charts show change 2001 - 11 in age cohort as percentage of total population)

■ 2001 ■ 2011

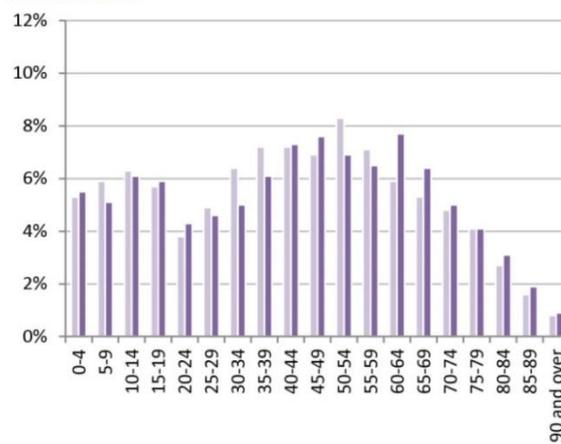
Broadland



Norwich



South Norfolk



### 7.2.13. Household size

7.2.14. Average household size reduced by over 1% between 2001 and 2011. Average household size in 2011 was 2.34 in Broadland, 2.20 in Norwich and 2.35 in South Norfolk.<sup>57</sup>

### 7.2.15. Ethnicity

7.2.16. Figure 46 below shows that the area's ethnic composition changed between 2001 and 2011, with an increase in minority ethnic groups. This change was most marked in Norwich, which has a more ethnically diverse population than Broadland and South Norfolk. Nevertheless, the Greater Norwich area remains less ethnically diverse than England as a whole.

Figure 46 - Percentage of resident population by ethnic group<sup>58</sup>

Area	Census	White British	Other white	Asian	Mixed	Black	Other
Broadland	2001	97.4	1.5	0.4	0.4	0.1	0.1
	2011	95.9	1.8	1.0	0.9	0.3	0.2
Norwich	2001	93.5	2.7	1.3	1.0	0.9	0.5
	2011	84.7	6.1	4.4	2.3	1.6	0.8
South Norfolk	2001	97.2	1.7	0.4	0.5	0.1	0.1
	2011	95.1	2.4	1.0	1.0	0.3	0.1
England	2001	87.4	3.8	4.8	1.4	2.2	0.4
	2011	80.6	5.4	7.5	2.2	3.3	1.0

### 7.3. Projected Baseline

7.3.1. Based on projections reported in the 2015 Central Norfolk Strategic Housing Market Assessment (SHMA), the population of the Greater Norwich area at the end of the local plan period in 2036 will be between 455,000 and 458,000.<sup>59</sup> The projected annual rate of population growth to 2036, at between 0.75% and 0.78%, is very similar to that which took place between 1971 and 2011 and slightly less than 2001-2011.

7.3.2. Based on current trends, it seems likely that while the age profile of the population will increase overall, there will remain a marked difference in the demographic structure of the population within the area. It is likely that there will continue to be a higher proportion of

<sup>56</sup> Source ONS Census

<sup>57</sup> ONS census 2011

<sup>58</sup> ONS Census 2011 (figures may not sum to 100 due to rounding)

<sup>59</sup> Population projection to 2036 455,142 (based on sub national population projection) and is 458,158 (based on 10 year migration trend) – see Central Norfolk Strategic Housing Market Assessment at [http://www.south-norfolk.gov.uk/housing/media/SHMA\\_Central\\_Norfolk\\_Part\\_1.pdf](http://www.south-norfolk.gov.uk/housing/media/SHMA_Central_Norfolk_Part_1.pdf)

young adults in Norwich, a higher proportion of people in older age groups in Broadland and South Norfolk, and increasing ethnic diversity.

- 7.3.3. The implications of the population growth and likely changes in demographic profile of the area will be key considerations for the GNLP. Without the plan, it would be unlikely to be possible to address the housing and growth needs identified in the plan's evidence base in a sustainable manner.

7.4. Issues

- There is a need to provide for continued growth in the population of approximately 15-16% from 2012 to 2036.
- It is necessary to provide services and housing to meet the needs across the area, particularly those of younger adults in Norwich, of remote rural communities and of the growing older population throughout the area.
- The needs of the small but growing ethnic groups in the area will need to be taken into account.

## 8. SECTION 8 – DEPRIVATION

8.1.1. This section covers existing and projected deprivation within Greater Norwich.

### 8.2. Context

#### 8.2.1. National

8.2.2. A New Approach to Child Poverty: Tackling the Causes of **Disadvantage and Transforming Families'** Lives is the government's first child poverty strategy, produced in 2011. It is set against the backdrop of the Child Poverty Act 2010, which established a duty to minimise socio-economic disadvantage. It aims to strengthen families, encourage responsibility, promote work, guarantee fairness and provide support to the most vulnerable.

8.2.3. The NPPF states that local planning authorities should use their evidence base to assess locations of deprivation which may benefit from planned remedial action.

#### 8.2.4. Local

8.2.5. Objective 4 of the JCS is to promote regeneration and reduce deprivation both in the significant concentrations of deprivation in Norwich, and in serious pockets of deprivation in surrounding towns, villages and rural areas.

8.2.6. Policy 7 (Supporting communities) aims to tackle social deprivation through a multi-agency approach to ensure that facilities and services are available as locally as possible, considering the potential for colocation, and are accessible on foot, by cycle and public transport.

8.2.7. This is supported by area focussed policies. Policy 11 (City centre) promotes an integrated approach to economic, social, physical and cultural regeneration to enable greater use of the city centre, including redevelopment of brownfield sites. Policy 12 (The remainder of the Norwich urban area, including the fringe parishes) prioritises area wide regeneration in east, west and north Norwich.

### 8.3. Current Baseline

8.3.1. According to the Index of Multiple Deprivation (IMD) for all domains, Norwich was ranked the 47th most deprived out of 324 district authorities in England in 2015, with South Norfolk ranked 241st and Broadland ranked 280<sup>th</sup> based on average deprivation scores. Norwich is the second most deprived district in Norfolk behind Great Yarmouth, which is ranked 29th.

8.3.2. Figure 47 below shows the relative changes in overall deprivation ranking of the Greater Norwich districts between 2004 and 2015,

according to the average rank of scores from the IMD in the year shown.

Figure 47 – Indices of multiple deprivation rank of average scores for Greater Norwich districts

Indices of multiple deprivation rank of average scores				
<i>The lower the figure the more deprived relative to other districts/boroughs</i>				
	2004	2007	2010	2015
Norwich	61	62	70	47
South Norfolk	281	286	259	241
Broadland	302	301	279	280

- 8.3.3. The overall ranking of Norwich City has risen from 70<sup>th</sup> most deprived in 2010 to 47<sup>th</sup> most deprived in 2015, with Broadland and South Norfolk also having shown a relative increase in deprivation when compared to national averages. However it should be noted that the data is not directly comparable over a long period because of changes in data definition and the indicators used.
- 8.3.4. The maps at figures 48 and 49 below show the distribution of relative levels of overall deprivation across Greater Norwich, mapped to the smallest geographic areas for which data is published – that is *Lower Super Output Areas (LSOAs)*, or neighbourhoods.
- 8.3.5. The neighbourhoods with the highest level of deprivation – those that fall within the most deprived 10% nationally – are within Norwich City, which also shows marked polarisation within a relatively small geographic area between its most deprived and least deprived areas. There are particular concentrations of deprivation evident in parts of Bowthorpe, Catton Grove, Crome, Lakenham, Mancroft, Mile Cross, Town Close and Wensum wards, but also many areas which show very low levels of deprivation. Town Close ward is notable in that it includes one neighbourhood which is amongst the 10% most deprived nationally (broadly the Vauxhall Street and Suffolk Square area) and one amongst the 10% least deprived (broadly the area between Ipswich Road and Hall Road centred on Grove Walk).
- 8.3.6. There were also very high levels of income deprivation affecting children and older people (in terms of average score, Norwich was ranked 20<sup>th</sup> and 37<sup>th</sup> respectively).
- 8.3.7. In the suburban and rural parts of Greater Norwich, the majority of neighbourhoods do not suffer from significant levels of deprivation, with only a very few areas ranked within the most deprived 40% and only one neighbourhood – part of Diss ward – within the most deprived 30%.

Figure 48: Indices of Deprivation 2015: Map showing overall Index of Multiple Deprivation in Greater Norwich

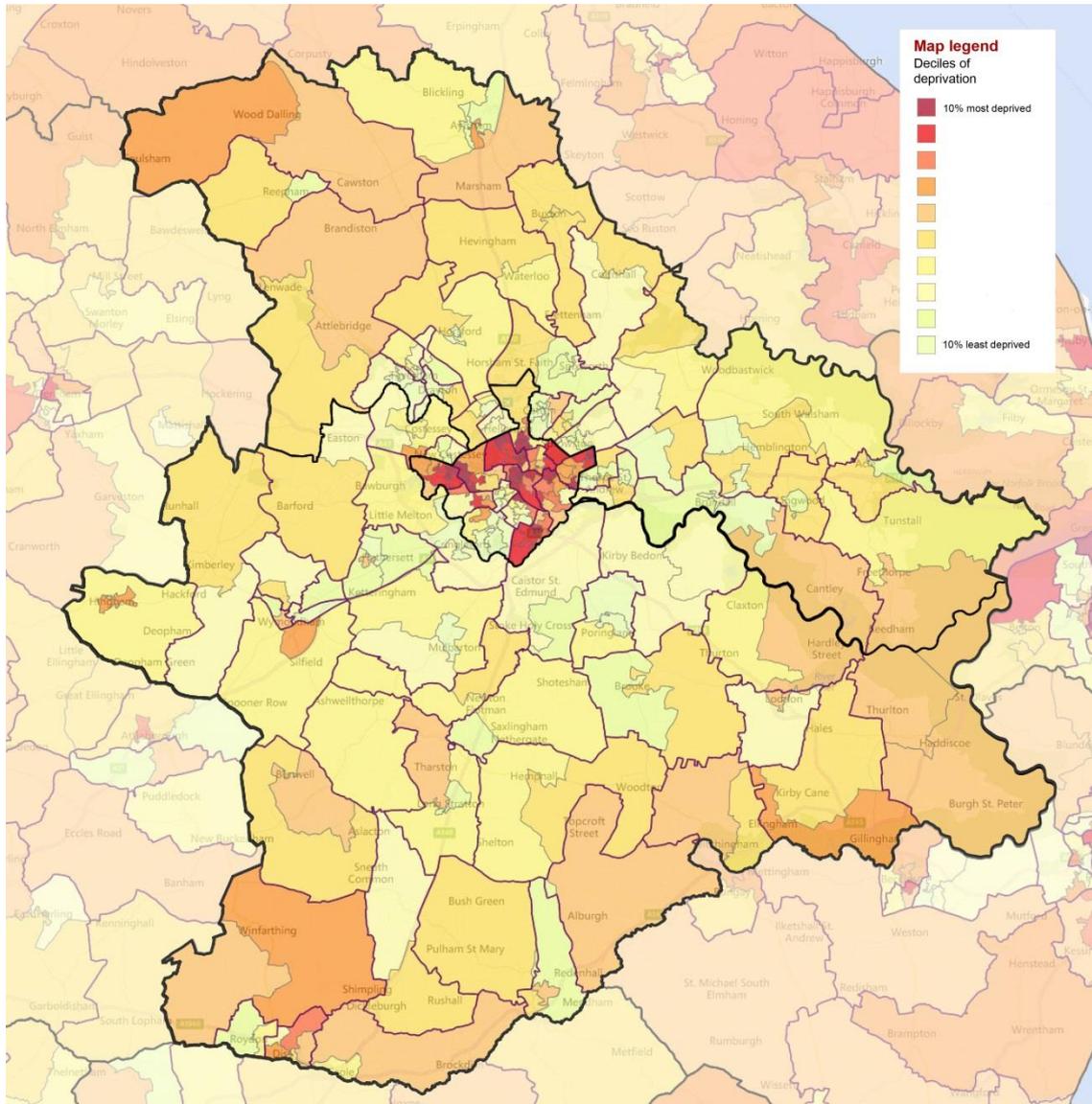
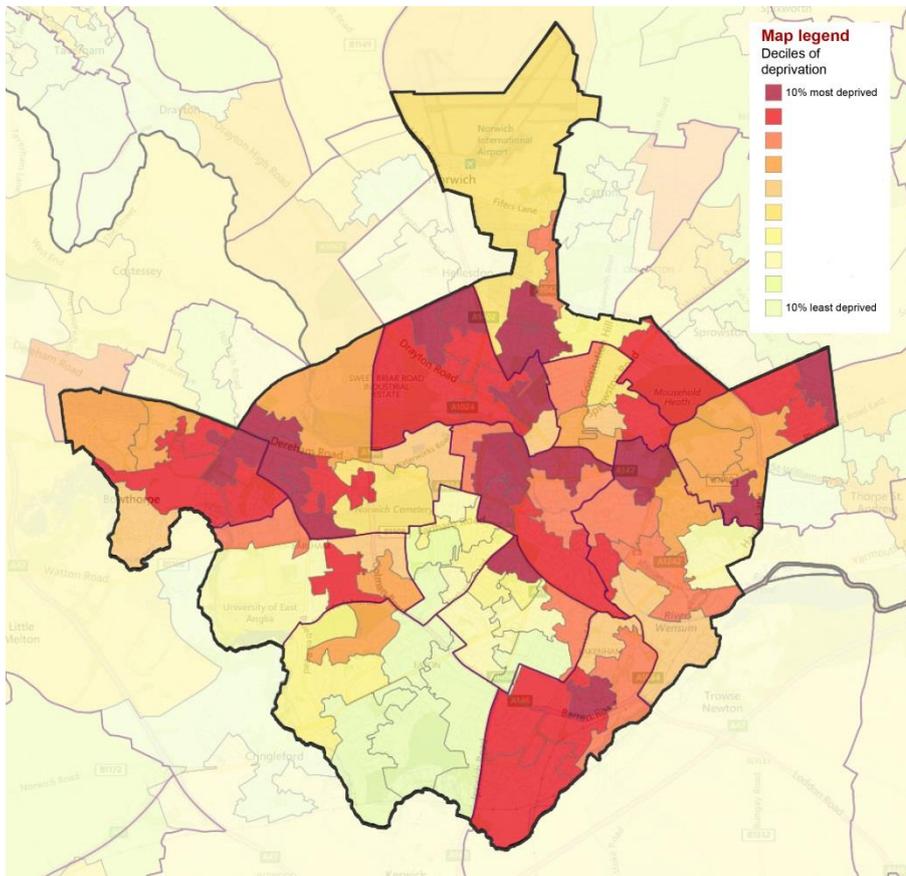


Figure 49: Indices of Deprivation 2015: Map showing overall Index of Multiple Deprivation in Norwich



#### 8.4. Projected Baseline

- 8.4.1. It is likely that without the continuation of the positive policies to reduce deprivation set out in the JCS to support vibrant centres and focus on regeneration of the most deprived neighbourhoods, relative deprivation could increase beyond the end of the JCS plan period in 2026.

#### 8.5. Issues

- There is a need to minimise socio-economic disadvantage and reduce deprivation, which particularly affects a number of areas of Norwich and some rural areas.

## 9. SECTION 9 – HEALTH

9.1.1. This section covers the health of the population of Greater Norwich and the provision of health facilities.

### 9.2. Context

#### 9.2.1. National

9.2.2. The NPPF sets out the wide ranging ways in which planning should promote healthy communities, requiring Local Plans to:

- Involve work with other authorities and providers to assess the quality and capacity of infrastructure for health and its ability to meet forecast demands;
- Set strategic priorities for their area for the provision of health facilities, taking account of local health strategies;
- Involve work with public health leads and health organisations to understand and take account of the health status and needs of the local population (such as for sports, recreation and places of worship), including expected future changes, and any information about relevant barriers to improving health and well-being;
- Support safe, secure and healthy communities, with local services and employment accessible by active and sustainable travel modes;
- Promote good design of development and the provision of landscaping, open spaces and green links to enable people to lead healthy and active lifestyles.

9.2.3. In addition, the NPPF addresses other issues which can affect health, such as pollution and housing quality.

9.2.4. More recently, Fair Society, Healthy Lives ('The Marmot Review') and its supplementary report have identified actions needed to tackle health issues in England. The review found that poor environments contribute significantly to poor health and health inequalities. It therefore promotes integration of the planning and health systems, active travel, green spaces, sports facilities, local food production and energy efficient housing.

9.2.5. The Public Health Outcomes Framework for England 2013-2016 promotes two key outcomes:

- Increased healthy life expectancy - Taking account of health quality as well as length of life.
- Reduced differences in life expectancy and healthy life expectancy between communities - through greater improvements in more disadvantaged communities.

9.2.6. Local

9.2.7. There are three local Clinical Commissioning Groups (CCGs) covering the area, each with its own commissioning budget and responsibility for commissioning the majority of health services for the population, including hospital treatment and community health care. The CCGs are:

- North Norfolk (covering rural parts of Broadland);
- Norwich (covering the city and its adjacent suburbs in Broadland);
- South Norfolk (covering the whole district).

9.2.8. In conjunction with NHS England, CCGs are required to produce Local Estates Strategies looking 5 years ahead. The strategies are intended to allow the NHS to rationalise its estates, maximise the use of facilities, deliver value for money and enhance patients' experiences. These are in production.

9.2.9. Health and Wellbeing Boards bring together local authorities, the NHS, communities and wider partners to share system leadership across the health and social care and have a duty to encourage integrated working between commissioners of services, and between the functions of local government (including planning). Each Health and Wellbeing Board is responsible for producing a Health and Well-being Strategy.

9.2.10. The Norwich CCG Health & Wellbeing Strategy 2013-2018 has four strategic goals:

- Continuously improve and assure the quality and safety of healthcare;
- Continuously improve the health & wellbeing of the population;
- Reduce health inequalities – the health gap between different communities;
- Manage resources responsibly and ethically, and deliver value for money for the taxpayer.

9.2.11. The South Norfolk CCG Health & Wellbeing Strategy 2014-2017 has three strategic outcomes:

- Younger people securing the best chances in life through health and wellbeing;
- Older people live independently in their own homes with peace of mind;
- Residents of South Norfolk enjoy increased health and wellbeing and avoid or delay demand on higher cost health and social care services.

9.2.12. North Norfolk CCG has produced a Strategic Vision, Operational Plan and Financial Plan for 2014/15 to 2015/16. It aims to focus

care on 4 hubs providing a variety of health services. It states that “General Practices will continue as the cornerstone of delivering high quality, locally accessible care for people living in relatively isolated communities at a distance from the many services in Norwich.”

- 9.2.13. Public Health England identifies the local health priorities for Greater Norwich as the social and emotional wellbeing of children aged 0-5, obesity and dementia.
- 9.2.14. Objective 11 of the JCS is to encourage the development of healthy and active lifestyles. Policy 7 (Supporting communities) of the JCS requires appropriate and accessible health facilities and services to be provided across the area, along with care home provision. It also supports the promotion of healthy lifestyles through the design of development. To help to address this, a requirement for Health Impact Assessments to be undertaken by developers of larger scale housing developments is set out.
- 9.2.15. A “Planning in Public Health” engagement protocol is in production for Norfolk. It aims to link NHS organisations and public health agencies with planning, to plan effectively for housing growth and the health infrastructure required to serve that growth.

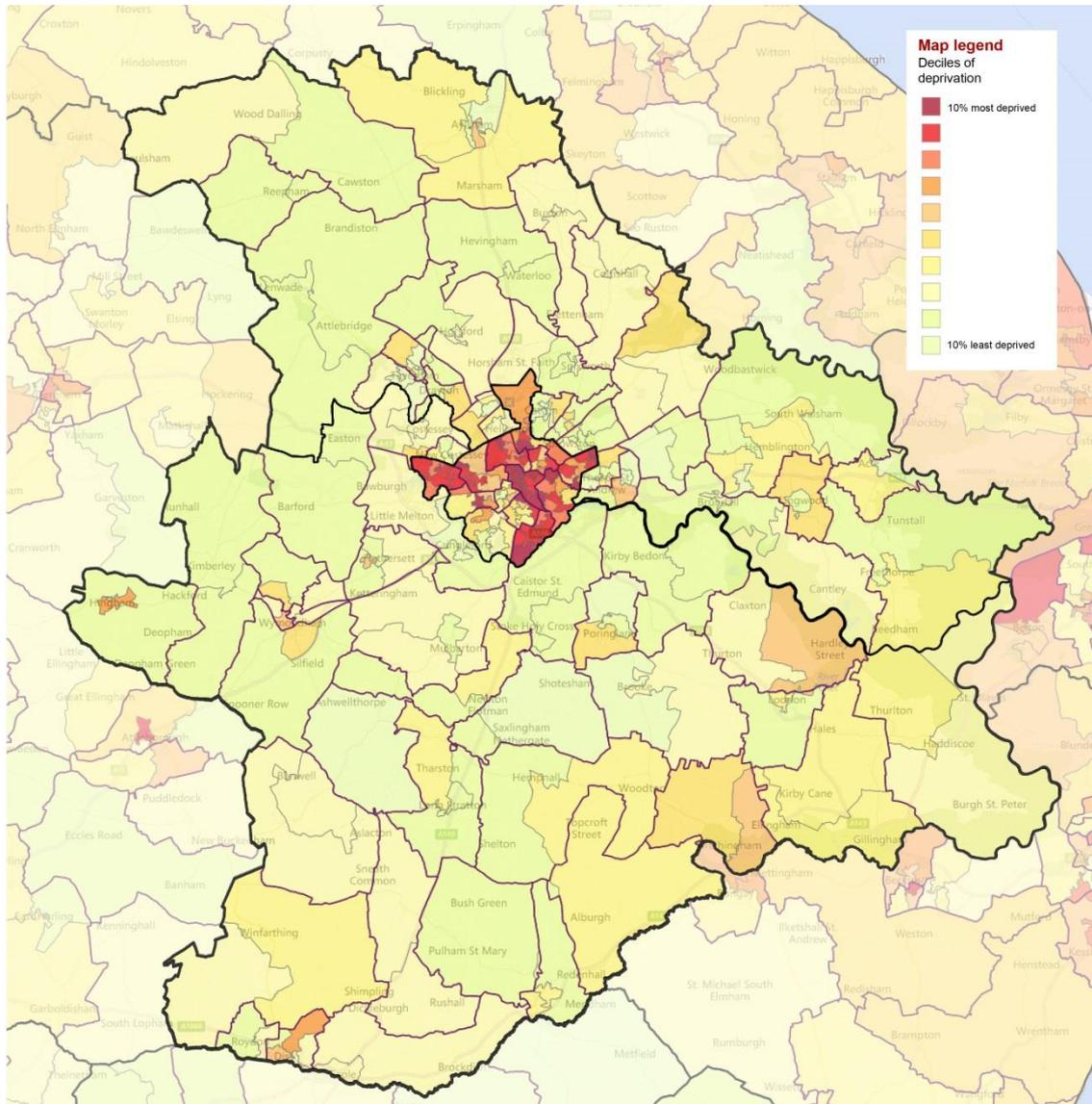
### 9.3. Current Baseline

- 9.3.1. Based on the 2015 health profiles<sup>60</sup> for the Greater Norwich districts produced by Public Health England, the health of people in Broadland and South Norfolk is generally better than the England average, whilst that in Norwich is worse.
- 9.3.2. Norwich also scores poorly on the IMD Health and Disability indicators. In 2015 the indices show Norwich as having 36% of its LSOAs ranked within the most deprived 10% nationally in terms of health. Only three other districts in England had higher relative proportions of health deprived neighbourhoods within their boundaries.
- 9.3.3. There are significant differences between areas within Greater Norwich and within Norwich itself. For example life expectancy is 10.9 years lower for men in the most deprived areas of the city than in the least deprived areas. The disparity in health between wards in Greater Norwich is illustrated in figure 50. This map shows that inner urban wards are considerably more deprived in terms of health than suburban and rural wards. The spatial patterns of health deprivation closely match those of overall deprivation illustrated in figures 48 and 49.

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<sup>60</sup> Health profiles for [Norwich](#), [Broadland](#), and [South Norfolk](#) 2015

Figure 50 Index of Multiple Deprivation – Map showing Health deprivation in Greater Norwich



- 9.3.4. People in Norwich score worse than the national average for approximately two-thirds of the indicators used by Public Health England, whilst people in Broadland and South Norfolk score better than average for the great majority of indicators.
- 9.3.5. The most notable health issues which are significantly worse than the national average in Norwich are the rate of alcohol related harm hospital stays, the rate of self-harm hospital stays and levels of adult smoking. Reflecting the relatively high proportions of older people, the most notable health issue which is worse than the national average in Broadland and South Norfolk is excess winter deaths.

- 9.3.6. The percentage of physically active adults is higher than the national average and obesity in both children and adults is lower than the national average in all three districts.
- 9.3.7. It is recognised that nitrogen dioxide and other particulates are a risk to peoples' health. For example, Public Health England estimated<sup>61</sup> that 5.5% of all deaths of people aged 25 years and over in Norwich and 5% in Broadland and South Norfolk were attributable to human-made fine particulate matter (PM2.5). In total this resulted in 1,902 life years lost.

9.4. Projected Baseline

- 9.4.1. Without a plan beyond the end date of the JCS in 2026, there is a risk that the current policy focus on new development providing for additional health care services and facilities where needed, meeting care needs and promoting healthy lifestyles, will be reduced.

9.5. Issues

- It will be important to ensure that Greater Norwich's good levels of health are supported, with a particular focus on reducing the health gap between different areas and on providing the necessary health services and facilities for a growing and ageing population.
- It is important to consider the ways in which exposure to poor air quality can be minimised or reduced
- It will be important to maintain and enhance links, including green infrastructure links, to the countryside and semi-natural open spaces to encourage physical activity and mental well-being.
- It will be important to ensure new development is well related to green infrastructure.
- It will be important to ensure new development supports active and healthy lifestyles.

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<sup>61</sup> Public Health England, 2014, Estimating Local Mortality Burdens associated with Particulate Air Pollution.

## 10. SECTION 10 – CRIME

10.1.1. This section covers the amount and type of crime experienced within Greater Norwich.

### 10.2. Context

#### 10.2.1. National

10.2.2. The NPPF states that local plans and planning decisions should create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion.

#### 10.2.3. Local

10.2.4. The Police and Crime Plan for Norfolk 2014-16<sup>62</sup> states that Norfolk is one of the safest counties in the country. It sets three crime and disorder reduction objectives:

- Reduce priority crime, anti-social behaviour and reoffending;
- Reduce vulnerability, promote equality and support victims;
- Reduce the need for service through preventative and restorative approaches and joined up working with partners, protecting the availability of frontline resources.

10.2.5. JCS objective 10 is for Greater Norwich to be a place where people feel safe in their communities. Policy 7 (Supporting communities) requires new police facilities to be provided to serve areas of major growth and areas which are deficient. It also requires the design of development to minimise crime and the fear of crime. Policy 11 for the city centre and other local plan policies in Norwich seek to extend leisure and hospitality uses across the city centre, while focussing late night activities in identified areas around Prince of Wales Road and Riverside, in the east of the city centre. This approach has been taken partly to enable the focussing of police resources and partly to enable the separation of office/residential uses from late night activities.

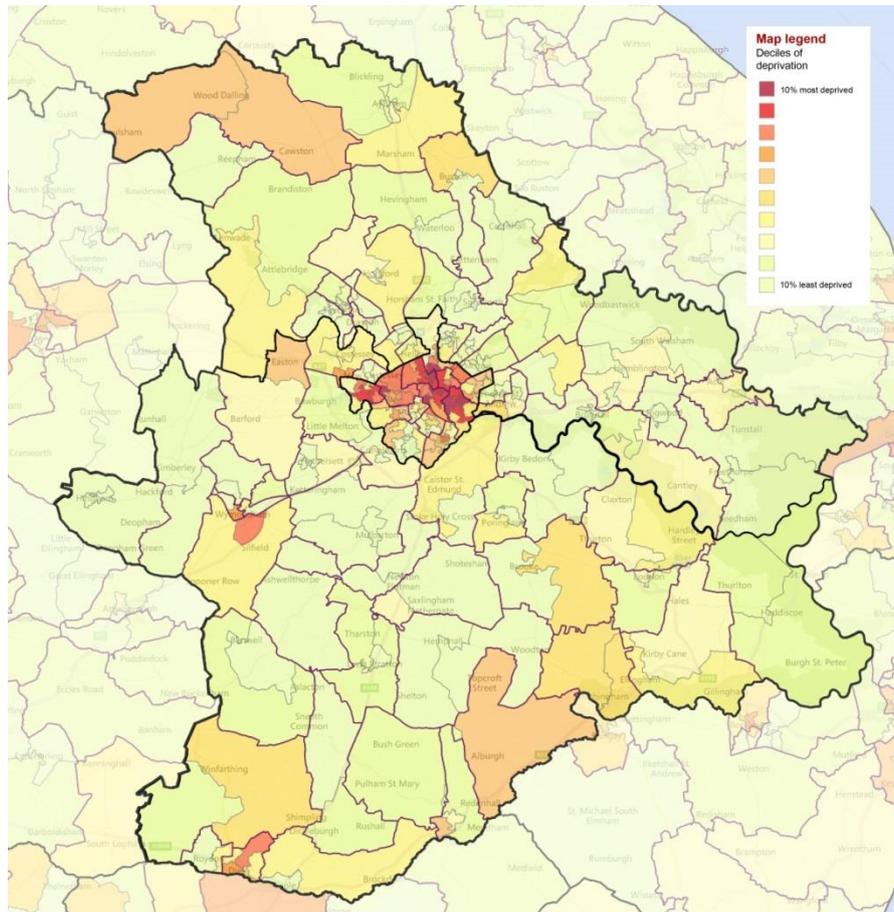
### 10.3. Current Baseline

10.3.1. 2015 IMD crime domain data for Greater Norwich shows that levels of crime are generally lower in rural and suburban areas than in inner urban areas. Norfolk constabulary data shows the Norwich east policing area, which contains the whole of the city centre, including shopping and late night activity areas, has the highest crime rates in Greater Norwich by a significant margin.

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<sup>62</sup> January 2015 refresh of the [Police and Crime Plan for Norfolk](#)

Figure 51 Index of Multiple Deprivation Map of Crime Domain data for Greater Norwich



#### 10.4. Projected Baseline

10.4.1. Dependent on behavioural patterns in society and the future policy approach to concentration of late night activities, the spatial patterns of higher crime in eastern parts of the city centre seem likely to continue. However, it is possible that changes to permitted development rights will lead to greater dispersal of such uses.

#### 10.5. Issues

- Although levels of crime are generally low, there are higher crime levels in inner urban wards, particularly in areas with a concentration of late night drinking establishments.

## 11. SECTION 11 – EDUCATION

11.1.1. This section covers educational attainment and facilities in Greater Norwich.

### 11.2. Context

#### 11.2.1. National

11.2.2. The NPPF states that local planning authorities should take a proactive, positive and collaborative approach to development that will widen choice in education.

#### 11.2.3. Local

11.2.4. The over-arching strategic action plan for A Good School for Every Norfolk Learner contains four aims.

- Raise Standards at all Key Stages;
- Increase proportion of schools judged good or better;
- Improve leadership and management including corporate leadership and strategic planning; and
- Improve monitoring and evaluation of impact.<sup>63</sup>

11.2.5. Objective 5 of the JCS promotes the provision of educational facilities to support the needs of a growing population. Policy 7 (Supporting communities) states that provision will be made for appropriate and accessible education opportunities, including wider community use of schools, new schools to serve growth and the promotion of tertiary education at the University of East Anglia (UEA), Norwich University of the Arts (NUA), City College and Easton College.

### 11.3. Current Baseline

11.3.1. Norwich scores poorly in the Education, Skills and Training domain of the IMD, while in Broadland and South Norfolk the picture is significantly better. In 2015 the indices show Norwich as having 36% of its LSOAs ranked within the most deprived 10% nationally in terms of education. Like health, only three other districts in England had higher relative proportions of education-deprived neighbourhoods within their boundaries. The position in Norwich appears to have worsened since 2010, though the reasons for this decline are unclear. The indicators for this include (for young people) attainment at Key Stages 2, 3 and 4; secondary school absence, and entry into higher education; and (for adults) the proportion of working age adults aged 25-54 with no or low qualifications.

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<sup>63</sup> <http://www.schools.norfolk.gov.uk/view/NCC130259>

Figure 52 Indices of Multiple Deprivation 2015 Education, Skills and Training in Greater Norwich

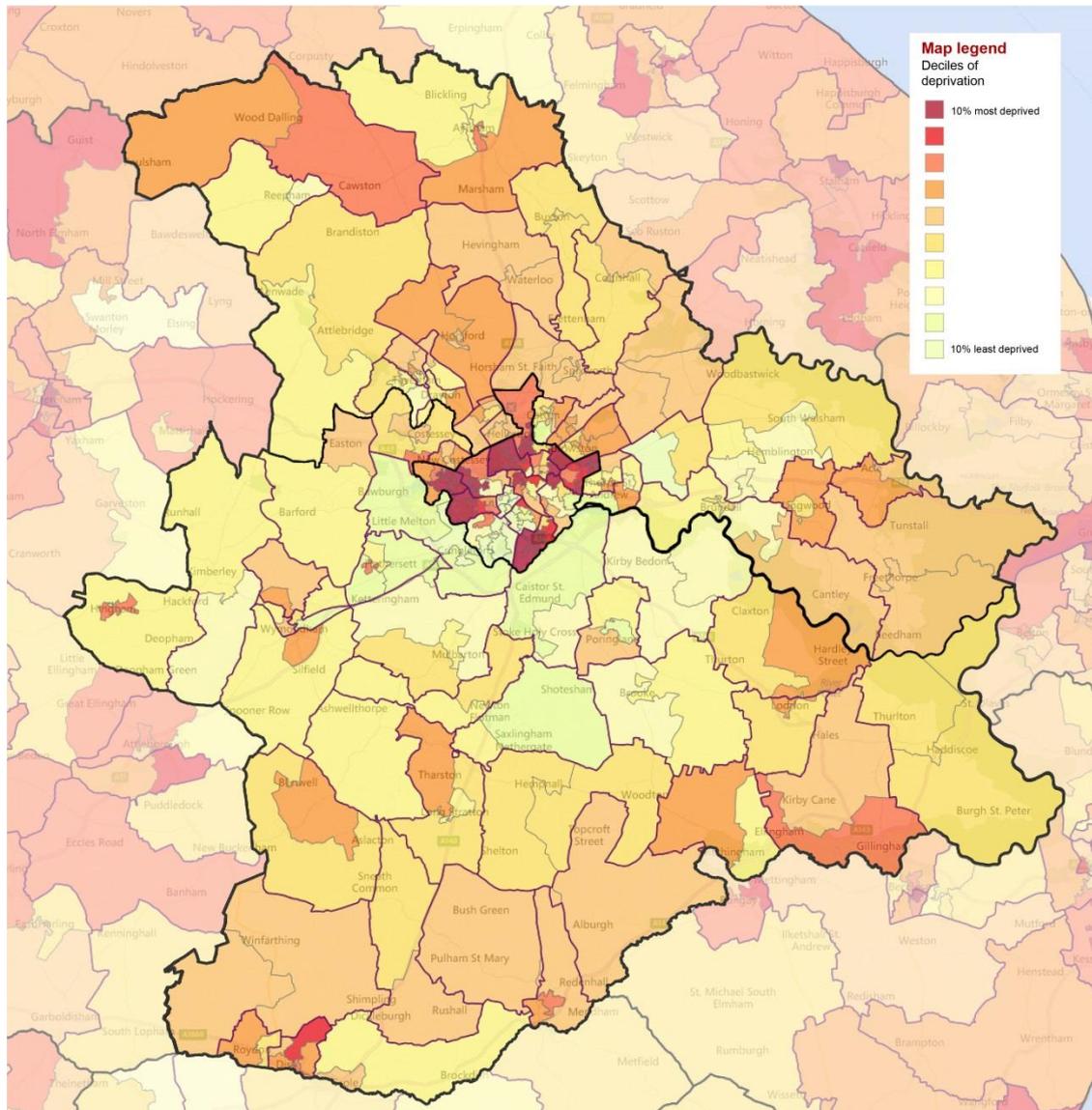


Figure 53 Education and employment across the districts

Indicator	Broadland	Norwich	South Norfolk	National
16 – 18 year olds who are not in education, employment or training (NEET) <sup>64</sup>	2.8%	6.4%	2.2%	4.1%
Proportion of population aged 16-64 qualified to NVO level 4 or higher <sup>65</sup>	29.3%	35.9%	35.7%	36%

<sup>64</sup> [Norfolk County Council](#), November 2015

<sup>65</sup> Source: ONS Annual Population Survey 2014

11.3.2. Figure 53, above, shows other education and skills statistics for the Greater Norwich area. Norwich's population is over-represented in the NEET category, and slightly fewer residents of Greater Norwich than the national average have high level educational qualifications, with the figure for Broadland being over 5% below the national average.

11.3.3. In addition, Norwich ranks poorly for social mobility (a geographical comparison of the chances of children from disadvantaged backgrounds doing well at school and getting a good job). In a recent government report<sup>66</sup>, Norwich ranked 323rd out of 324 lower-tier authorities, while Broadland and South Norfolk performed much better (163 and 110 respectively). This means, for deprived children in Norwich, there are limited opportunities to acquire the education and skills they need to achieve good outcomes as an adult, and even if they are able to overcome this, a weak labour market and/or high housing costs make it difficult to secure good outcomes in adult life.

11.3.4. The tertiary education sector plays an important role in the local economy and supports the growth of the knowledge economy.

#### 11.4. Projected Baseline

11.4.1. The JCS focus on the development of knowledge based industries in the area, along with initiatives to increase opportunities for young people should, if successful, start to address issues of low educational performance in the area. Planned growth in the tertiary sector, particularly at the University of East Anglia, should increase Norwich's role as a "learning city", as promoted by the JCS. Beyond the end date of the JCS in 2026, education is likely to remain a key element of the local economy.

#### 11.5. Issues

- The recent increase in the birth rate will increase demand for education and other children's services in the area.
- It is important to increase educational attainment and skill levels, particularly in the more deprived parts of the area and in other areas where there is low educational attainment.

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<sup>66</sup> <https://www.gov.uk/government/publications/social-mobility-index>

## 12. SECTION 12 – TRANSPORT AND ACCESS TO SERVICES

12.1.1. This section covers the existing and planned transport network in the area and access to services.

### 12.2. Context

#### 12.2.1. National

12.2.2. Transport forms a key part of the NPPF. It states:

- Transport policies have a key role promoting sustainability and health objectives;
- Smarter use of technologies can reduce the need to travel;
- Local Plans should support a pattern of development which facilitates the use of sustainable transport modes and reduces greenhouse gas emissions and congestion;
- Developments that generate significant amounts of movement should be supported by a Transport Statement or Assessment;
- Planned growth should be located and designed to reduce the need for major transport infrastructure.

12.2.3. More detailed guidance in paragraph 35 requires developments to be located and designed where practical to:

- accommodate delivery of goods and supplies;
- give priority to pedestrians, cyclists and public transport;
- create safe and secure layouts which minimise conflicts, including home zones;
- incorporate facilities for low emission vehicles; and,
- consider the needs of people with disabilities.

12.2.4. The NPPF also promotes strong, vibrant and healthy communities, with accessible local services that reflect the community's needs, focussing the majority of services in defined centres.

12.2.5. The UK Broadband Impacts Study suggests that investment of substantial public funds in upgrading the UK's broadband infrastructure is likely to yield significant economic returns, generate employment and cut energy and carbon dioxide emissions.

#### 12.2.6. Local

12.2.7. Norfolk County Council's 3<sup>rd</sup> local transport plan "Connecting Norfolk", which includes an implementation plan, was adopted in 2011 and runs to 2026.

12.2.8. The plan's vision is: "A transport system that allows residents and visitors a range of low carbon options to meet their transport

needs and attracts and retains business investment in the county."

12.2.9. Six strategic aims underpin the vision: maintaining and managing the highway network; delivering sustainable growth; enhancing strategic connections; reducing emissions; improving road safety; and improving accessibility.

12.2.10. The following strategic connections identified in the plan for enhancement are most relevant to Greater Norwich:

- The A11, providing the main road connection to London and the south;
- A Norwich Northern Distributor Road (NDR) to facilitate strategic access to north-east Norfolk and Norwich International Airport, along with other connections to enhance the airport as a gateway;
- The A47, part of the European TEN-T network, providing the main east-west road connection and route to the Midlands and north of England;
- The Norwich to London rail line, providing links to London and the south;
- The Norwich to Cambridge and Peterborough rail line, providing links to the Midlands and the north of England.

12.2.11. Other plan priorities of particular significance to the GNLP are:

- Aiding a shift to a more efficient vehicle fleet through development and facilitation of necessary infrastructure like electric vehicle charging points;
- Promoting active and healthier travel options for short journeys to schools, services and places of employment;
- Enhancing integration between different travel modes, particularly at key bus and rail stations and Norwich International Airport;
- Tackling traffic problems where they result in poor air quality;
- Prioritising measures to reduce the number of people killed or seriously injured on Norfolk's roads;
- A shift towards more demand responsive transport in rural areas;
- Promoting shared travel options like car sharing;
- Achieving efficient movement into town and urban centres, favouring short term parking for car drivers, which benefits the local economy and supports alternative travel options;
- Providing opportunities for sustainable tourism, recognising the benefit of community and heritage rail lines;
- Providing accessible transport services;
- Encouraging alternatives to travel, such as supporting high quality broadband.

- 12.2.12. Connecting Norfolk sets the context for more local transport strategy in the Norwich Area Transportation Strategy (NATS) and its implementation plan.
- 12.2.13. NATS supports Norwich's role as a regional transport interchange and promotes a balanced transport policy, providing the opportunity to deliver a high quality living environment in sustainable developments based around walking, cycling and public transport, whilst providing road links to enable this.
- 12.2.14. NATS has been successful. Whilst the population of the area has increased significantly in the last ten years, traffic crossing the ring roads in Norwich has fallen, bus patronage has gone up by 35% and walking and cycling rates have also increased.
- 12.2.15. NATS is integral to the JCS – the proposed transport implementation plan, set out in figure 54 below, and a programme of capital works across the Greater Norwich area, form part of the planning strategy. Further detail on NATS and other measures to promote sustainable accessibility in Greater Norwich is in the current baseline and planned improvement section below.
- 12.2.16. **Objective 6 of the JCS is "To make sure people have ready access to services." To achieve this, the strategy focusses development round existing service centres, requires new services to be provided to serve new growth where necessary and promotes taking innovative approaches to support rural service provision.**
- 12.2.17. **Objective 7 is "To enhance transport provision to meet the needs of existing and future populations while reducing travel need and impact." To achieve this, the strategy requires development to be located and designed to reduce the need to travel especially by private car. Greater use of sustainable modes of transport is encouraged through better public transport, footways and cycle networks, and by co-location of housing with services, jobs, shops, schools and recreational facilities. A Bus Rapid Transit system and general enhancement to bus infrastructure is promoted on key routes in the Norwich area. Improvement of the strategic road network is also promoted, including the construction of the NDR, along with encouraging newer communication and information technologies to reduce the need to travel.**
- 12.2.18. Policy 6 of the JCS covers access and transportation. Reflecting the objectives above, the strategy focuses the majority of development in the Norwich Policy Area and the policy promotes Norwich as a regional transport node, along with improved access in rural areas. This is to be achieved by:

- The implementation of NATS including the NDR;
- Improvements to the walking, cycling and bus networks, including a Bus Rapid Transit (BRT) network, Park and Ride and the links between main towns and service centres;
- Enhanced rail services;
- Provision of the A140 Long Stratton bypass;
- Promoting improvements to the A11 and A47;
- Supporting growth of Norwich International Airport;
- Concentrating development close to services and promoting local service delivery;
- Improved IT links including broadband;
- Protecting strategic transport corridors;
- Promoting rail freight;
- Recognising that in the most rural areas the car remains an important means of travel.

12.2.19. Policy 19 (The hierarchy of centres) emphasises the role of strong centres throughout the area in promoting regeneration.

### 12.3. Current Baseline

12.3.1. This baseline section identifies the current transport network in Greater Norwich and sets out recent and planned improvements to that network.

12.3.2. The area's national and international transport links and proposed enhancements are set out in paragraph 257 above. The JCS Key Diagram in appendix 3 shows the main transport routes in the Greater Norwich area and local transport enhancement priorities.

12.3.3. Dualling of the A11 has been completed in recent years. There is a government commitment in its Roads Investment Strategy 2015/16 to 2019/20<sup>67</sup> to making improvements to the A47, including complete dualling between Dereham to the west of the area and Acle in the east, improvements to the A11/A47 junction at Thickthorn and safety measures on the A47 Acle Straight linking to Great Yarmouth.

12.3.4. The Northern Distributor Road, which is largely funded by central government, is under construction with completion scheduled for December 2017.

12.3.5. The adopted Long Stratton Area Action Plan identifies a corridor within which the A140 Long Stratton bypass will be delivered to ease congestion on this strategic and regionally important road linking Norwich and Ipswich. A substantive element of the funding is expected to come from the developer.

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<sup>67</sup> [See page 42 of section 2](#)

- 12.3.6. Rail improvements are planned to strategic services, including faster services from Norwich via Diss to London and improved services to the Midlands and the north. Norwich and Diss are already key commuting hubs and may have potential to accommodate further growth in commuting numbers. Norwich station also provides the hub for regional and local rail services to Cambridge, Cromer/ Sheringham and Great Yarmouth/Lowestoft, giving options for local commuting from settlements such as Diss, Wymondham, Brundall and Acle.
- 12.3.7. Norwich International Airport is promoted in Connection Norfolk and the JCS as a catalyst for economic growth and there has been some growth in passenger numbers in recent years. While its road connections will be greatly improved by the NDR, public transport links to the airport are currently poor.
- 12.3.8. As well as the key scheduled service to Schiphol (Amsterdam) which provides a hub for links to international destinations, figure 54 below shows there is significant business from offshore industries and other destinations including Alicante, Edinburgh, Jersey, Malaga and Manchester.<sup>68</sup>

Figure 54: Norwich International Airport Passenger Numbers

	2011/12	2012/13	2013/14
Scheduled Traffic	266,373	264,544	255,753
Chartered Traffic	84,770	73,724	108,305
Gas Platform & Domestic Charter	77,037	85,128	101,606
Total Passengers	427,909	423,396	465,664

12.3.9. Implementation of NATS associated measures

12.3.10. The Norwich urban area and its surrounding growth locations, the area covered by NATS, is a relatively compact largely urban area. This form of development assists the delivery of sustainable transport options.

12.3.11. Implementation of NATS is ongoing. Appendix 4 is the NATS Implementation Plan from the JCS which sets out the main elements of NATS, with greater detail for Norwich city centre provided in figure 55. Completion of the NDR will free up additional road space for NATS measures.

12.3.12. In addition to the NDR, associated measures to implement NATS include:

12.3.13. Improvements to the cycle network: There is a relatively good network of cycle routes and quiet country routes linking

<sup>68</sup> Norwich Airport Fast Facts <https://www.norwichairport.co.uk/about-us/norwich-airport-fast-facts/>

settlements within Greater Norwich and Norwich is in the top 5 districts in the country for cycle use. The Marriotts Way, a long-distance route on a former railway line, forms part of National Cycle Route 1 and links Norwich to Reepham and Aylsham. It is used both by commuters and leisure users and is a priority for future investment.

12.3.14. Significant government Cycle City Ambition grant funding to improve the cycle network in and around the city and to link to growth locations has been secured. A refined network is being delivered through the 'Push the Pedalways' programme. £5.7 million has been invested in the Pink Pedalway along the route from the Norfolk & Norwich University Hospital and UEA, through the city centre, to the strategic growth area, the north-east growth triangle. Funding has been secured to invest in the other pedalways, including improving and extending the blue pedalway between Wymondham, Norwich and Sprowston. Attracting additional funding for further initiatives will be an ongoing priority in the future.

12.3.15. Public transport improvements: Development of a Bus Rapid Transit (BRT) network, shown in Appendix 4, is planned as part of NATS. BRT is a bus-based public transport service providing more frequent and faster services than an ordinary bus routes, achieved by making improvements to existing infrastructure, vehicles and scheduling. Over the last 20 years infrastructure improvements have established dedicated bus-priority lanes on main radial routes into Norwich, including Dereham Road, Newmarket Road and Wroxham Road. The network will be developed further to promote public transport use in growth areas, with BRT routes linking Norwich City Centre to: Wymondham/Hethersett/Cringleford; Easton/Costessey; Hellesdon/Drayton/ Taverham; Norwich International Airport; the Growth Triangle, and Yarmouth Road/Broadland Business Park. This network will be supplemented by core bus routes, as shown in Appendix 4.

12.3.16. The six Park & Rides sites around Norwich form one of the most comprehensive Park and Ride networks in the country, serving commuters, shoppers and other visitors to the city. Priorities set out in NATS are improving the speed, reliability and frequency of the service and, potentially, a new site at Trowse. However, funding cuts have had a negative effect on facilities and services in recent years.

12.3.17. City centre measures: Incremental pedestrian, cycle and public transport improvements have been made in Norwich city centre. Recent examples include improvements in the **St Stephen's Street and Rampant Horse Street retail area** and a £2.55 million scheme on Golden Ball Street, All Saints Green and Westlegate, which is currently being implemented. As illustrated

in figure 55 below, further projects are planned which aim to prioritise pedestrians, cycling and public transport.

12.3.18. The strategic approach retains access for private vehicles to the city centre car parks and for residents and businesses, whilst aiming to reduce unnecessary cross city centre car journeys to make effective use of the inner ring road. This approach is supported by the long term strategy set out in NATS and in the Norwich Local Plan to cap public car parking spaces in the city centre at 10,000, with parking increasingly focussed on accessible multi-storey car parks rather than widely dispersed surface level car parks. To complement these measures, a 20mph speed limit is being introduced within the whole city centre.

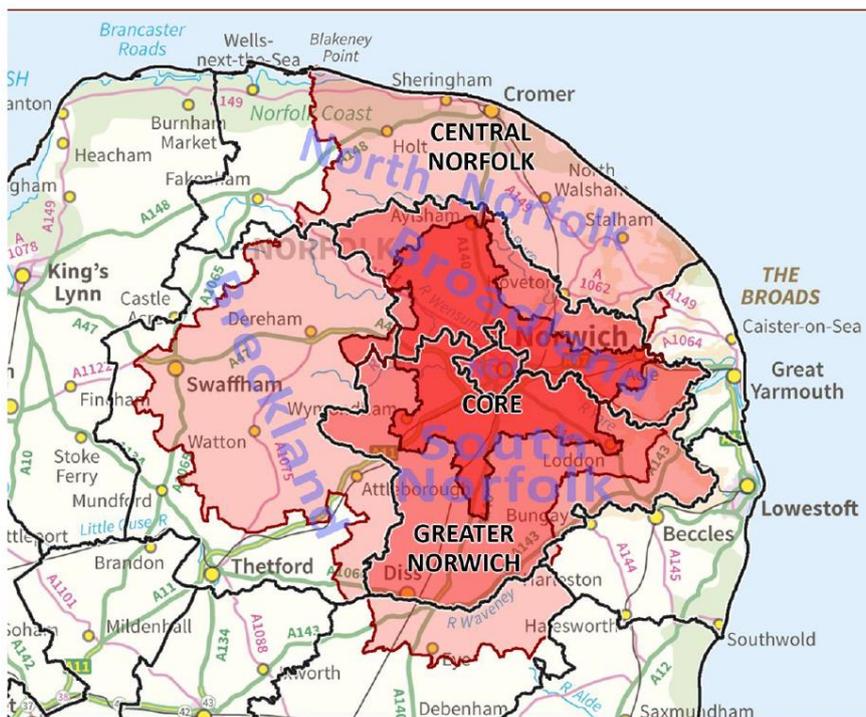
Figure 55 NATS measures for Norwich city centre



12.3.19. 2011 Census data set out in the Strategic Housing Market Assessment (SHMA) in 2015, set out in figure 56 below, demonstrates the strong pull of Norwich for commuters. The housing market area it defines is based on travel to work patterns. It extends to Cromer on the North Norfolk Coast, westwards to Swaffham, southwards to Eye in north Suffolk, and eastwards to the edges of Great Yarmouth. Whilst the influence of Norwich diminishes over distance, and the inclusion of some

areas is due to the lack of fit with any other housing market, the wider influence of Norwich beyond the district boundaries of Broadland and South Norfolk is clear.

Figure 56 Map of commuting area as defined in Strategic Housing Market Assessment



12.3.20. Census travel to work data from 2011 in figure 57 below shows that the use of sustainable modes of transport (walking, cycling and public transport) is higher in Norwich than in Broadland and South Norfolk, with private vehicle use for journeys to work higher in more rural areas.

Figure 57 Percentage of residents who travel to work by various modes<sup>69</sup>

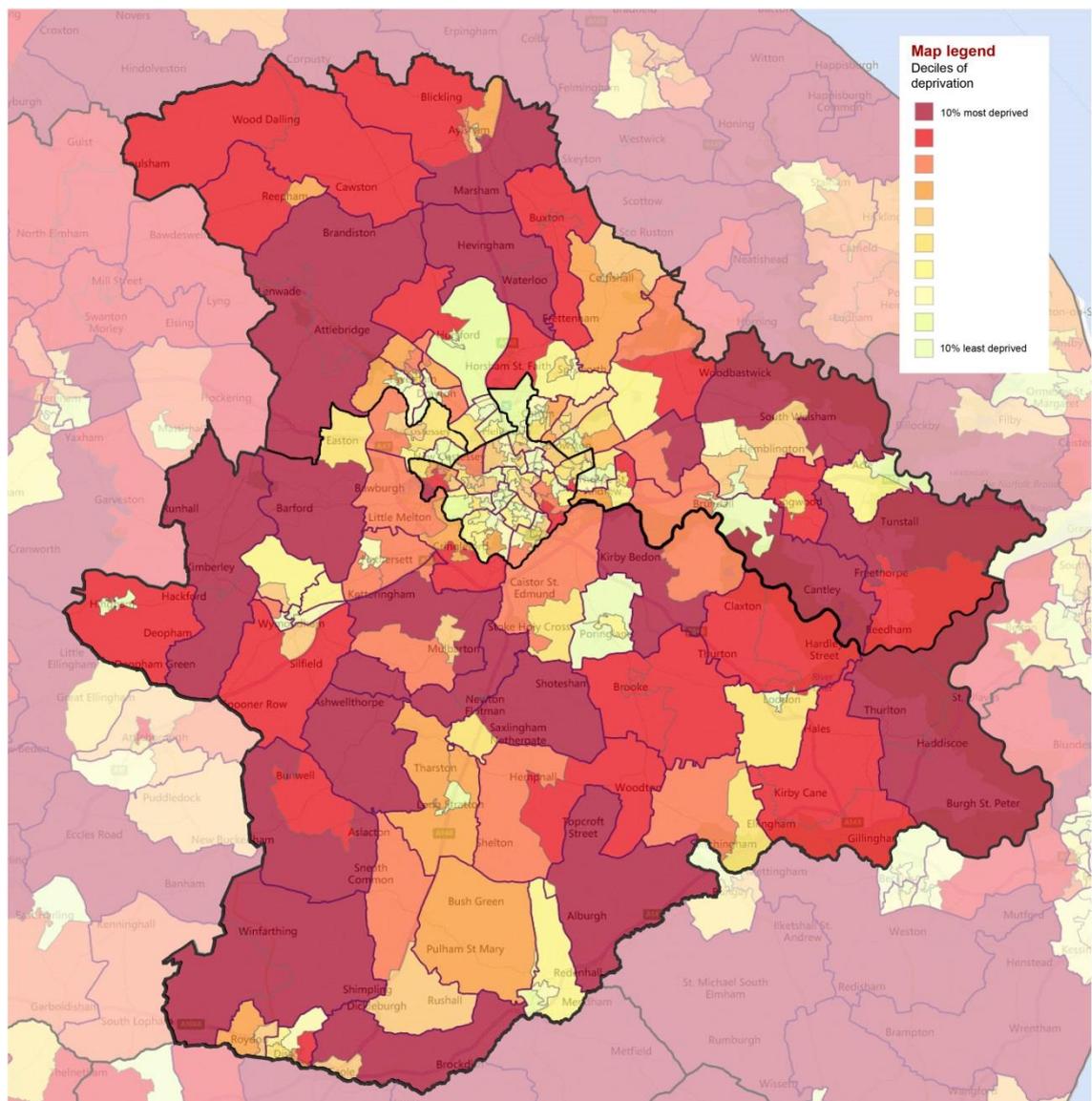
	Broadland	Norwich	South Norfolk	Greater Norwich
Private Motor Vehicle	70%	50%	71%	64%
Public Transport	8%	9%	5%	8%
Foot or Cycle	9%	32%	10%	17%
Work from Home	10%	7%	12%	9%

\*Data does not add to 100% due to rounding of percentages

<sup>69</sup> 2011 Census data quoted in Greater Norwich Growth Board Annual Monitoring Report 2014/15, Appendix D.

12.3.21. Whilst commuters from remoter villages may be able to use public transport their options are often limited and may decrease further due to cuts in subsidies leading to reduced rural public transport services. As figure 58 illustrates, rural areas of Greater Norwich have poorer access to services (and housing) than in Norwich and the market towns and large villages. As set out above, Connecting Norfolk promotes increasing use of demand responsive transport services, car sharing and the improvement of broadband services in rural areas to reduce the need to travel and as a means of increasing access to services in rural areas.

Figure 58 Index of Multiple Deprivation 2015 Access to services and housing 2015 across Greater Norwich



## 12.4. Projected Baseline

12.4.1. The JCS concentrates the majority of development in areas capable of being accessed by sustainable modes of transport and promotes the delivery of transport infrastructure required to support growth to 2026. Without a plan beyond this date there is the potential both for the required infrastructure to support further growth not being delivered and for more dispersed patterns of development which could occur without a plan increasing the proportion of the population with poor access to services.

## 12.5. Issues

- Development should be located where transport options are, as far as possible, not limited to using the private car, so that sustainable transport options can be promoted, and where the need for additional infrastructure can be minimised.
- There is a need to improve the strategic transport network, most particularly improvements to the rail network, to the A47 and to provide good quality public transport access to Norwich International Airport.
- Further investment is required to promote sustainable transport patterns. The completion of the NDR (as described in the development consent order) provides the opportunity to implement further improvements in the Norwich urban area and in the main growth locations and to reduce cross city traffic movements. Local rail connections could provide further opportunities for sustainable transport which should be considered.
- In rural areas, access to public transport is poor and subsidies are likely to decline, so it will be important to sustain local public transport services where possible and to support demand responsive transport.
- It will be important to improve access to high speed broadband and mobile phone connectivity, particularly in rural areas.
- Road safety should be improved.

## 13. SECTION 13 – NATURAL RESOURCES AND WASTE

13.1.1. This section looks at issues related to waste, recycling minerals and soils in Greater Norwich. The Greater Norwich Local Plan does not cover waste management facilities or minerals extraction as these are covered by Norfolk County Council as the Mineral and Waste Planning Authority in their own plan-making. However, the Local Plan needs to take account of relevant issues, for instance in planning development in relation to known mineral assets.

### 13.2. Context

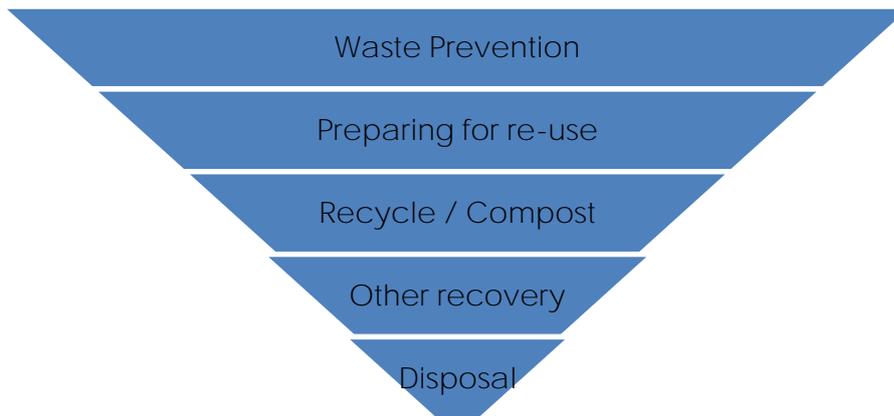
#### 13.2.1. National

13.2.2. Most UK legislation impacting on waste management is now implemented as a result of European Directives. The European Union's waste legislation includes:

- Directives providing frameworks for managing waste, including the Directive on Waste ("The Waste Framework Directive"), as amended and includes the European Waste Catalogue, and the Directive on Hazardous Waste, as amended.
- Directives on the treatment of waste including the Directive on Integrated Pollution Prevention and Control, the Directive on Landfill of Waste and the Directive on Incineration of Waste.
- The EU Landfill Directive sets a target to reduce the proportion of biodegradable municipal waste landfilled by 75% by 2035 compared to 1995. A commitment is made to meeting this target through the Waste Management Plan for England 2013.
- The Waste Framework Directive sets an EU wide target for recycling of household waste of 50% by 2020.

13.2.3. The Waste Framework Directive is transposed in English law largely through the Waste (England and Wales) Regulations 2011, amongst others, which places emphasis on the waste hierarchy (figure 59) to ensure that waste is dealt with in the priority order of prevention, preparing for re-use, recycling, other recovery and lastly disposal.

Figure 59 Waste Hierarchy (DEFRA, 2013)



13.2.4. The NPPF does not contain specific waste policies as waste is covered by the National Planning Policy for Waste (NPPW). The NPPF does however contain specific mineral policies.

13.2.5. The NPPW sets out how positive planning plays a pivotal role in delivering the **country's waste ambitions**, including:

- delivery of sustainable development and resource efficiency, by driving waste management up the waste hierarchy;
- recognising the positive contribution that waste management can make to the development of sustainable communities;
- provide a framework in which communities and businesses are engaged with and take more responsibility for their own waste;
- helping to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment; and
- ensuring the design and layout of new residential and commercial development and other infrastructure complements sustainable waste management, including the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste.

13.2.6. NPPF Section 13 includes advice in respect of 'Facilitating the sustainable use of minerals'. This identifies the importance of ensuring there is sufficient supply of material to provide for development and the economy. It also states that Local Planning Authorities should give great weight to the benefits of mineral extraction, particularly economic benefits. Paragraph 143 sets out detail of minerals considerations in preparing Local Plans, including:

- policies for extraction of mineral resource of local and national importance;

- take account of the potential for secondary and recycle materials before primary extraction;
- define Mineral Safeguarding Areas and safeguard existing, planned and potential mineral facilities; and policies to encourage prior extraction of mineral where possible if non-mineral development has to take place on Mineral Safeguarding Areas

13.2.7. The NPPF states (at paragraph 109) that the planning system should protect and enhance valued soils and prevent the adverse effects of unacceptable levels of pollution. Paragraph 112 requires planning authorities to take into account the economic and other benefits of the best and most versatile agricultural land which it defines as grades 1, 2, and 3a of the Agricultural Land Classification.

13.2.8. National Planning Practice Guidance suggests that where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality.

13.2.9. **The Government's Safeguarding our Soils Strategy, 2009** sets out a vision for the future of soils in England that agricultural soils will be better managed and threats to them will be addressed, construction practices should value soil and soil pollution is prevented.

13.2.10. Natural England also publishes the Agricultural Land Classification, referred to in the NPPF and above.

13.2.11. Local

13.2.12. Local mineral and waste planning policy is currently set out in the adopted Norfolk County Council Core Strategy and Waste Development Management Policies Development Plan Document 2010-2026 which states the following in relation to Greater Norwich and Norfolk:

- Norfolk will continue to be self-sufficient in the production of sand & gravel.
- The County Council will aim to manage the equivalent of the amount of waste expected to arise in the county (subject to considerations such as the availability of treatment facilities, distance travelled and mode of transport used).
- Norfolk will increase waste prevention, recycling and the recovery of energy from waste, leading to a reduction in the quantity of non-hazardous waste being disposed of to landfill.
- The county will have also increased the proportion of aggregates needs met through the use of secondary and recycled aggregates.

- Large and medium-sized facilities for minerals extraction and waste management will be preferentially located close to the Norwich Policy Area. Medium-sized facilities will be preferentially located close to the market towns of Aylsham, and Diss. In particular, the expected development of 32,000 dwellings in the Norwich Policy Area, and the planned development and construction of the Norwich Northern Distributor Road, will, as far as is practicable, be supported through appropriately-located minerals extraction and waste management facilities.
- All mineral workings will be covered by progressive restoration schemes; the enhancement of Norfolk's biodiversity (particularly Norfolk Biodiversity Action Plan habitats and species) and the creation of new, high quality, distinctive landscapes will be strongly supported.
- The key actions outlined above will make a valuable contribution to climate change adaptation, whilst also reducing greenhouse gas emissions in Norfolk.<sup>70</sup>

13.2.13. Whilst the Greater Norwich Local Plan will not set out matters related to waste management or minerals development, as these are the responsibility of Norfolk County Council, it will be necessary for the Local Plan to help implement elements of waste and minerals plans. This will be done, for instance, through safeguarding land, promoting the use of materials reuse and setting the policies for delivery of waste development.

### 13.3. Current Baseline

#### 13.3.1. Waste

13.3.2. Broadland, Norwich and South Norfolk councils each operate a kerbside recycling collection scheme. This includes a full range of recyclables including glass, plastic, cans, paper, card and garden waste. There are currently food waste kerbside collections in Norwich and some of the surrounding urban fringe areas. Elsewhere residents are encouraged to compost should they wish to. Therefore food waste still makes up a proportion of waste going to landfill.

13.3.3. In addition to kerbside collections, there are seven Recycling Centres in Greater Norwich at:

- Ketteringham;
- Mayton Wood (Coltishall);
- Mile Cross;
- Morningthorpe (Long Stratton);
- Strumpshaw;

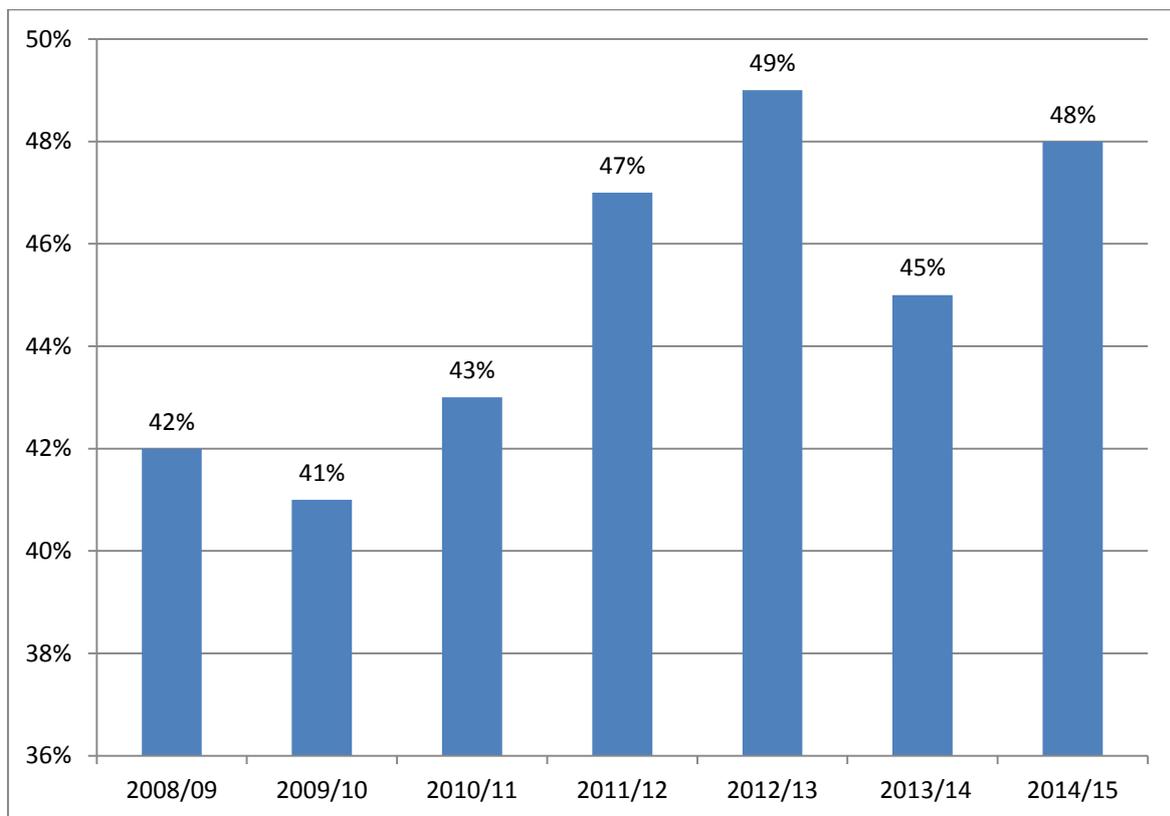
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<sup>70</sup> Adapted from the Norfolk Minerals and Waste Development Framework, pages 36-37  
<http://www.norfolk.gov.uk/view/ncc094912>

- Bergh Apton; and
- Wymondham.

13.3.4. Changing waste collection practices have helped the percentage of household waste recycled or composted to increase as set out in figure 60 below. In 2014/15 Greater Norwich had a recycling & composting total of 48% which exceeded Norfolk's average rate of 43%<sup>71</sup>. Across England in 2000/01 the recycling rate was 11.2% and by 2014/15 it had reached 43.7%<sup>72</sup>.

Figure 60 Percentage of Household Waste Recycled or Composted in Greater Norwich <sup>73</sup>



### 13.3.5. Minerals and Waste Site Allocations

13.3.6. Following the strategic direction set by its Core Strategy, Norfolk County Council has produced two site specific allocation documents. One document deals with minerals extraction

<sup>71</sup> Recycle for Norfolk, *How Are We Doing?* <http://www.recyclefornorfolk.org.uk/content.asp?pid=207>

<sup>72</sup> Department for the Environment, Food and Rural Affairs, Tables ENV18 - Local Authority Collected Waste: Annual Results Tables –Table 3a: Regional Household Recycling Rates 2000/01 to 2014/15 <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables>

<sup>73</sup> Joint Core Strategy Annual Monitoring Report 2014/15

sites.<sup>74</sup> The other document deals with waste management facilities<sup>75</sup>.

13.3.7. Allocated sites in Greater Norwich where mineral extraction is considered acceptable in principle are shown in figure 61. In total there are 12 sites, five in Broadland, none in Norwich, and seven in South Norfolk.

Figure 61 Sites allocated for mineral extraction in Greater Norwich

Reference	Location	Size and Resources
Broadland		
Policy MIN 37	Frettenham & Buxton with Lammas (Land at Mayton Wood)	23.5 hectare site with estimated sand and gravel resource of 1,450,000 tonnes
Policy MIN 48	Felthorpe (Swannington Bottom Plantation)	51.6 hectare site with estimated sand and gravel resource of 1,900,000 tonnes
Policy MIN 55	Attlebridge (Land at Keepers Cottage)	1.9 hectare site with estimated sand and gravel resource of 525,000 tonnes
Policy MIN 64	Horstead & Stanninghall (Horstead Quarry extension, Grange Farm)	22 hectare site with estimated sand and gravel resource of 950,000 tonnes
Policy MIN 96	Spixworth, Horsham St Faith & Newton St Faith (Land at Grange Farm)	48 hectare site with estimated sand and gravel resource of 1,000,000 tonnes
Norwich		
n/a	n/a	n/a
South Norfolk		
Policy MIN 79	Swainsthorpe, Swardeston & Stoke Holy Cross (North of Hickling Lane)	38.6 hectare site with estimated sand and gravel resource of 1,750,000 tonnes
Policy MIN 80	Swardeston (Land south of Mangreen Hall Farm)	13 hectare site with estimated sand and gravel resource of 760,000 tonnes
Policy MIN 81 (consented October 2015)	Stoke Holy Cross (South of Mangreen Lane)	13.9 hectare site with estimated sand and gravel resource of 955,000 tonnes
Policy MIN 83 (consented February 2015)	Heckingham & North Subcourse	4.7 hectare site with estimated sand and gravel resource of 674,000 tonnes

<sup>74</sup> Mineral Site Specific Allocations (DPD) 2013, <http://www.norfolk.gov.uk/view/ncc126927>

<sup>75</sup> Waste Site Specific Allocations (DPD) 2013, <http://www.norfolk.gov.uk/view/ncc126928>

	(Extension to Norton Subcourse Quarry, Loddon Road)	
Policy MIN 90 (consented February 2015)	North Subcourse (extension to Norton Subcourse Quarry, Loddon Road)	8.1 hectare site with estimated sand and gravel resource of 510,950 tonnes
Policy MIN 91 (consented February 2015)	Heckingham & Norton Subcourse (Extension to Norton Subcourse Quarry, Loddon Road)	9.7 hectare site with estimated sand and gravel resource of 1,146,170 tonnes
Policy MIN 118 (consented January 2014)	Wymondham (land at Hall Farm, Stanfield Road)	26.9 hectare site with estimated sand and gravel resource of 600,000 tonnes

13.3.8. As set out in figures 62 below, nine sites are allocated in Greater Norwich for waste management facilities.

Figure 62 Sites allocated for waste management facilities in Greater Norwich

Reference	Location	Size and Capacity
Broadland		
Policy WAS 17	Frettenham, Horstead (Land at Mayton Wood landfill site, Little Hautbois Road)	The 0.8 hectare site has an estimated capacity as a Household Waste Recycling Centre of 5,000 tonnes per annum
Policy WAS 68	Buxton with Lammas, Frettenham	The 23.5 hectare site has an estimated capacity for inert landfilling of 45,000 tonnes per annum
Policy WAS 24	Attlebridge (Land at Keeper's Cottage)	The 1.9 hectare site has an estimated capacity of 20,000 tonnes per annum for temporary composting
Policy WAS 76	Lenwade (Land at SPC Atlas Works)	The 0.4 hectare site has an estimated capacity for scrap metal recycling of 50,000 tonnes per annum
Policy WAS 78	Morton-on-the-Hill & Weston Longville (Land at SPC Atlas Works)	The 8.7 hectare site has an estimated capacity of 150,000 tonnes per annum for mixed waste processing, composting and recycling
Norwich		

Policy WAS 90	Land at 49 Hurricane Way	The 0.87 hectare site has an estimated capacity of 25,000 tonnes per annum as a recycling centre for doorstep-collected recyclable waste.
South Norfolk		
Policy WAS 31	Land at Costessey Transfer Station	The 2.6 hectare site has an estimated capacity of 150,000 tonnes per annum for residual waste treatment
Policy WAS 58	Costessey (Longwater Industrial Estate)	The 0.4 hectare site has an estimated capacity of 10,000 tonnes per annum for processing of recyclables and/or inert waste recycling
Policy WAS 33	Tivetshall St Mary (Land at Pulham Market transfer station)	The 1.8 hectare site has an estimated capacity of 3,000 tonnes per annum as a Household Waste Recycling Centre.

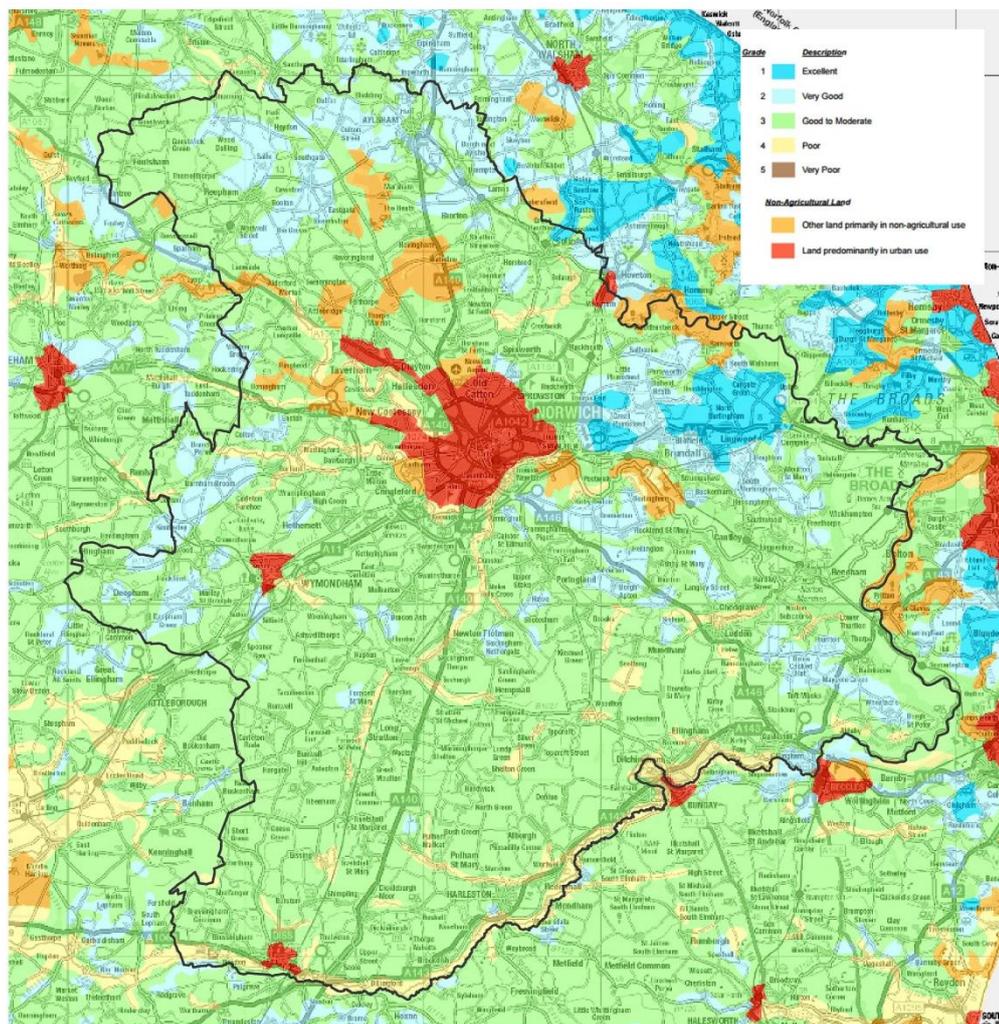
13.3.9. There are limited areas of contaminated land in the area, which are mainly on brownfield sites.

13.3.10. Large tracts of rural Greater Norwich are valuable for their agricultural land. As figure 63 below shows, a high proportion of Great Norwich's agricultural land is of high quality (grades 1-3), with the majority of the most valuable land being located between Norwich and Acle<sup>76</sup>.

<sup>76</sup> [file:///s-norfolk/pd\\$/SNPDAZ/aragan/Downloads/10-111h%20East%20Region%20250k%20ALC.pdf](file:///s-norfolk/pd$/SNPDAZ/aragan/Downloads/10-111h%20East%20Region%20250k%20ALC.pdf)

Note: The map is indicative as it does not break down category 3 into a and b classes

Figure 63 Agricultural land grading in Greater Norwich



13.3.11. This soil quality is vital to supporting the agricultural economy, which in turn shapes the overall rural landscape character. There is a need to avoid degrading any landscapes whilst retaining and enhancing the particular characteristics of each landscape area and their transition zones.

#### 13.4. Projected Baseline

13.4.1. Without the GNLP, there will be a limited policy basis to protect high quality soils, enable remediation of contaminated land, safeguard land in new development and promote good practice to increase materials re-use and reduce waste production, whilst meeting waste management needs, beyond the end of the JCS in 2026. A long term policy approach to safeguarding mineral resources, protect high quality soils and enable remediation of contaminated land will also be needed beyond 2026.

### 13.5. Issues

- It is important to ensure waste management accords with the waste hierarchy and reduces the overall quantity of waste.
- Waste facilities will need to be provided to cater for a growing population, prevent fly tipping and increase recycling rates.
- Appropriate storage and segregation facilities for waste will need to be provided on new development.
- Mineral resources including sand and gravel and minerals and waste infrastructure should be safeguarded.
- The use of secondary and recycled aggregates in all developments to reduce the need for primary aggregate extraction and increase inert construction and demolition waste recycling should be promoted.
- There are high quality soils (grades 1, 2 and 3a) in many parts of the area and limited areas of contaminated land mainly on brownfield sites.
- The need to make the most efficient use of land, maximising the re-use of brownfield sites in order to minimise the loss of undeveloped land and protect soils.

## 14. SECTION 14 – EMPLOYMENT AND THE ECONOMY

14.1.1. This section focuses on employment and the principal business sectors in the economy. It also considers economic growth objectives and the role of retail centres.

### 14.2. Context

#### 14.2.1. National

14.2.2. As highlighted in the NPPF, the economy plays a key role in achieving sustainable development. Paragraph 7 states that the economic role of planning is:

*“Contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure.”*

14.2.3. The NPPF contains a section entitled ‘Building a strong, competitive economy’ which considers mechanisms for the delivery of strategic employment sites and support of existing business sectors (paragraph 21). It also states that town centres should be stimulated to provide a diverse retail offer and should be the focus of retail activity and office development (paragraph 23).

14.2.4. The rural economy is also highlighted as being important to sustainable development. Paragraph 28 states that:

*“Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development.”*

#### 14.2.5. Local

14.2.6. The New Anglia Local Enterprise Partnership (LEP) is one of 39 LEPs and was established by Government in 2010. The LEP is a business-led collaboration between the private, public and education sectors across Norfolk and Suffolk which aims to drive economic growth. The New Anglia Local Enterprise Partnership (LEP) produced a Strategic Economic Plan (SEP) in 2014 which sets out a plan for economic growth in Norfolk and Suffolk. The SEP sets out ambitious plans for Norfolk and Suffolk including the creation of 95,000 new jobs and 10,000 new businesses by 2026.

14.2.7. JCS Objective 3 is to promote economic growth and diversity, with a plan target of 27,000 additional jobs. This is supported by a number of policies in the plan, most particularly policy 5 (the economy). The JCS identifies Norwich city centre as the main

focus for retail, leisure, office, cultural and tourism related development. The other main focuses for employment development are at Thorpe St Andrew, Longwater, Rackheath, Hethel, Norwich International Airport, Norwich Research Park and Wymondham. Supporting economic growth in the market towns and revitalising the rural economy are also priorities.

14.2.8. The Greater Norwich councils and the New Anglia LEP secured a City Deal in 2013. The Government's City Deals are designed to:

- give cities the powers and tools they need to drive local economic growth;
- unlock projects or initiatives that will boost their economies; and
- strengthen the governance arrangements for each city.

14.2.9. The deal is expected to create more than 13,000 jobs additional jobs above JCS targets, including 3,000 high value jobs at Norwich Research Park, 2,000 jobs around Norwich International Airport, 1,000 jobs based around Norwich University of the Arts and 6,000 construction jobs. It is also anticipated that it will lead to increased investment in housing, with 3,000 additional homes delivered in the north east growth triangle.

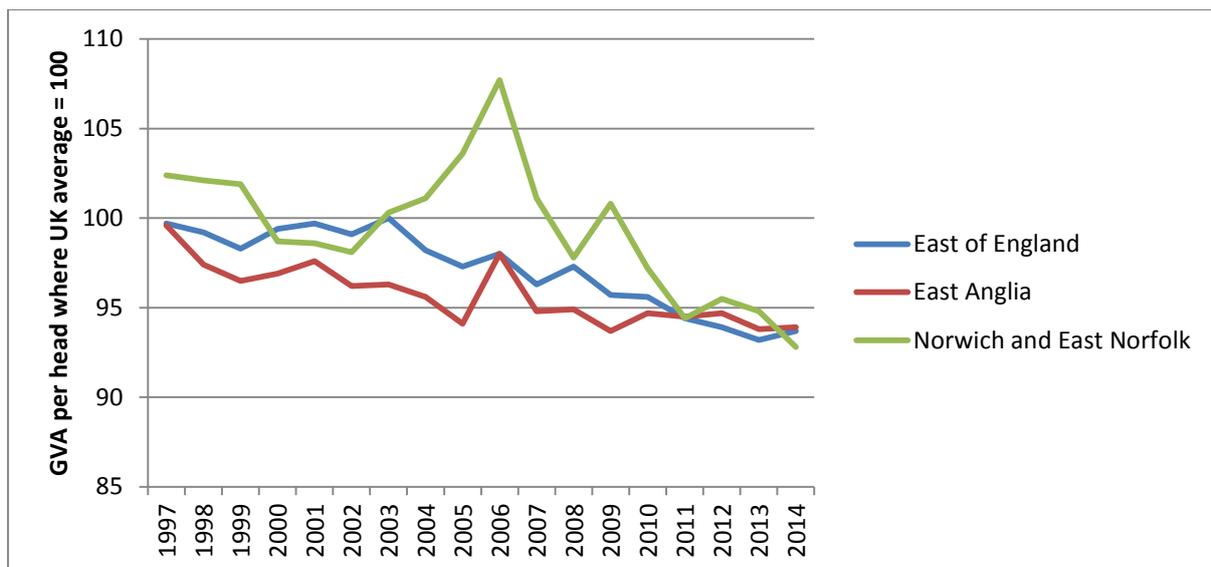
### 14.3. Baseline

#### 14.3.1. The Economy

14.3.2. Greater Norwich is the largest economic centre in the East of England, with good road and rail links to London and the Midlands, an international airport, two universities and a number of major employment sites.

14.3.3. As shown in figure 64, below, Greater Norwich has a decreasing GVA per head compared to that of England. This trend is reflected across the Eastern region.

Figure 64 GVA per head



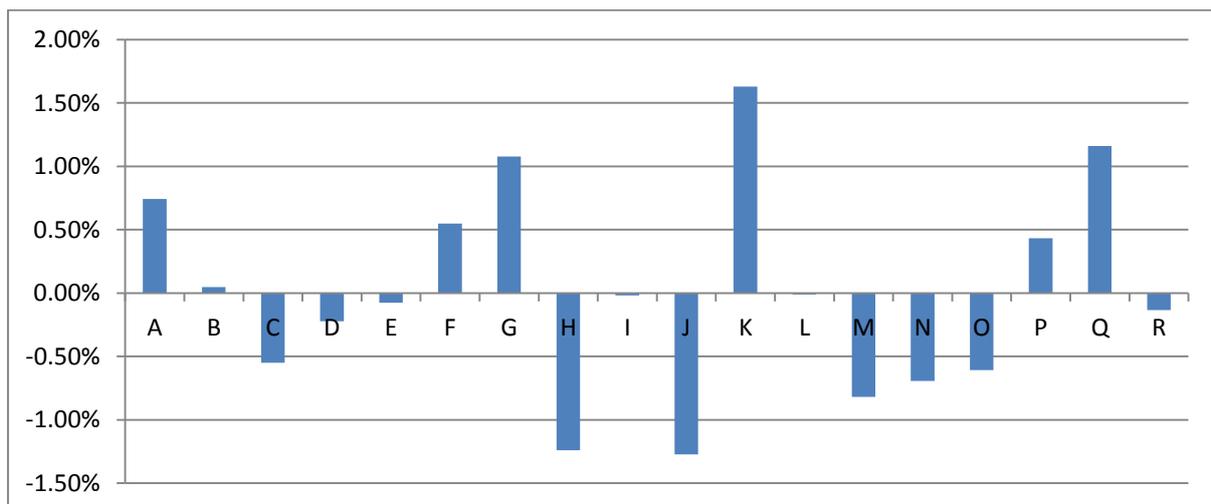
14.3.4. According to the 2011 Census, there is relatively little variation between the three districts in terms of the percentage of workers employed in each industry. The 5 biggest industries across Greater Norwich are:

- Wholesale, Retail, Vehicle repairs (17%);
- Human health and social work (13.6%);
- Education (10.3%);
- Manufacturing (8.3%); and
- Construction (8.2%).

14.3.5. Figure 65, below, shows the variation between the percentage of the workforce employed in each industry in Greater Norwich compared to nationally. The letters shown in figure 66 correlate to the following industries as shown below. The financial and insurance industry (K) shows the biggest variation (+1.6%) and human health and social work (Q) also employs a greater percentage of the workforce (+1.2%). Transport and storage (H) employs less of the workforce (-1.2%) as does information and communication (J) (-1.3%).

Figure 65 Employment by industry in relation to national averages<sup>77</sup>

- A = Agriculture, forestry and fishing
- B = Mining and quarrying
- C = Manufacturing
- D = Electricity, gas, steam and air conditioning supply
- E = Water supply; sewerage, waste management and remediation activities
- F = Construction
- G = Wholesale and retail trade; repair of motor vehicles and motor cycles
- H = Transport and storage
- I = Accommodation and food service activities
- J = Information and communication
- K = Financial and insurance activities
- L = Real estate activities
- M = Professional, scientific and technical activities
- N = Administrative and support service activities
- O = Public administration and defence; compulsory social security
- P = Education
- Q = Human health and social work activities
- R = Other



14.3.6. New Anglia LEP's Strategic Economic Plan (SEP) identifies Norfolk & Suffolk's four largest employment sectors as:

- Agriculture and food and drink (10% of the workforce and 10% of the annual GVA);
- Financial and insurance services (3% of the workforce and 13% of the annual GVA);
- Ports and logistics (15% of the workforce and 6% of the annual GVA); and
- Tourism and culture (11% of the workforce and 6% of the annual GVA).

<sup>77</sup> ONS Census 2011

14.3.7. The SEP also identifies five high impact sectors which have high growth potential:

- Advanced Manufacturing and Engineering;
- Agri-tech;
- Energy;
- ICT/Digital Culture; and
- Life Sciences.

14.3.8. Employment and workforce

14.3.9. Levels of employment in Greater Norwich compare favourably to national averages with the area having low levels of unemployment and a high ratio of jobs to working-age population. These figures vary across the three districts with levels of unemployment higher in Norwich (5.9%) than Broadland (3.1%) or South Norfolk (3.3%). Norwich has a higher ratio of jobs to working-age population (1.03) compared to Broadland (0.73) or South Norfolk (0.77)<sup>78</sup>. As can be seen in figures 66 below, the percentage of employees in full- and part-time work is broadly similar across each of the three districts (32% part-time and 68% full-time). These figures differ slightly from the national average of 29% part-time and 71% full-time<sup>79</sup>. There are gender variations within these figures, with significantly more women than men working part-time.

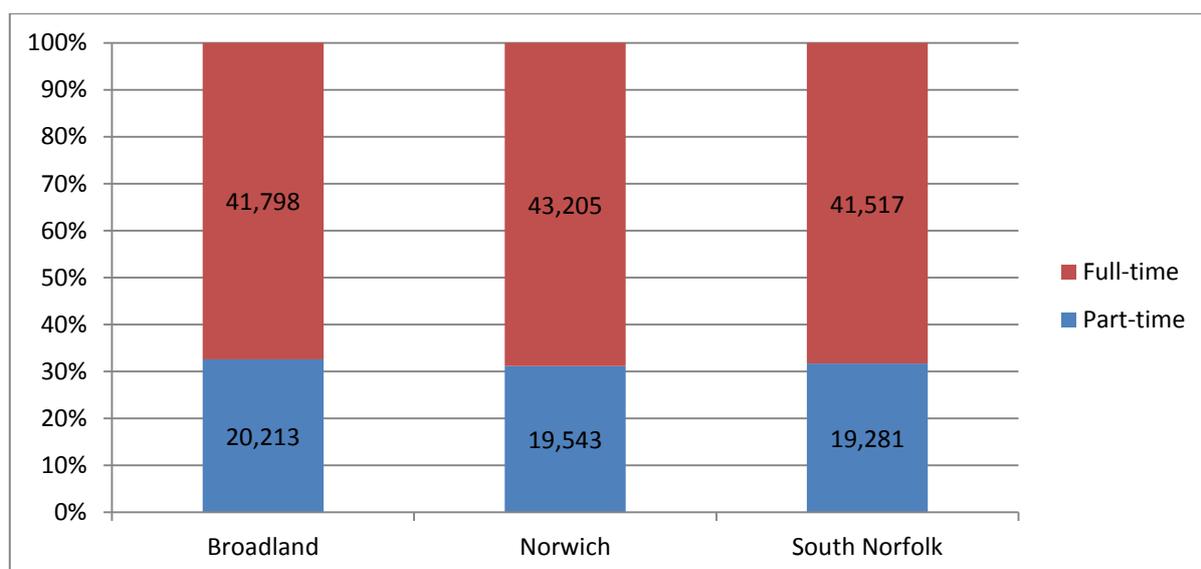
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1.1.1. <sup>78</sup> <http://www.ons.gov.uk/ons/rel/subnational-labour/regional-labour-market-statistics/january-2016/rft-lm-table-li01-january-2016.xls>

1.1.2.

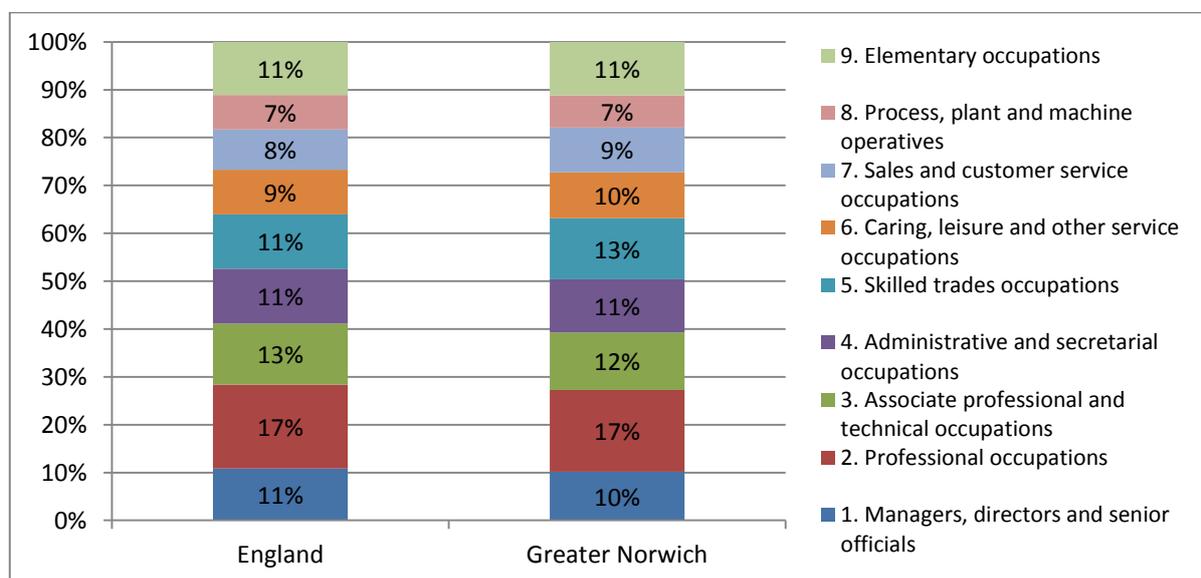
<sup>79</sup> ONS Census 2011

Figure 66 Number of employees in full-time and part-time employment<sup>80</sup>



14.3.10. Figure 67 below shows that the percentages of the working population in different types of occupation are broadly in line with national averages.

Figure 67 Percentage of the working population in different types of occupation<sup>81</sup>



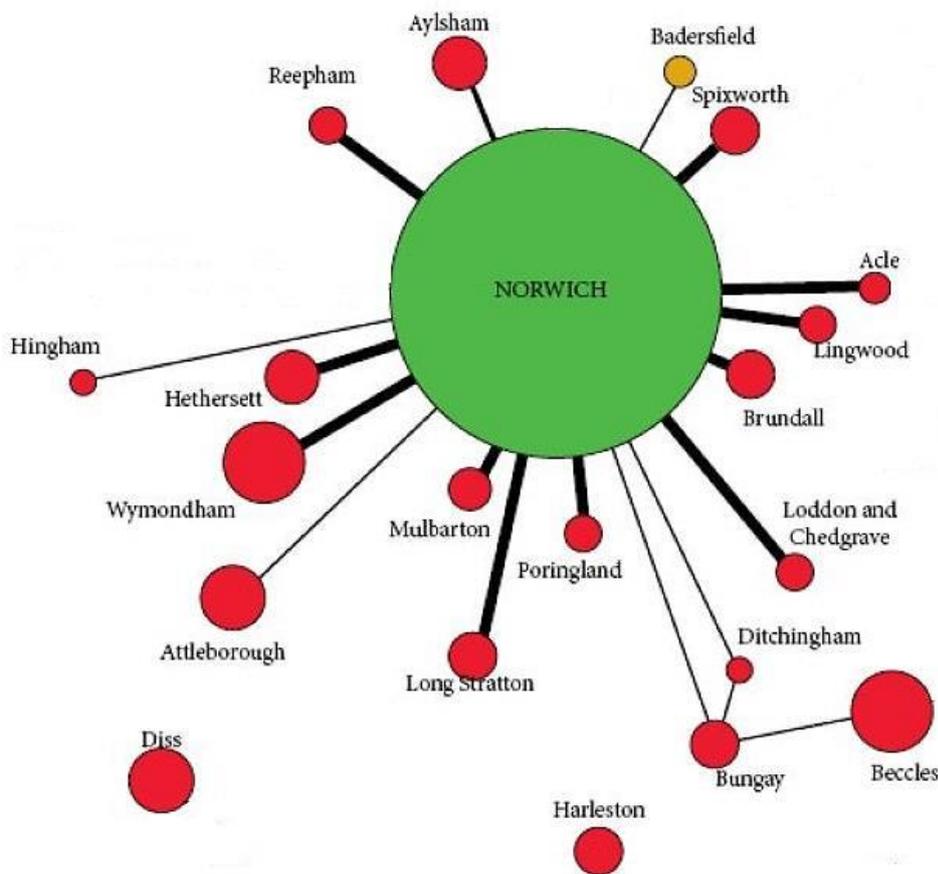
14.3.11. Travel-to-work patterns are shown in figure 68 below. The colour code represents the proportion of all workers who also live in an area with green indicating 65% or more of workers living in the area; amber indicating 55% - 65% of workers living in the area; and red indicating less than 55% of workers living in the area. The size of the centres (the coloured circle) is proportional

<sup>80</sup> ONS Census 2011

<sup>81</sup> ONS Census 2011

to the number of workers who live within the area. The more workers, the larger the circle; hence Norwich is the largest circle. The links that exist between the centres are also illustrated by the joining lines, with stronger links having heavier lines. The thickness of the line is based on the strength of the connection when taking into account the number and the proportion of the resident and workplace populations in both areas. The illustration clearly indicates that Norwich is the area's largest employment centre and is largely self-contained (only 19% of working Norwich residents are employed outside the city).

Figure 68 Travel-to-work patterns<sup>82</sup>



14.3.12. Retail

14.3.13. Norwich is rated as the 13<sup>th</sup> best performing retail centre nationally (source: CACI). There are a number of market towns surrounding Norwich which also have a strong local retail offer.

14.3.14. The 2015 Norwich Retail Monitor concluded that “The situation is fairly stable with regard to retail vacancies in comparison to the vacancy rate in Norwich in recent years. The

<sup>82</sup> SHMA

vacancy rate in Norwich is positive when considered against the national picture."

14.3.15. Until recently, Norfolk County Council undertook regular Market Town Surveys. The most recent survey was undertaken in 2013 and concluded that most market towns had a healthy retail offer and "all Norfolk market towns surveyed [were] below the average national town vacancy rate".

#### 14.4. Projected Baseline

14.4.1. Without the GNLP, there will be a no local plan policy basis for economic development beyond the end of the JCS in 2026. Since the economic issues, particularly in relation to retailing, have changed rapidly subsequent to the global recession in starting in 2008, and much of the evidence base for the JCS was collected around that date, a review of the evidence base for the GNLP is timely. This will enable new evidence to be collected to inform policy making for the period to 2036.

#### 14.5. Issues

- Greater Norwich is a regionally important economic centre, with the potential for significant growth.
- Employment land provision needs to support the existing main employment sectors including retail; health; and financial services and also sectors with high growth potential including advanced manufacturing and engineering; agri-tech; energy; ICT/digital culture; and life sciences.
- Norwich city centre is a main regional focus for employment, retailing, tourism, culture, education and leisure.
- Rural enterprises remain important to the local economy and home working is likely to increase in significance.

## 15. SECTION 15 – HOUSING

15.1.1. This section considers the existing housing stock and future needs, including housing type and tenure and the strategic plan for the location of the housing to 2026.

### 15.2. Context

15.2.1. National

15.2.2. Laying the Foundations: A Housing Strategy for England was launched by Government in November 2011. It is a national housing strategy that sets out measures to support aspirations for and the delivery of new homes, support choice and quality for tenants, tackle empty homes and provide better quality homes, places and housing support. Actions include the following:

- Establishment of the Growing Places Fund to support infrastructure that unblocks stalled housing and economic growth;
- Launch of 'Get Britain Building' investment fund to support building firms in need of development finance;
- Support a new build indemnity scheme to provide up to 95 percent loan to value mortgages;
- Putting in place incentives for housing growth through the New Homes Bonus, Community Infrastructure Levy and proposals for local business retention;
- A simplified National Planning Policy Framework;
- Supporting choice and quality for tenants through supporting growth and investment in the private rented housing market;
- Reform of social housing through the Localism Act 2011;
- Considering how to encourage more affordable housing; and
- Support, protection and opportunities for struggling households, including prioritisation for the vulnerable.

15.2.3. One of the principle roles of the strategy is to deliver housing, based on an evidence base to ensure that enough housing is identified for development that will meet housing needs, both for market and subsidised affordable homes.

15.2.4. The NPPF focuses on sustainable development and the need for the planning system to perform a number of roles including a social role "supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations" (paragraph 7). Section 6 of the NPPF relates to housing delivery, stating that:

*"To boost significantly the supply of housing, local planning authorities should:*

- use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with the policies set out in this Framework, including identifying key sites which are critical to the delivery of the housing strategy over the plan period;
- identify and update annually a supply of specific deliverable sites sufficient to provide five years' worth of housing against their housing requirements with an additional buffer of 5% (moved forward from later in the plan period) to ensure choice and competition in the market for land. Where there has been a record of persistent under delivery of housing, local planning authorities should increase the buffer to 20% (moved forward from later in the plan period) to provide a realistic prospect of achieving the planned supply and to ensure choice and competition in the market for land;
- identify a supply of specific, developable sites or broad locations for growth, for years 6-10 and, where possible, for years 11-15;
- for market and affordable housing, illustrate the expected rate of housing delivery through a housing trajectory for the plan period and set out a housing implementation strategy for the full range of housing describing how they will maintain delivery of a five-year supply of housing land to meet their housing target; and
- set out their own approach to housing density to reflect local circumstances."

15.2.5. Paragraph 50 of the NPPF relates to the type of housing that should be delivered, identifying:

*"To deliver a wide choice of high quality homes, widen opportunities for home ownership and create sustainable, inclusive and mixed communities, local planning authorities should:*

- *plan for a mix of housing based on current and future demographic trends, market trends and the needs of different groups in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes);*
- *identify the size, type, tenure and range of housing that is required in particular locations, reflecting local demand; and*
- *where they have identified that affordable housing is needed, set policies for meeting this need."*

15.2.6. The NPPF is also clear that to promote sustainable development in rural areas, housing should be located where it will enhance the vitality of rural communities, with isolated dwellings in the

countryside only permitted subject to certain circumstances (paragraph 55).

15.2.7. The Government's Planning Policy Statement for Travellers Sites (2015) states that local planning authorities should identify and update annually a supply of specific deliverable sites sufficient to provide 5 years' worth of sites against their locally set targets; and identify a supply of specific, developable sites or broad locations for growth, for years six to ten years and, where possible, for eleven to fifteen years.

15.2.8. Local

15.2.9. The need to provide a range of accommodation to house the growing population available to buy, rent and be supported in, recognising the requirements of different groups in society, is identified as a major challenge for the strategy. As a result, Objective 2 of the JCS is to allocate enough land for housing, and affordable housing, in the most sustainable settlements.

15.2.10. To achieve this, the JCS identifies land to meet a housing requirement of 37,000 additional dwellings between 2008 and 2026. It focuses most housing growth in the Norwich Policy Area (NPA) (see appendix 5 for map) in and around the city, making use of brownfield sites wherever possible. Given the limited amounts of developable land in the city, the strategy recognises that housing development on greenfield sites in Broadland and South Norfolk is unavoidable. The area to the north east of the city and the A11 corridor to the south west have been identified as the main strategic locations for new housing development, whilst development of the market towns and larger villages also forms an important part of the strategy.

15.2.11. The JCS key diagram shown in appendix 3 maps the main locations for housing growth. Figure 69 sets out how many additional homes will be delivered through outstanding planning permissions and allocations (as of April 2015) in different locations.

Figure 69 Locations for further housing growth

Location	Dwellings to be delivered through outstanding planning permissions and allocations (as of April 2015)
Norwich Policy Area (NPA)	
Broadland – NPA	
Growth Triangle (inc. part of Old Catton, Sprowston, Rackheath, Thorpe St Andrew and Gt & Lt Plumstead)	12,916
Drayton	238
Hellesdon	1,379
Old Catton (Outside Growth Triangle)	7
Sprowston (Outside Growth Triangle)	14
Taverham	18
Thorpe St Andrew (Outside Growth Triangle)	346
Blofield	399
Brundall	168
Blofield Heath	61
Gt & Lt Plumstead (Outside Growth Triangle)	121
Horsford	143
Horsham & Newton St Faiths	71
Salhouse	21
Spixworth (Outside Growth Triangle)	25
Other Broadland NPA	6
Norwich	
Norwich	7,430

South Norfolk – NPA	
Costessey & Easton	1,828
Cringleford	1,530
Hethersett	1,406
Long Stratton & Tharston	1,978
Wymondham	2,154
Trowse	264
Poringland & Framingham Earl	892
Bawburgh	6
Bramerton	8
Keswick	8
Little Melton	60
Mulbarton & Bracon Ash	206
Newton Flotman	39
Stoke Holy Cross	132
Surlingham	14
Swardeston	38
Tasburgh	25
Other South Norfolk NPA	6
NPA total	
33,957	
Rural Policy Area (RPA)	
Broadland RPA	
Aylsham	596
Acle	202
Reepham	182
Wroxham	102
Buxton	24

Cawston	28
Coltishall & Horstead	79
Foulsham	3
Freethorpe	18
Lenwade (Great Witchingham)	2
Lingwood & Burlingham	64
Reedham	23
South Walsham	26
Other Broadland RPA	111
South Norfolk –RPA	
Diss	280
Harleston	257
Hingham	106
Loddon & Chedgrave	227
Alpington & Yelverton	13
Ashwellthorpe	47
Aslacton & Great Moulton	33
Barford	14
Barnham Broome	29
Bergh Apton	14
Brooke	20
Broome	16
Bunwell	17
Carleton Rode	16
Dickleburgh	37
Ditchingham	71
Earsham	26
Geldeston	12

Gillingham	10
Hales & Heckingham	71
Hempnall	23
Norton Subcourse & Thurlton	31
Pulham Market	25
Rockland	20
Roydon	90
Scole	16
Seething	19
Tacolneston	23
Wicklewood	30
Woodton & Beddingham	22
Wortwell	5
Wreningham	15
Other South Norfolk RPA	119
RPA total	3, 214

15.2.12. Affordable housing policy is set out in policy 4 of the JCS. The policy requires developments to provide a mix of housing, taking account of the most up to date study of housing need. It sets out a stepped requirement for affordable housing dependent on site size, with 33% of homes required to be affordable homes on sites of 16 dwellings or more. The tenure mix required on these sites is 85% social rented and 15% intermediate tenures. The policy also requires housing with care in the most accessible locations.

15.2.13. The policy provides flexibility on the provision of affordable housing in relation to site viability.

15.2.14. The Central Norfolk Strategic Housing Market Assessment 2015 (SHMA)<sup>83</sup> identifies a functional Housing Market Area which includes all of the Greater Norwich area, as well as parts of North Norfolk, Breckland and the Broads Authority, with Norwich at its core. It provides the most up to date study into housing

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<sup>83</sup> The Central Norfolk SHMA is available [here](#).

need and delivery across the Greater Norwich area to inform the GNLP. It takes into account data from the Office of National Statistics and the Valuation Office Agency, as well as primary research undertaken for the study and the delivery of housing in recent years. It identifies that there will be a need for 52,200 additional dwellings in Greater Norwich between 2012 and 2036, a slight increase on the annual delivery required by the JCS (see paragraph 328 for further detail).

15.2.15. In 2012, local level research was undertaken through a Gypsy and Traveller Accommodation Assessment (GTAA) 2012. The study indicated that within the period 2011-2016, 51 pitches were required across Greater Norwich with 3 pitches required in Broadland, 11 in Norwich and 37 in South Norfolk. Beyond 2016, the report suggested that there would likely be a need to provide further Gypsy and Traveller sites.

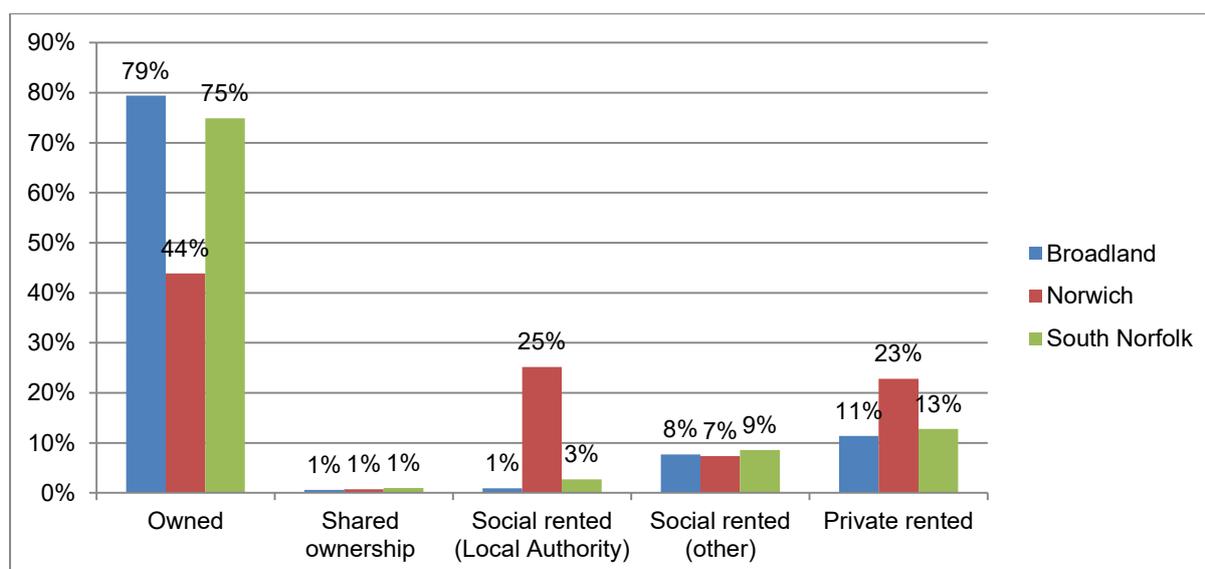
### 15.3. Baseline

15.3.1. There are significant variations in the tenure of properties across Greater Norwich. Broadland and South Norfolk are dominated by owned properties while Norwich has a much higher percentage of Local Authority social rented and private rented properties<sup>84</sup>. **The area's tenure mix has changed significantly in recent years with home ownership and social renting having fallen significantly between the 2001 and 2011 censuses. The private rented sector appears to have taken on these properties with significant rises in the percentage of private rented properties across all three districts. Figure 70, below, shows the percentage dwellings in each tenure.**

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<sup>84</sup> ONS Census 2011

Figure 70 Dwellings broken down by tenure



15.3.2. Figures 72 to 75 below illustrate a number of issues in relation to housing in Greater Norwich.

15.3.3. Across the UK, Norwich is the local authority with the eighth highest percentage of one-person households (38.2% of all households<sup>85</sup>). The most notable difference between the sizes of households in Norwich and the more rural districts of Broadland and South Norfolk is that the city has more 1 person households and fewer 2 person households. There is a similar percentage of 5+ person households in each of the districts. Due to the presence of two universities, a large percentage of the population of Norwich is made up of students and young professionals so it is likely that many of these larger households in Norwich are houses in multiple occupation (HMOs) whereas in the rural districts the larger households are more likely to be occupied by families. All three of the districts have a similar proportion of 2 and 3 bed dwellings, while the city has more 1 bedroom dwellings (mainly flats) and fewer 4+ bedroom dwellings<sup>86</sup>.

15.3.4. Overcrowding and the methodology behind its calculation are discussed in detail in the Central Norfolk Strategic Housing Market Assessment 2015 (SHMA). Overall, overcrowding in the Greater Norwich area has increased over the period 2001-2011 but remains in line with the national trends<sup>87</sup>. Nearly 90% of properties in Broadland and South Norfolk are defined as under-occupied while 7% of properties in Norwich are overcrowded. Two-thirds of overcrowded properties are in the social or private rented sectors. For those people who are unable to access the

<sup>85</sup> ONS Census 2011

<sup>86</sup> Council Tax: property attributes, VOA

<sup>87</sup> ONS Census 2011

open housing market, perhaps because current prices are beyond their means, local plan policy promotes affordable housing development to meet the identified need. As can be seen from figure 71 below, the percentage of affordable dwellings delivered varies between districts and from year to year, but Greater Norwich as a whole has had particularly low levels of delivery in the past 2 years<sup>88</sup>.

Figure 71 Percentage of affordable dwellings

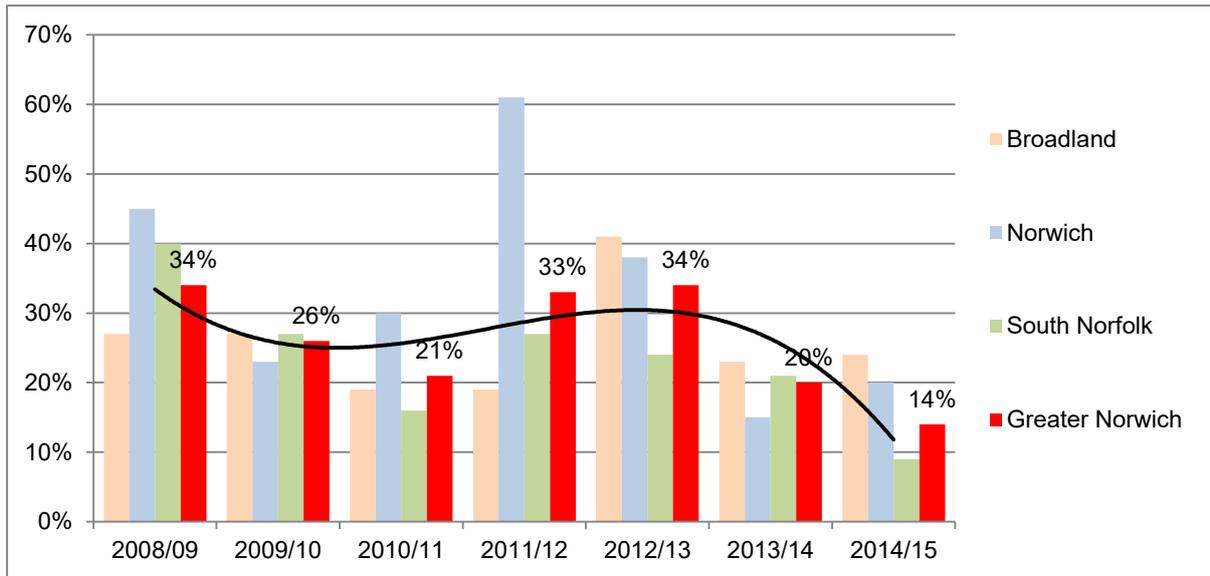
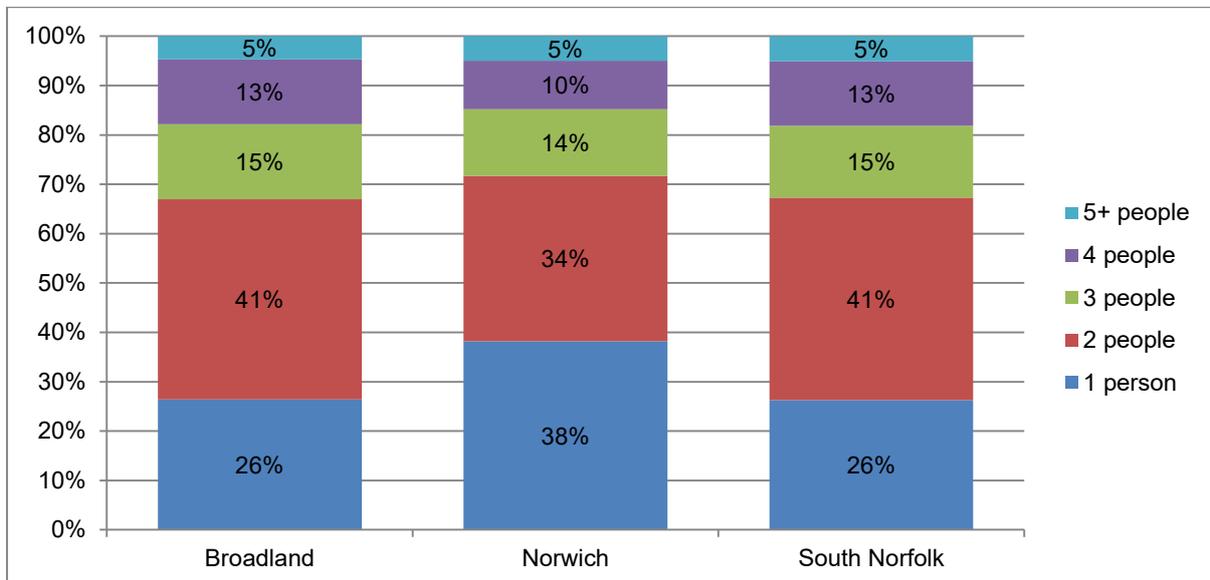


Figure 72 Households broken down by number of occupants



<sup>88</sup> Joint Core Strategy Annual Monitoring Report 2014/15

Figure 73 Dwellings broken down by number of bedrooms

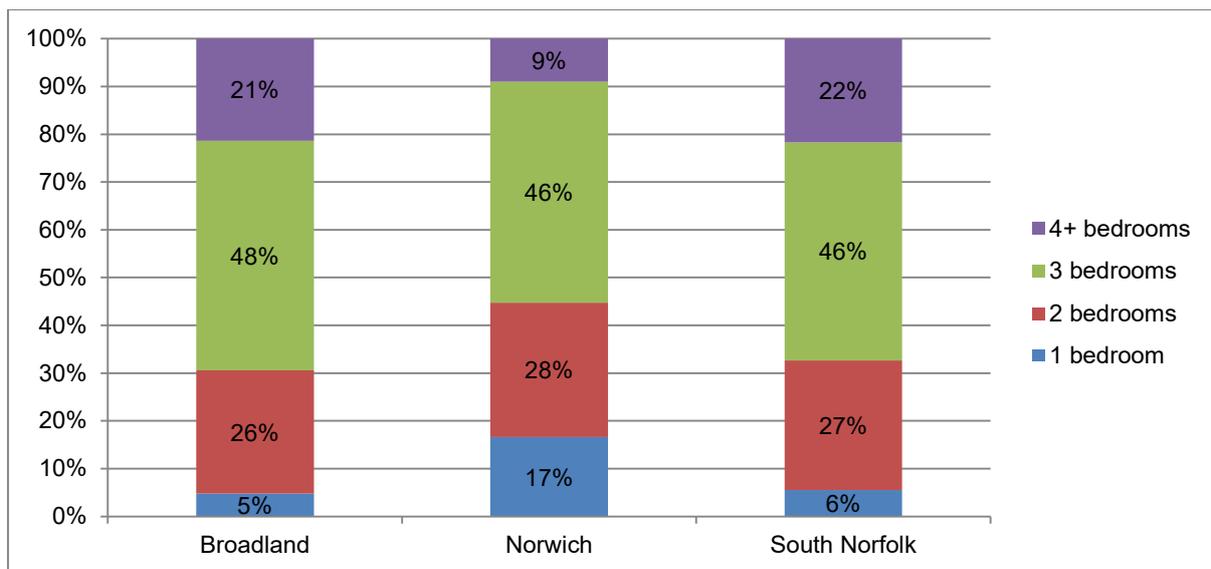
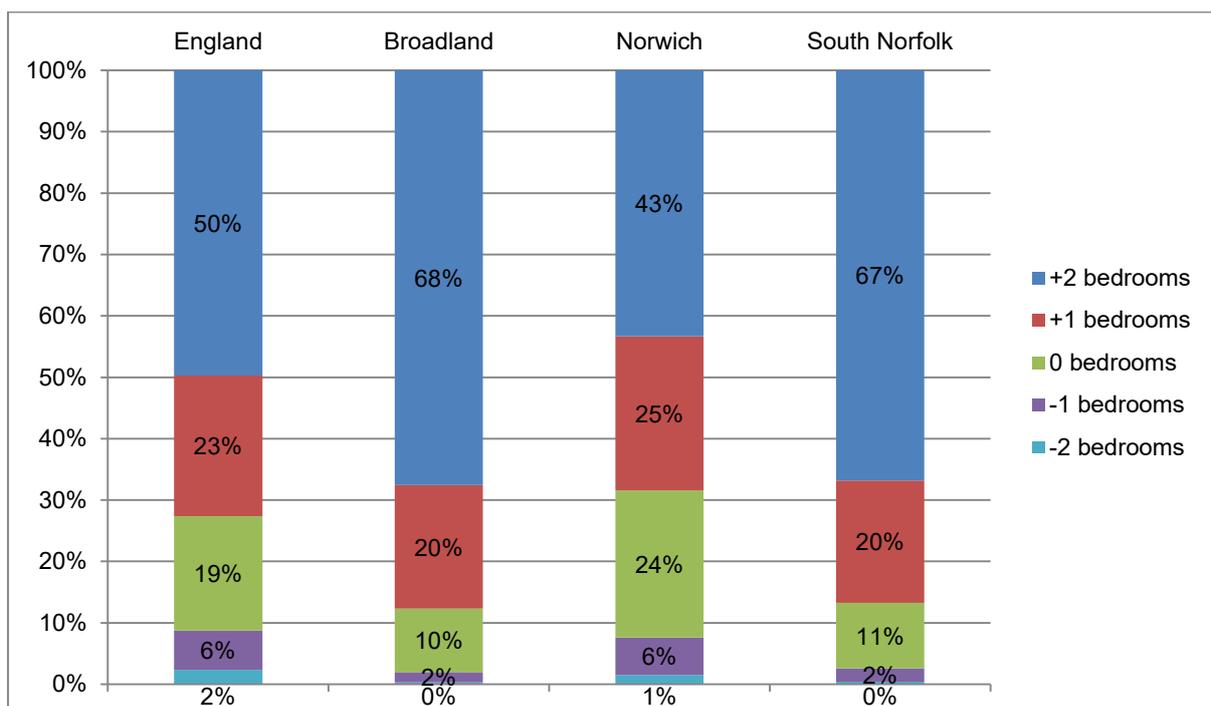


Figure 74 Dwellings broken down by overcrowding or under-occupation



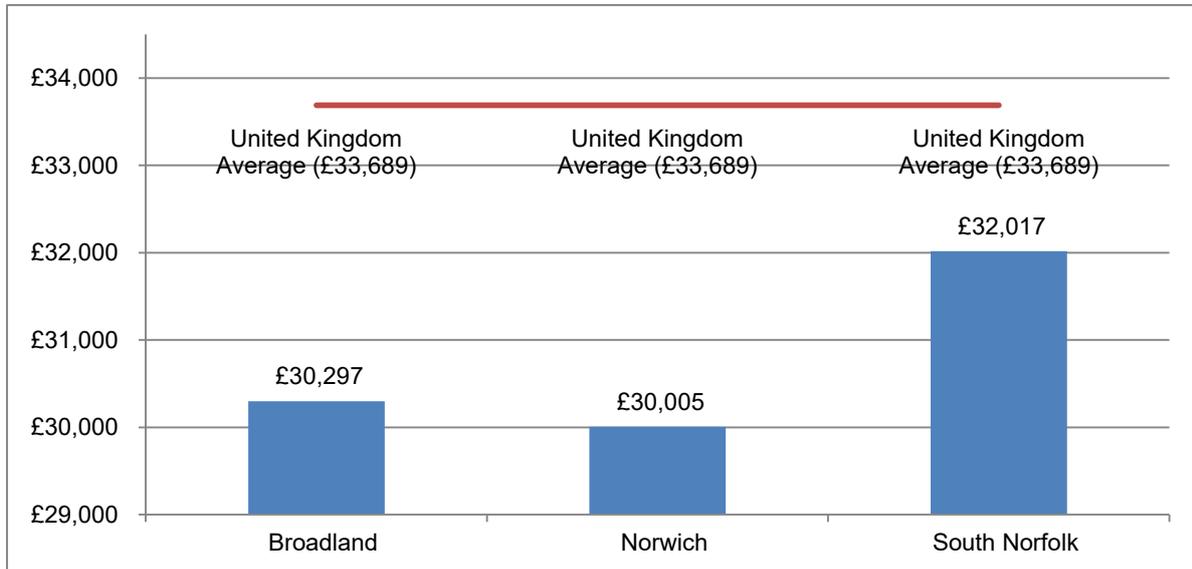
15.3.5. Full-time annual gross earnings vary across the three Greater Norwich districts, with South Norfolk residents earning significantly more than those in the other two districts<sup>89</sup>. All districts fall below the United Kingdom average<sup>90</sup> but the national figure will be heavily influenced by high London earnings. It is worth noting that all three districts have higher annual full-time earnings than

<sup>89</sup> ONS [ASHE 2015 \(provisional\) Table 07 - Place of Work by Local Authority](#)

<sup>90</sup> ONS [ASHE 2015 \(provisional\) Table 01 - All Employees](#)

the East of England overall (£27,299). Figure 75, below, illustrates this.

Figure 75 Average gross annual full-time earnings



15.3.6. Nationally, house prices have continued to rise gradually in recent years<sup>91</sup> and this trend has been reflected in Greater Norwich<sup>92</sup>. Importantly, the average house price peaked in 2007 (average 2007 price £177,165) and after a significant dip and subsequent rise, the average house price once again surpassed this peak in 2014 (average 2014 price £183,000).

<sup>91</sup> UK and London House Price Index, 2008-2014 (ONS)

<sup>92</sup> House Price Statistics for Small Areas, 1995 to 2014 (ONS)

Figure 76 Ratio of house price to earnings

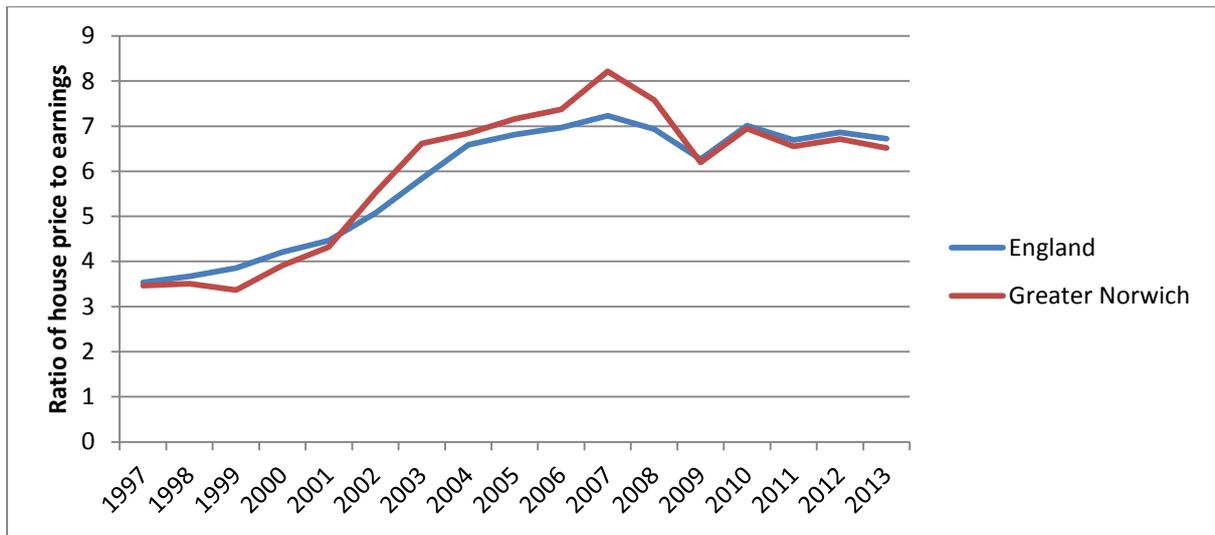
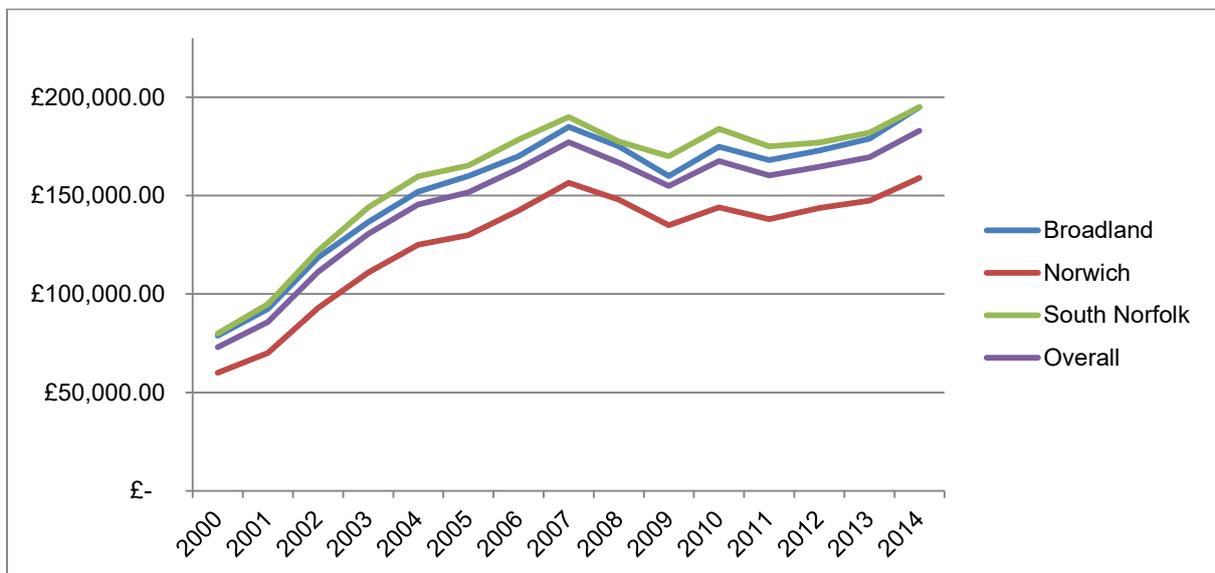


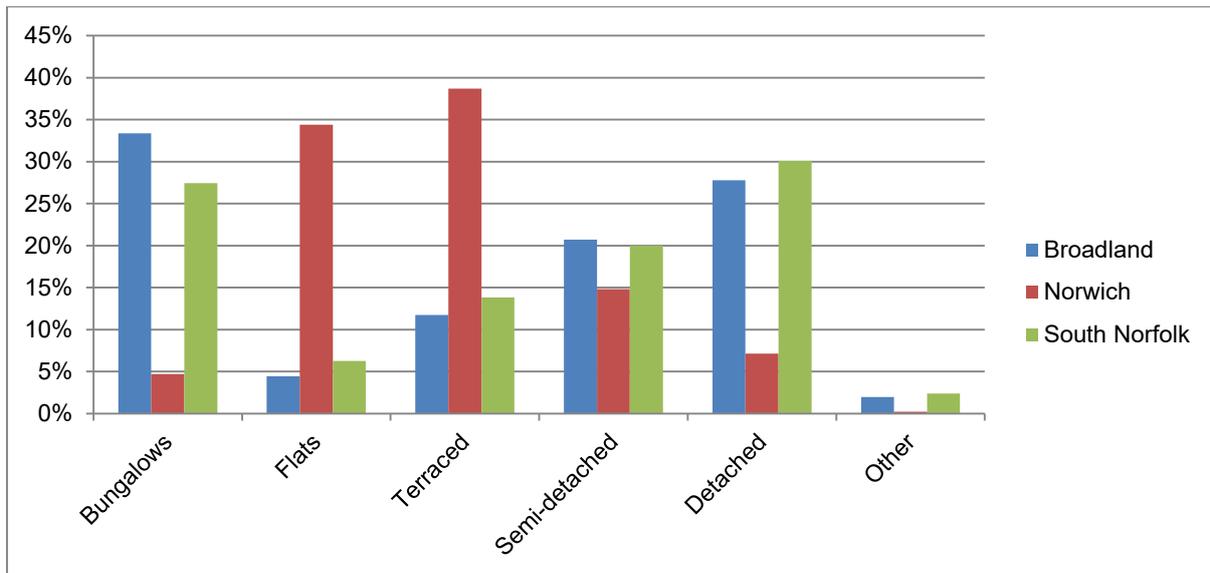
Figure 77 Average house prices 2000-2014



15.3.7. There is variation in the property types prevalent in each of the districts. Norwich is dominated by terraced houses and flats, while Broadland and South Norfolk have more detached houses and bungalows<sup>93</sup>.

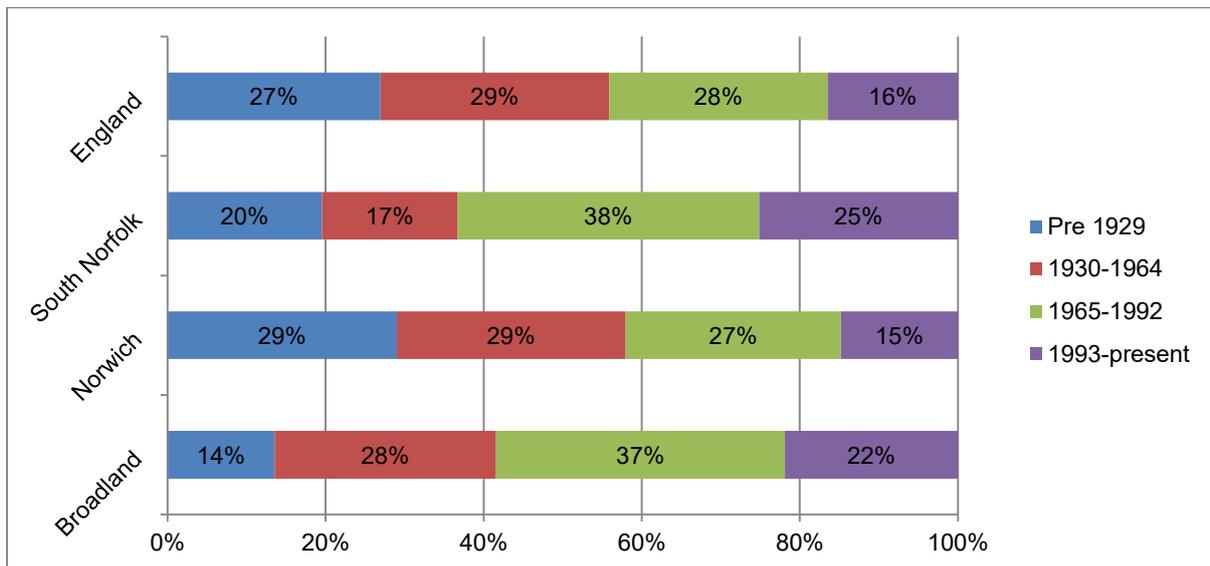
<sup>93</sup> Council Tax: property attributes, VOA

Figure 78 Dwellings broken down by property type



15.3.8. The age of Norwich's housing stock is broadly in line with the national average, while Broadland and South Norfolk have much newer properties with around 60% of their properties having been built since 1965<sup>94</sup>.

Figure 79 Housing stock broken down by age



15.3.9. The population of Greater Norwich has risen steadily over recent decades and this trend is predicted to continue. More detail is given in the population and communities section.

15.3.10. Greater Norwich's Joint Core Strategy plan period started in 2008 and runs to 2026. Housing delivery since that time has been at approximately 60% of targets in the Norwich Policy Area

<sup>94</sup> Council Tax: property attributes, VOA

(NPA), while completions the Rural Policy Area (RPA) have been higher than the Joint Core Strategy targets. As a consequence, overall delivery from 2008-14 was at approximately 70% of targets, compared to national delivery at 60% of the Government's housing target set in 2007. Promisingly, completions have increased every year since 2010/11.<sup>82</sup>

15.3.11. The SHMA considers Office of National Statistics (ONS) predictions as well as local trends and market signals in order to establish an Objectively Assessed Need (OAN) for the Central Norfolk area. The SHMA concludes that Greater Norwich has an Objectively Assessed Need of 52,170 dwellings over the 24-year period 2012-36. This equates to 2,174 dwellings per year compared to the JCS annual requirement of 2,046 per year. Evidence suggests that this is likely to mean that sites for approximately 12,000 additional dwellings in addition to existing planning permissions and allocations will need to be identified through the GNLP.

15.3.12. These figures take account of the jobs planned as part of the City Deal for Greater Norwich.

Figure 80 Housing Need

	Objectively Assessed Housing Need (to 2036) <sup>95</sup>
Broadland	13,100
Norwich	19,900
South Norfolk	19,200
Greater Norwich Total	52,200

15.3.13. The SHMA also identifies the amount of social housing that will be required over the same period, totalling 12,700 across Greater Norwich by 2036<sup>96</sup>. This equates to 21% of the total Great Norwich Objectively Assessed Housing Need, but there are significant variations across the districts. Affordable housing needs make up 36% of the total need in Norwich, while it is only 17% in Broadland and 18% in South Norfolk.

<sup>95</sup> Central Norfolk Strategic Housing Market Assessment 2015

<sup>96</sup> Central Norfolk Strategic Housing Market Assessment 2015

Figure 81 Affordable Housing Need

	Affordable dwellings (for purchase) needed to 2036	Social rented dwellings needed to 2036	Total
Broadland	300	1,900	2,200
Norwich	800	6,300	7,100
South Norfolk	700	2,700	3,400
Greater Norwich Total	1,800	10,900	12,700

15.4. Projected Baseline

15.4.1. Without the GNLP, there will be a no local plan policy basis for planning the location, type and amount of housing development beyond the end of the JCS in 2026. The lack of a plan to both guide development to more sustainable locations and to ensure that housing development is promoted in locations and scales which are evidenced to be economically viable risks unplanned, piecemeal housing development which would be unlikely to meet the needs of the area. It would be more difficult to provide the necessary services and infrastructure for such development to make it sustainable for the period to 2036.

15.4.2. In addition, the lack of housing policies on the type of housing provided, for example policies to require affordable housing and starter homes as part of new development, would lead to a decline in the provision of social housing, reduce the ability of young people to purchase their first homes and reduce the ability to create mixed communities meeting the needs of all, with negative social consequences.

15.5. Issues

- New housing and economic growth needs to be planned together to focus housing growth in locations where it can provide the greatest benefits and sustainable access to services and jobs. It is essential to ensure the locations chosen for growth will result in the delivery of the amount and range of housing required to meet needs.
- The delivery of affordable housing is a priority across the whole Greater Norwich Area, with a particularly high need in Norwich.
- There is a need to ensure sufficient pitches are provided to meet the needs of the Gypsies & Travellers along with those of Travelling Showpeople.

## 16. SECTION 16 – LIMITATIONS IN DATA FOUND

- 16.1.1. Inevitably there will be difficulties in accessing data to contribute to the baseline of such a report. Data sets on the following issues may be helpful to include, where possible. Further attempts will be made to access useful information when drafting of the main SA report.
- 16.1.2. It would be helpful to include a map showing green infrastructure projects which support growth identified in the JCS. However, this would require additional digitising of various projects.
- 16.1.3. Likewise it may be helpful to have an area-centric version of the Norfolk Broad Habitat Map, if this proves possible when the final SA report is produced.
- 16.1.4. The available mapping of the agricultural land classification does not show a distinction of category 3a and 3b. 3a is considered to be in the 'best and most versatile' definition.
- 16.1.5. There is likely to be a need to review the Water Cycle Study (2010) evidence base, this may helpfully update information in the SA baseline.
- 16.1.6. There are numerous non-statutory locally designated heritage assets in the area. It could be helpful to represent these on a map, but it is possible that this will not be practicable due to the number of them. In addition, currently no information has been obtained on areas which may have the potential for historic or archaeological interest which are currently unidentified.
- 16.1.7. Information on the quality and capacity of health and leisure facilities, and their accessibility would add fine grain detail to health section, and may allow more informed identification of issues, if this information can be obtained.
- 16.1.8. Further qualitative information on the types of crime, potential causes of crime and statistics on the fear of crime could be included in the full report, if available.
- 16.1.9. Providing information on access to education establishments and the capacity of educational facilities would provide a helpful facet to the baseline data.
- 16.1.10. Likewise, it would be useful to investigate the reasons behind the worsening education result in the Index of Multiple Deprivation for Norwich.
- 16.1.11. Information on the location of minerals safeguarding areas would be helpful and could be included in the later report.

16.1.12. Data from the districts' databases of contaminated land would be a helpful addition to the sustainability baseline.

16.1.13. Additionally, figure 84 suggests indicators and targets to monitor sustainability issues. At present, no indicators have been identified in relation to noise levels, green infrastructure, geodiversity, landscape character, contamination and provision of community or education facilities. There will be a need for further work on targets in some cases.

## 17. SECTION 17 – SUMMARY OF SUSTAINABILITY ISSUES

17.1.1. The issues identified in sections 1 to 15 above are set out in figure 82 below.

Figure 82 Summary list of Issues

Theme	Issue
Air Quality	Although air quality is generally good in the area, there are Air Quality Management Areas (AQMA) in Norwich City Centre and in Hoveton, adjacent to the plan area, along with other isolated sites of reduced air quality.
	There are high noise levels around Norwich International Airport and main roads in the area and light pollution from urbanised areas.
Climate Change	Climate change is expected to increase the frequency and intensity of extreme weather events such as heat waves, drought and intense rainfall.
	Fluvial/tidal flooding is a risk affecting limited parts of the area, while surface water and sewer flooding is a risk in a number of places.
	Although per capita CO2 emissions have been declining in line with national trends, they are above the national average in rural parts of the area.
	There is potential to increase renewable energy production chiefly from solar, wind and biomass developments, as well as from micro-renewables.
Biodiversity, Geodiversity and Green Infrastructure	There is a need to protect and enhance nationally and internationally protected nature conservation interests and geodiversity sites in and adjacent to the area, with particular emphasis on reducing visitor pressure on and improving water quality in Natura 2000 sites and the wider habitats of the Broads.
	There are a number of locally important biodiversity sites that should be protected and enhanced.
	Long term investment in improvements to the defined green infrastructure network is required.
Landscape	Development should maintain important aspects of Greater Norwich's varied landscapes, including historic parks and gardens and ancient woodlands.
	Defined strategic gaps, including those between Wymondham and Hethersett and Hethersett and Cringleford, are important to maintain the settlement pattern in rural areas.

	Regard must be had to the distinctive landscape of the Broads.
Water	Since the area has low rainfall, water efficiency is a significant issue locally.
	Water quality in Natura 2000 protected sites is an issue, particularly in relation to water abstraction from the River Wensum and water disposal at Long Stratton and into the River Yare. Consequently there is a need to improve water quality to achieve Water Framework Directive (WFD) targets and to protect habitats.
Built Heritage	There is a great wealth of heritage assets in the area of both national and local significance. A limited number of these assets are on the heritage at risk register.
	Due to the long history of habitation in the area, there is significant potential for archaeological artefacts and finds throughout Greater Norwich.
People and Communities	There is a need to provide for continued growth in the population of approximately 15-16% from 2012 to 2036.
	It is necessary to provide services and housing to meet the needs across the area, particularly those of younger adults in Norwich, of remote rural communities and of the growing older population throughout the area. There will be a particular need to provide services and housing to meet the needs of younger adults in Norwich and to provide for the growing older population throughout the area.
	The needs of the small but growing ethnic groups in the area will need to be taken into account.
Deprivation	There is a need to minimise socio-economic disadvantage and reduce deprivation, which particularly affects a number of areas of Norwich and some rural areas.
Health	It will be important to ensure that Greater Norwich's good levels of health are supported, with a particular focus on reducing the health gap between different areas and on providing the necessary health services and facilities for a growing and ageing population.
Crime	Although levels of crime are generally low, there are higher crime levels in inner urban wards, particularly in areas with a concentration of late night drinking establishments.
Education	It is important to increase educational attainment and skill levels, particularly in the more deprived parts of the area. and in other areas where there is low educational attainment.
Transport and Access to Services	Development should be located where transport options are, as far as possible, not limited to using the private car, so that

	<p>sustainable transport options can be promoted, and where the need for additional infrastructure can be minimised.</p> <p>There is a need to improve the strategic transport network, most particularly improvements to the rail network, to the A47 and to provide good quality public transport access to Norwich International Airport.</p> <p>Further investment is required to promote sustainable transport patters. The completion of the NDR provides the opportunity to implement further improvements in the Norwich urban area and in the main growth locations and to reduce cross city traffic movements.</p> <p>In rural areas, access to public transport is poor and subsidies are likely to decline, so it will be important to sustain local public transport services where possible and to support demand responsive transport.</p> <p>It will be important to improve access to high speed broadband and mobile phone connectivity, particularly in rural areas.</p> <p>Road safety should be improved.</p>
Natural Resources, Waste and Contaminated Land	<p>It is important to ensure waste management accords with the waste hierarchy and reduces the overall quantity of waste.</p> <p>Waste facilities will need to be provided to cater for a growing population, prevent fly tipping and increase recycling rates.</p> <p>Appropriate storage and segregation facilities for waste will need to be provided on new development.</p> <p>Mineral resources including sand and gravel and minerals and waste infrastructure should be safeguarded.</p> <p>The use of secondary and recycled aggregates in all developments to reduce the need for primary aggregate extraction and increase inert construction and demolition waste recycling should be promoted.</p> <p>There are high quality soils (grades 1, 2 and 3a) in many parts of the area and limited areas of contaminated land mainly on brownfield sites.</p>
Employment and the Economy	<p>Greater Norwich is a regionally important economic centre,, with a the potential for significant growth.</p> <p>Employment land provision needs to support the existing main employment sectors including retail; health; and financial services and also sectors with high growth potential including advanced manufacturing and engineering; agri-tech; energy; ICT/digital culture; and life sciences.</p> <p>Norwich city centre is a main regional focus for employment, retailing, tourism, culture, education and leisure.</p>

	Rural enterprises remain important to the local economy and home working is likely to increase in significance.
Housing	New housing and economic growth needs to be planned together to focus housing growth in locations where it can provide the greatest benefits and sustainable access to services and jobs. It is essential to ensure the locations chosen for growth will result in the delivery of the amount and range of housing required to meet needs.
	The delivery of affordable housing is a priority across the whole Greater Norwich Area, with a particularly high need in Norwich.
	There is a need to ensure sufficient pitches are provided to meet the needs of the Gypsies & Travellers along with those of Travelling Showpeople.

## 18. SECTION 18 – THE SUSTAINABILITY FRAMEWORK

18.1.1. The sustainability framework aims to define what sustainable development means for the Greater Norwich Local Plan. It comprises a set of objectives that derive from the context, baseline and issues identified in the previous sections and appendix 1. The framework provides a consistent way for the strategy, policies and potential growth locations to be assessed.

18.1.2. The ultimate aim of the sustainability framework, therefore, is to ensure the Local Plan addresses environmental, economic and social issues. The sustainability framework identifies these features with, at this scoping stage before local plan policies have been drafted, suggestions for indicators to monitor their progress.

18.1.3. Since some issues are difficult to measure, some indicators are indirectly related to objectives. In addition, changes to indicators (e.g. in rates of recycling) may not only result from local plan policies. However, since the SA is primarily concerned with achieving more sustainable development, rather than with attempting to quantify future changes, these issues are not regarded as significant.

18.1.4. Annex 1(f) of the SEA Directive lists a number of topics that should be considered in the SEA process (and therefore the SA process). These are presented in figure 83 below, along with the relevant SA themes in this report.

Figure 83 Compliance with SEA

SEA Topic	Relevant SA Themes/Objectives
Landscape	Landscape
Biodiversity	Biodiversity, Geodiversity and Green Infrastructure
Flora	Biodiversity, Geodiversity and Green Infrastructure
Fauna	Biodiversity, Geodiversity and Green Infrastructure
Soil	Natural Resources, Waste and Contaminated Land
Water	Water
Air	Air Quality and Noise
Climatic factors	Climate change
	Biodiversity, Geodiversity and Green Infrastructure
	Transport and Access to Services
Cultural Heritage (including architectural and archaeological)	Cultural Heritage

Material Assets	Housing
	Economy
	Minerals and Waste
Population	People and Communities
	Deprivation
	Education
	Crime
Human Health	Air Quality and Noise
	Health
	Natural Resources, Waste and Contaminated Land

18.1.5. The SA framework in figure 84 includes sustainability themes, along with objectives related to each theme. The over-arching objective for each theme sets out what the Local Plan should be trying to achieve in relation to sustainable development. Each objective is accompanied by a set of supporting sub-objectives which address more specific sustainability issues and can help to guide strategic decisions. These are followed by decision making criteria which can be applied to both general policies and to site allocations. at a more local level, for example when assessing sites. These are suitable for all types of allocation including those for housing, employment and retail development.

18.1.6. The final column shows suggestions for the indicators and targets which will be used to measure the plan's sustainability performance. The indicators will be finalised as the SA/SEA progresses, before production of the sustainability report.

18.1.7. Applying the SA framework will allow a systematic approach through all the stages of sustainability appraisal and plan making. By comparing the proposed Local Plan objectives, strategy, policy and allocations against this framework, it should be possible to determine if the Local Plan is contributing to sustainable development.

Figure 84 – Sustainability Appraisal Framework

Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
Air Quality & Noise (ref: SA1)	Minimise air, noise and light pollution to improve wellbeing.	<ul style="list-style-type: none"> <li>• Will it have a significant impact on AQMAs in Norwich city central and Hoveton?</li> <li>• Will it minimise impact on air quality?</li> <li>• Will it minimise the impact of light and noise pollution?</li> </ul>	Indicator Concentration of selected air pollutants: a) NO2 b) PM10 (particulate matter) Target Decrease
Climate Change Mitigation and Adaptation (ref: SA2)	Continue to reduce carbon emissions, adapting to and mitigating against the effects of climate change.	<ul style="list-style-type: none"> <li>• Will it minimise CO2 emissions?</li> <li>• Will it support decentralised and renewable energy generation?</li> <li>• Will it minimise the risk of fluvial or surface water flooding?</li> </ul>	Indicator CO2 emissions per capita Target Reduction in emissions  Indicator Sustainable and renewable energy capacity permitted by type Target Year on year permitted capacity increase Indicator Number of planning permissions granted contrary to the advice of the Environment Agency on either flood defence or water quality grounds Target Zero

<p>Biodiversity, Geodiversity &amp; Green Infrastructure (ref: SA3)</p>	<p>Protect and enhance the area's biodiversity and geodiversity assets, and expand the provision of green infrastructure.</p>	<ul style="list-style-type: none"> <li>• Will it minimise impact on designated sites and important species and habitats?</li> <li>• Could it provide opportunities for bio- or geo-diversity enhancement?</li> <li>• Could it contribute to green infrastructure networks?</li> <li>• Will it help minimise the impact on air quality at designated sites?</li> <li>• Will it ensure that current ecological networks are not compromised and future improvements in habitat connectivity are not prejudiced?</li> </ul>	<p>Indicator  <b>Net change in Local Sites in "Positive Conservation Management"</b>  Target  Year on year Improvements  Indicator  Percentage of SSSIs in:  a) favourable condition  b) unfavourable recovering  c) unfavourable no change  d) unfavourable declining  e) destroyed/ part destroyed  Target  95% of SSSIs in  'favourable' or 'unfavourable recovering' condition  Indicator  Number of Planning Approvals granted contrary to the advice of Natural England or Norfolk Wildlife Trust (on behalf of the County Wildlife Partnership) or the Broads Authority on the basis of adverse impact on site of acknowledged biodiversity importance.  Target  None  Indicator  Percentage of allocated residential development sites, or sites permitted for development of 10 or more homes, that have access to a semi-natural green space of at least 2ha within 400m.  Target  Minimise</p>
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Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
			<p>Indicator Length of new greenway (defined as a shared use, car-free off road route for a range of users and journey purposes) provided as a consequence of a planning condition, S106 obligation or CIL investment.</p> <p>Target Increase</p> <p>Indicator Total hectares of accessible public open space (cumulative) provided as a consequence of a planning condition, S106 obligation or CIL investment within the plan period</p> <p>Target Equal to or above current local plan requirements.</p>
Landscape (ref: SA4)	Promote efficient use of land, while respecting the variety of landscape types in the area.	<ul style="list-style-type: none"> <li>• Will it minimise impact on the landscape character of the area, including the setting of the Broads?</li> <li>• Will it enable development of previously developed land?</li> <li>• Will it make efficient use of land?</li> </ul>	<p>Indicator Percentage of new and converted dwellings on Previously Developed Land</p> <p>Target 18% to 2026 (based on JCS housing allocations, update in line with GNLP)</p> <p>Indicator Number of Planning Approvals granted contrary to the advice of the Broads Authority on the basis of adverse impact on the Broads Landscape</p> <p>Target None</p>

Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
Housing (ref: SA5)	Ensure that everyone has good quality housing of the right size and tenure to meet their needs.	<ul style="list-style-type: none"> <li>• Will it ensure delivery of housing to meet needs in appropriate locations?</li> <li>• Will it deliver affordable housing and other tenures to meet needs?</li> <li>• Will it ensure a variety in the size and design of dwellings, to meet a range of circumstances and needs?</li> </ul>	<p>Indicator Net housing completions Target Meet or exceed annual trajectory requirements</p> <p>Indicator Affordable housing completions Target tbc</p> <p>Indicator House completions by bedroom number, based on the proportions set out in the most recent Sub-regional Housing Market Assessment Target Figures within 10% tolerance of the Housing Market Assessment Requirements</p> <p>Indicator Starter Homes completions Target 20% of homes delivered are starter homes</p>
Population and Communities (ref: SA6)	Maintain and improve the quality of life of residents	<ul style="list-style-type: none"> <li>• Will it enhance existing, or provide new community facilities?</li> <li>• Will promote integration with existing communities?</li> </ul>	No indicators for provision of community facilities have been identified

Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
Deprivation (ref: SA7)	To reduce deprivation	<ul style="list-style-type: none"> <li>Will it help to reduce deprivation?</li> </ul>	Indicator and targets from IMD to be identified
Health (ref: SA8)	To promote access to health facilities and promote healthy lifestyles	<ul style="list-style-type: none"> <li>Will it maximise access to health services, taking into account the needs of an ageing population?</li> <li>Will it promote healthy lifestyles?</li> <li>Will it avoid impact on the quality and extent of existing assets, such as formal and informal footpaths?</li> </ul>	<p>Indicator Percentage of physically active adults Target Increase percentage annually or achieve percentage above England average</p> <p>Indicator and target for access to health facilities to be identified</p>
Crime (ref: SA9)	To reduce crime and the fear of crime	<ul style="list-style-type: none"> <li>Will it help design out crime from new development?</li> </ul>	Indicator and target for crime reduction to be identified
Education (ref: SA10)		<ul style="list-style-type: none"> <li>Will it enable access to education and skills training?</li> </ul>	Indicator and target for access to education facilities to be identified

Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
Economy (ref: SA11)	Encourage economic development covering a range of sectors and skill levels to improve employment opportunities for residents, and maintain and enhance town centres.	<ul style="list-style-type: none"> <li>• Will it promote Greater Norwich as a regional economic centre?</li> <li>• Will it promote employment land provision to support existing and future growth sectors?</li> <li>• Will it promote a range of employment opportunities?</li> <li>• Will it promote vibrant town centres?</li> <li>• Will it promote the rural economy?</li> </ul>	<p>Indicator Amount of land developed for employment by type Target 118ha B1 &amp; 111ha B2 / B8 2007 to 2026 (split into five year tranches, based on JCS targets - update in line with GNLP targets)</p> <p>Indicator Annual count of jobs by BRES across the Plan area Target Measure against GNLP annualised jobs targets (2,222 p.a in JCS.)</p> <p>Indicator Employment rate of economically active population Target Increase</p> <p>Indicator Percentage of workforce employed in higher occupations Target Annual increase of 1%</p>

Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
Transport and access to services  (ref: SA12)	Reduce the need to travel and promote the use of sustainable transport modes.	<ul style="list-style-type: none"> <li>• Does it reduce the need to travel?</li> <li>• Does it promote sustainable transport use?</li> <li>• Does it promote access to local services?</li> <li>• Does it promote road safety?</li> <li>• Does it promote strategic access to and within the area?</li> </ul>	Indicator Percentage of residents who travel to work: a) By private motor vehicle b) By public transport c) By foot or cycle d) Work at, or mainly at, home Target Decrease in a), increase in b), c) and d)  Indicator IMD Access to services and housing Target Increase the number of LSOAs In the least deprived 50% on the IMD for access to housing and services
Historic Environment  (ref: SA13)	Conserve and enhance the historic environment, heritage assets and their setting, other local examples of cultural heritage, preserving the character and <b>diversity of the area's historic built environment.</b>	<ul style="list-style-type: none"> <li>• Does it enable the protection and enhancement of heritage assets, including their setting?</li> <li>• Does it provide opportunities to reveal and conserve archaeological assets?</li> <li>• Could it benefit heritage assets currently 'at risk'?</li> </ul>	Indicator Percentage of Conservation Areas with appraisals Target Year on year increase  Indicator Heritage at risk – number and percentage of a) Listed buildings; and b) Scheduled Ancient Monuments on Buildings at Risk register Target Year on year reduction

Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
Natural Resources, Waste and Contaminated Land (ref: SA14)	<p>Minimise waste generation, promote recycling and avoid the sterilisation of mineral resources.</p> <p>Remediate contaminated land and minimise the use of the best and most versatile agricultural land.</p>	<ul style="list-style-type: none"> <li>• Does it contribute to the minimisation of waste production and to recycling?</li> <li>• Does it safeguard existing and planned mineral and waste operations?</li> <li>• Will it help to remediate contaminated land?</li> <li>• Does it avoid loss of the best and most versatile agricultural land (grades 1-3a)?</li> <li>• Will there be adequate provision for waste and recycling facilities?</li> </ul>	<p>Minerals and waste indicators and targets tbc</p> <p>Indicator Number of planning permissions granted on non-allocated sites on class 1, 2 or 3a agricultural land Target Zero</p> <p>Indicator Percentage of land allocated for development, or subject to an extant planning permission of 5 or more dwellings that is identified as Grade I or II agricultural land value. Target Minimise</p> <p>No indicators for contaminated land have been identified</p>

Theme	Over-arching Objective	Decision making criteria for site allocations and general policies	Suggested indicators and targets
Water (ref: SA16)	Maintain and enhance water quality and ensure the most efficient use of water	<ul style="list-style-type: none"> <li>• Will it maximise water efficiency?</li> <li>• Will it minimise impact on water quality?</li> <li>• Will it impact on water discharges that affect designated sites?</li> <li>• Will it contribute to achieving the River Basin Management Plan actions and objectives?</li> </ul>	<p>Indicator Water efficiency in new homes</p> <p>Target All new housing schemes to achieve water efficiency standard of 110 litres/person/day (lpd)</p> <p>No indicators for water infrastructure have been identified.</p> <p>See also flood section (Number of planning permissions contrary to the advice of the Environment Agency on either flood defence or water quality grounds)</p>

## 19. THE NEXT STAGES

- 19.1.1. Appointed consultants (Lepus) will act as a critical friend providing advice on the early stages of the SA and will write the SA report itself, with some input from greater Norwich officers.
- 19.1.2. This SA Scoping report will be subject to consultation with the Statutory Consultees (Historic England, Natural England and the Environment Agency) and others. Any comments made on the SA Scoping Report will be considered and the SA scope and methodology will evolve as appropriate, with changes incorporated into the SA Report. The SA Report will require sign off from the councils before it is submitted with the local plan.
- 19.1.3. As a result of the above, at this stage it is only possible to set out an outline methodology for the remainder of the SA/SEA process based on the key elements of Sustainability Appraisal which are necessary to comply with legislation and to inform the plan making.
- 19.1.4. Reasonable Alternatives
- 19.1.5. Alternative sites for growth and strategic policy approaches will need to be considered. **Since only “reasonable alternatives” for sites and policies are required to be appraised under SA/SEA legislation, a means of identifying which alternatives are considered “reasonable” and which are not will be established.** A “reasonable alternative” should be different enough from other options to allow a meaningful comparison, and should be realistic and deliverable.
- 19.1.6. The Interim SA Report
- 19.1.7. An interim SA Report will be produced to accompany the regulation 18 (Favoured Option and Reasonable Alternatives) version of the plan. This document is likely to include the following stages:
- Identification of broad locations for growth and strategic policy options, including providing an explanation of which broad growth locations and strategic policy options are considered to be unreasonable and therefore do not need to be assessed further;
  - SA/SEA, using the Sustainability Appraisal Framework in figure 84 above, of the reasonable alternatives for specific locations for growth and policy options identified in stage 1 above to assist in identifying the favoured option.
- 19.1.8. The SA Framework will consider the potential impacts (including the cumulative impacts) of different scales of growth, or selecting some settlements for more growth than others on the same tier of the settlement hierarchy, including considering the sustainability of individual sites. Given that a large number of sites for consideration for allocation in the local plan are likely to come forward through the “Call for Sites”, it is probable that a “cluster approach” will be taken to assessing sites.
- 19.1.9. The SA process will consider what mitigation could be applied to alleviate sites’ impacts, thereby influencing site selection policy. By

default, SA helps to identify sites which have overriding constraints. However, while the SA process influences the site allocation process, the final choice of sites through the plan-making process will also need to consider wider policy issues.

- 19.1.10. The suggested indicators set out in figure 84 will be amended as appropriate and will be used in the long term to help to assess the success of the plan in sustainability terms.
- 19.1.11. SA Report
  - 19.1.12. The SA Report and a non-technical summary will be issued at the regulation 19 publication stage to appraise the Draft Local Plan. This will meet the requirements of Regulation 12 of the Environmental Assessment of Plans and Programmes Regulations 2004.
- 19.1.13. Modifications
  - 19.1.14. Further Sustainability Appraisal will be required if main modifications are proposed during the Local Plan examination which are likely to lead to “significant effects”.
- 19.1.15. Environmental Adoption Statement
  - 19.1.16. There is a legal requirement to publish an Environmental Adoption Statement on adoption of the plan, the date of which is scheduled for 2020. The statement covers a wide range of issues, setting out the role of the SA/SEA in shaping and monitoring the plan.

## 20. GLOSSARY

AMR	Annual Monitoring Report
AQMA	Air Quality Management Area
BRCFMP	Broadland Rivers Catchment Flood Management Plan
BRT	Bus Rapid Transit
CCG	Clinical Commissioning Group
CGS	County Geological Site
CHP	Combined Heat & Power
CIL	Community Infrastructure Levy
CWS	County Wildlife Site
DECC	Department for Energy and Climate Change
EA	Environment Agency
EU	European Union
GI	Green Infrastructure
GNLP	Greater Norwich Local Plan
GTAA	Gypsy & Traveller Accommodation Assessment
GVA	Gross Value Added
IMD	Indices of Multiple Deprivation
JCS	Joint Core Strategy for Broadland, Norwich & South Norfolk
LAQM	Local Air Quality Management
LEP	Local Enterprise Partnership
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
LSOA	Lower Super Output Area
NATS	Norwich Area Transportation Strategy
NBIS	Norfolk Biodiversity Information Service
NDR	Northern Distributor Road
NHER	Norfolk Historic Environment Record
NIA	Norwich International Airport
NPA	Norwich Policy Area
NPPF	National Planning Policy Framework
NPPW	National Planning Policy for Waste
OAN	Objectively Assessed Needs

ONS	Office of National Statistics
PAS	Planning Advisory Service
PPG	Planning Practice Guidance
PV	Photovoltaic
RPA	Rural Policy Area
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SANG	Suitable Alternative Natural Greenspace
SEA	Strategic Environmental Assessment
SEP	Strategic Economic Plan
SHMA	Strategic Housing Market Assessment
SMP	Shoreline Management Plan
SPA	Special Protection Area
SPD	Supplementary Planning Document
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage System
WFD	Water Framework Directive
WRMP	Water Resources Management Plan
WRZ	Water Resources Zone

## APPENDIX 1

### A REVIEW OF RELEVANT PLANS, PROGRAMMES AND STRATEGIES FOR SUSTAINABLE DEVELOPMENT

This appendix, in combination with the context sections for each theme in the Scoping Report, meets Strategic Environmental Assessment (SEA) directive 2001/42/EC article 5, annex I (e) requirements: The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

Document Title	Key Relevant Objectives	Implications for future development	Issues for Sustainability Appraisal
<b>INTERNATIONAL</b>			
The Convention on Wetlands of International Importance 1971 (amended 1982)	Requires signatory states to designate important wetlands for conservation in particular waterfowl habitats. Designation of Ramsar Sites to be protected from development	Ensure that the Local Plan does not support development that threatens designated wetland sites.	Protect designated wetland sites
The Convention on Biological Diversity, Rio de Janeiro, 1992	The main driver of the SEA Directive. Article 6A of the Convention requires each Contracting Party to develop national strategies, plans and programmes for the conservation and sustainable use of biological diversity.	Ensure that the plan does not support development that threatens designated biodiversity sites.	Maintain and enhance biodiversity and geodiversity
Kyoto Protocol (1997)	Implemented measures to limit and / or reduce emissions of greenhouse gases. The protocol was ratified in 2004.	Ensure the plan contributes to greenhouse gas reduction targets by reducing greenhouse gas emissions.	Reduce the effect of / greenhouse gases traffic on the environment
The Johannesburg Declaration on Sustainable Development, 2002	Focus the world's attention and direct action toward meeting difficult challenges, including improving people's lives and conserving our natural resources in a world that is growing in population, with ever-increasing demands for food, water, shelter, sanitation, energy, health services and economic security.		Relates to water, energy, economy and social aspects of the plan.
<b>EUROPEAN</b>			
European Climate Change Programme	To combat climate change by means of various cross-cutting measures in the fields of energy, industry and transport.	Ensure plan contributes to greenhouse gas reduction targets by reducing greenhouse gas emissions.	To adapt and mitigate against the impacts of climate change.
The EU Water Framework Directive 2000 2000/60/EC	Applies to surface waters (including some coastal waters) and groundwater. It requires member states, among other things, to prevent deterioration of aquatic ecosystems and protect, enhance and restore water bodies to 'good' status.	The plan must have regard to the river basin management plans and water resource plans that help to implement the Water Framework Directive. These plans contain the main issues for the water environment and the actions needed to tackle them.	Protect and enhance water quality

Air Quality Framework Directives 1996/62/EC, 1999/30/EC, and 2008/50/EC	Establishes mandatory standards for air quality and sets limits and guides values for sulphur and nitrogen dioxide, suspended particulates and lead in air. Establishment of limit values for concentrations of sulphur dioxide, nitrogen dioxide, particulate matter and lead in the ambient air.	Avoid detrimental impacts on air quality. Help to mitigate in designated Air Quality Management Areas.	Relates to reducing emissions from development and ensuring that limit values are not exceeded due to resulting traffic.
The Conservation of Natural Habitats and of Wild Fauna and Flora Directive (92/43/EEC)	To contribute towards ensuring biodiversity through the conservation of natural habitats and of wild flora and fauna; designation of Special Areas of Conservation. Requirement for “appropriate assessments” to consider effects on sites of European importance.	Protection and management of biodiversity and areas of significant habitat and ecological importance.	Impact on habitats and species Development to avoid areas of particular importance, including particular consideration of Natura 2000 sites such as SACs and SPAs
Directive (2001/77/EC) Promotion of development of renewable energy sources and their use	Promotion of development of renewable energy sources and their use.	Promotion of renewable energy	Contribution to use of renewable energy
EC Directive on the assessment of the effects of certain plans and programmes on the environment (2001/42/EC)	To provide for a high level of protection of the environment & to contribute to integration of environmental considerations into preparation of plans & programmes .... promoting sustainable development. “Environmental assessments” should be carried out for plans which are likely to have significant effects on the environment.	The plan should be accompanied by SA to ensure: <ul style="list-style-type: none"> <li>• Policies in plan will contribute to sustainable development.</li> <li>• That there is full stakeholder &amp; public consultation in the process.</li> </ul>	The SA framework should ensure the objectives of this overarching document are covered
<b>NATIONAL</b>			
Localism Act (2011)	Devolves powers to councils and neighbourhoods to give local communities more control over housing and planning decisions.	Ensure that the consultation process enables genuine opportunities for local people to be involved in the Local Plan process and to be part of planning decisions made in the areas affected.	Contribution to community involvement. Improve the quality of where people live.

Waste Regulations (2011)	Emphasis on waste hierarchy to ensure waste is dealt in the priority order of prevention	Prevent waste, preparing reuse, recycling	To make best use of resources minimize waste production
Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)	Further improve air quality in the UK into the long term. As well as direct benefits to public health, the options are intended to provide important benefits to quality of life and help to protect the environment. The current policy framework and the legislative requirement to meet EU air quality limit values everywhere in the UK tends to direct attention to localised hotspot areas of pollution (where the objectives are not met).	Encourage a reduction in air pollutants.	Contribution to reducing air pollution and improving air quality.

<p>National Planning Policy Framework (2012)</p>	<p>As overarching government policy on plan making, the relevant sections of the NPPF are covered on a topic by topic basis in sections 2 to 11 of this document.</p> <p>Overall, the NPPF guides the implementation of the Localism Bill including the Duty to Cooperate, Neighbourhood Planning and other changes to planning policy.</p> <p>Development is encouraged and the 'presumption in favour of sustainable development' is introduced where proposals which are in line with the local plan policies are approved and proposals can only be refused 'if the adverse impacts of allowing development would significantly outweigh the benefits'.</p>	<p>The Districts preparing this plan need to work closely with the local community and businesses to identify and plan for the needs of the area. Developers are expected to work closely with people affected by their proposal and any design proposed should take into account the view of the community. To build a strong economy land needs to be available for growth and infrastructure. Policies need to be clear how the 'presumption for sustainable development' will be applied. Support the implementation of the "Town Centres First" approach in relevant areas. Policies need to protect and improve the natural and built environment and need to promote the development of strong, vibrant and healthy communities through providing housing, good design and local services. New development should have good public transport links, with priority given to cyclists and people on foot. Local facilities should be accessible by foot.</p>	<p>Contribution to community involvement</p> <p>Contribution to economic provision</p> <p>Contribution to sustainability</p> <p>Improve accessibility to essential services, facilities and jobs</p> <p>Protection of and contribution to green infrastructure</p> <p>Contribution to more sustainable modes of travel</p> <p>Improve the quality of where people live</p>
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<p>National Planning Practice Guidance (NPPG) (2014)</p>	<p>The Planning Practice Guidance (PPG) supports the NPPF. Areas of particular relevance to the plan relate to:</p> <ul style="list-style-type: none"> <li>□□ Air quality (plans should take in to account air quality management areas, air quality is a consideration in the SEA, sustainable transport, need to establish a baseline in Local Plans).</li> <li>□□ Climate change (mitigating and adapting to climate change).</li> <li>□□ Conserving and enhancing the historic environment (positive strategy for the conservation and enjoyment of the historic environment, identify specific opportunities in the area for the conservation and enhancement of the historic environment).</li> <li>□□ Design (design quality should be secured through local plan policy, design guides/codes are supported, local character, safety, crime prevention, security, access inclusion, natural resources and cohesive communities should be considered, encourage a robust relationship between town centres and variable uses such as travel option, hosing, activities, safe walking and cycling routes, transport stops).</li> <li>□□ Duty to cooperate (as part of the Local Plan process).</li> <li>□□ Ensuring the vitality of town centres (town centre first approach, generate local employment; improve the quality of parking, sequential tests).</li> <li>□□ Flood risk (strategic flood risk assessment the application of a sequential approach).</li> <li>□□ Health and wellbeing (promoted through Local Plan policy).</li> <li>□□ Local Plans (preparation in accordance with legislation)</li> <li>□□ Minerals (safeguarding minerals resources)</li> <li>□□ Natural environment (strategic policies for the conservation and enhancement of the natural environment, encouraged use of landscape character assessments, plan positively for biodiversity and green infrastructure, consider agricultural land classifications).</li> <li>□□ Open space, sports and recreation, public rights of way and green space (assess need, protection and provision).</li> </ul>	<p>Supporting the key objectives of the NPPF</p>	<p>Housing need Economic development Infrastructure provision Conservation of natural environment Conservation of the historic environment Viability and deliverability</p>
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	<ul style="list-style-type: none"> <li><input type="checkbox"/> Rural housing (encourage thriving rural community).</li> <li><input type="checkbox"/> SEA &amp; SA (both are required for the AAP).</li> <li><input type="checkbox"/> Viability (use of viability assessment to ensure that plan policies are viable).</li> <li><input type="checkbox"/> Water supply, waste water and water quality (encourage discussions with water and sewerage companies; encourage a catchment based approach, sufficient capacity within the waste infrastructure, EU water framework directive).</li> </ul>		
The Housing and Planning Bill (2015)	<p>Provisions for <b>'starter home'</b> means a building or part of a building that—</p> <ul style="list-style-type: none"> <li>(a) is a new dwelling,</li> <li>(b) is available for purchase by qualifying first-time buyers only,</li> <li>(c) is to be sold at a discount of at least 20% of the market value,</li> <li>(d) is to be sold for less than the price cap, and</li> <li>(e) is subject to any restrictions on sale or letting specified in regulations made by the Secretary of State</li> </ul>	In some cases, Starter Homes requirements may replace affordable housing requirements	Impact on affordability for first time buyers
Planning Policy for Travellers Sites (2015)	To ensure sites are allocated with respect to Travellers Sites	Identify need for traveller sites	Ensure the needs for Traveller Sites are addressed
Noise Policy Statement for England. DEFRA. 2010.	<p>Noise Policy Vision: Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development.</p> <p>Noise Policy Aims: Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:</p> <ul style="list-style-type: none"> <li>• avoid significant adverse impacts on health and quality of life;</li> <li>• mitigate and minimise adverse impacts on health and quality of life; and</li> <li>• where possible, contribute to the improvement of health and quality of life.</li> </ul>		To promote good health and a good quality of life through the management of noise
Making Space for Nature: A review of England's Wildlife Sites	An independent review of England's wildlife sites and ecological network concluding that England's Nature is fragmented and unable to respond effectively to new	Adds weight to the objective of establishing a resilient ecological network through	Protection and contribution of green infrastructure

and Ecological Network (2010)	pressures, such as climate and demographic change. The report emphasises the need to restore natural networks to create a more resilient natural environment.	green infrastructure improvements in the area.	Impact on / enhancement of the environment Contribution to enhanced biodiversity Reduce vulnerability to climate change
Natural Environment White Paper (2011)	Government's vision for the natural environment in the next 50 years in response to Making Space for Nature. - Protecting and improving the natural environment - Growing a green economy - Reconnecting people and nature	Develop a resilient ecological network in the area, promoting the development of ecosystem services, and increasing public access to the natural environment to improve human wellbeing.	Protection and contribution of green infrastructure Impact on / enhancement of the environment Contribution to enhanced biodiversity, Improve the quality of where people live
UK National Ecosystem Assessment (2011)	Analysis of the benefits the natural environment to provide an evidence base on ecosystem change and ecosystem services provision to inform decision making.	Supports the need to strengthen policies to ensure the effective management of the environment and ecosystem services in the future, as well as recognising the importance of the natural environment to human well-being and economic prosperity.	Impact on / enhancement of the environment, Contribution to enhanced biodiversity Improve the quality of where people live
Flood and Water Management Act (2010)	This gives the Environment Agency a strategic overview of the management of flood and coastal erosion risk in England; and gives LLFAs responsibility for putting in place flood management strategies. The Act defines 'risk' and includes district councils as Risk Management Authorities. It also sets out approaches to flood risk management, including: at section 32, sustainable drainage requirements; and at section 40, changing Building Regulations to incorporate greater flood resilience.		Seek opportunities to reduce risk of flooding where feasible



LOCAL

GENERAL			
Sustainable Community Strategies for each district	<p>The main themes of the SCSs for the Greater Norwich Skills and Fulfilling Aspirations</p> <ul style="list-style-type: none"> <li>• To have a sustainable housing, jobs, facilities and services base, whatever their needs;</li> <li>• To have a healthier and safer places and a high quality sustainability that is protected and respected for everyone's enjoyment;</li> <li>• To develop the right infrastructure so that people can travel using varied forms of transport;</li> <li>• To provide opportunities for people to learn at all stages of life;</li> <li>• For people to play an active part in community life and to be involved in decision making.</li> </ul>	Maintain and enhance the elements that contribute to the quality of life.	<p>Improve the quality of where people live</p> <p>Maintenance and improvement of the health of the population</p> <p>Improve accessibility to essential services and facilities</p> <p>Encourage local community identity, good behaviour and co-operative attitudes</p> <p>Maximise the use of renewable energy solutions and reduce contributions to climate change</p> <p>Reduce vulnerability to climate change</p> <p>Improve education and</p>
Joint Core Strategy for Broadland, Norwich and South Norfolk Adopted 2011 , Amended 2014	Sets out long term the development strategy and policies for the area to 2026 and provides the framework for more detailed policies set out in other local plan documents. As the starting point for the GNLP, key elements of the strategy are considered on a topic by topic basis in sections 2 to 11 of this document.		
Broads Authority Core Strategy DPD	Sets policies for determining planning applications.	Development should consider any impacts on the BA area	Impact on unique character of Broads landscape
Broads Site Specifics DPD	The Site Specific Policies DPD relates the policies and objectives of the Core Strategy and Development Management Policies DPDs to identified sites and areas.	Development should consider any impacts on the BA area	Impact on unique character of Broads landscape
HOUSING			
Greater Norwich Housing Strategy 2008-2011	Provides each local authority and its partner organisations with a basis for delivering housing services.	To ensure there are sufficient decent homes which people can afford, in places they want to live,	Contribution to housing provision (market and social)

(2009) Update	Since adopting the original Strategy, much progress has been made but new challenges have emerged	within sustainable and thriving communities.	
Broadland Housing Strategy (2011)	Increasing the supply and availability of good quality private sector rented property Deliver the affordable homes set out in the Joint Core Strategy (JCS) and Local Investment Plan and Programme (LIPP) Maximise the number of affordable homes delivered through the planning system. Increase access to suitable and sustainable accommodation and deliver high quality services to all vulnerable groups	Provide for housing requirements (for all sectors of the population)	
South Norfolk Housing Strategy 2016-19	To ensure all residents have access to and are able to maintain a good quality home that meets their needs and aspirations. The housing secured, and the support provided where appropriate, will assist local people in maximising their life opportunities. Residents will be 'opportunity ready' for housing, jobs, healthy lifestyles, independent living and their community.	A good supply of housing which <b>meets residents' needs, supports growth</b> and can be afforded at all income levels.	
ECONOMY AND EMPLOYMENT			
New Anglia Strategic Economic Plan	Sets out to harness the region's distinct sector strengths and its natural assets to deliver more jobs, new businesses and housing	Ensure that the new local plan supports the aims of the SEP	
New Anglia Green Economy Path Finder	To ensure the economy actively contributes to social, and environmental well-being.	Deliver a strong and sustainable green economy, resilient to climate change	
Greater Norwich Economic Strategy 2009-2014 (2010)	Define priorities for economic development in Greater Norwich for a five year period, to attract investment to the area, create new jobs and enable local businesses to develop.	Promote sustainable development, protecting and enhancing the natural and built environment. Encourage economic development, ensuring the necessary infrastructure and quality is available to attract and retain investment and support business growth. Coordinate the location of employment areas, housing and the provision of a sustainable transport	Contribution to economic provision Sustainability of development locations Contribution to strategic infrastructure Contribution to sustainable transport infrastructure Contribution to accessibility for all

		system to improve access to jobs, facilities and services for all. Increase the number of new business start-ups and support the growth of small and medium sized enterprises to create more sustainable jobs.	Contribution to regeneration and renewal Protection of and contribution to green infrastructure Encouraging cultural diversity
South Norfolk Economic Strategy 2011-2014.	The Economic Strategy has been developed to support the themes and related objectives. The themes and related objectives are:- 1. Business support and infrastructure 2. Growth sectors and strategic locations 3. Skills and aspirations 4. Market towns, rural economy and tourism The primary aim is for the area to be attractive for enterprise and business investment.	The Economic Strategy has been developed to support the themes and related objectives. The themes and related objectives are:- 1. Business support and infrastructure 2. Growth sectors and strategic locations 3. Skills and aspirations 4. Market towns, rural economy and tourism	Ensure economic development is sustainably located
MINERALS AND WASTE			
Minerals Site Allocations DPD and Waste Site Allocations DPD Norfolk County Council (to 2026) (2013)	These documents consists of the locations that are acceptable in principle and available for mineral extraction sites or waste management facilities in Norfolk throughout the plan period, up until the end of 2026, as assessed against local and national policies. The Waste Site Specific Allocations Plan allocates 9 sites for a range of waste management operations across the Greater Norwich area to the end of 2026. The Minerals Site Specific Allocations Plan identifies and allocates 12 sites within the Greater Norwich Area for mineral extraction. The presumption is that appropriate minerals or waste management facilities would be permitted on the allocated sites that are consistent with the site allocation policy requirements in the plan and relevant local and national policies.	Ensure development does not hinder the implementation of this plan	Ensure efficient use of mineral resources Safeguard existing and planned mineral and waste operations
Core Strategy and Waste DM Policies DPD Norfolk County Council	Sets out the spatial vision and strategic objectives for minerals and waste development in Norfolk over the time period from 2010 to 2026. The Core Strategy document also contains policies for use in making decisions on planning applications for	Ensure development takes into consideration the potential impacts of planned minerals and waste development, and ensure that development in the local plan does	Include provision for waste storage and segregation

(2010 – 2026)	mineral extraction and associated development and for waste management facilities, and in the selection of site specific allocations in Norfolk	not hinder the planned development for minerals and waste.	
CLIMATE CHANGE			
Norwich Urban Area Surface Water Management Plan Norfolk County Council (2011)	<p>Undertake a risk assessment of Surface Water Flows across the Norwich Urban Area</p> <p>Identify potential options for surface water management across Norwich Urban Area</p> <p>Prepare an Action Plan for Surface Water Management and set out proposals for implementation and review (including proposals for spatial planning measures).</p>	<p>Identifies three Critical Drainage Areas:</p> <ul style="list-style-type: none"> <li>➤ Drayton</li> <li>➤ Catton Grove &amp; Sewell</li> <li>➤ Nelson &amp; Town Close</li> </ul> <p>Publication of SWMP may trigger review of Joint Level 1 SFRA and Level 2 SFRA for Norwich.</p> <p>May identify the need for further flood risk assessment of possible development sites where effected by areas at risk of surface water flooding.</p> <p>Could have implications for design in terms of layout and siting of buildings, the design of roads and streets, use of materials and detailing and the provision of green infrastructure.</p> <p>Possible implications for CIL &amp; LIPP in terms of the incorporation of SUDS into existing public spaces and roads to address existing problems.</p>	<ul style="list-style-type: none"> <li>➤ avoid, reduce and manage flood risk, including surface water flood risk.</li> <li>➤ risks of flooding</li> </ul>
Partnership of Norfolk District Councils - Strategic Flood Risk Assessment (2008)	Ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. Where new development is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk	Consider the implications of flood risk for development, avoiding risks where possible and enabling improvements	Avoid, reduce and manage flood risk

	elsewhere and where possible, reducing flood risk overall.		
Electricity Market Reform (EMR) White Paper (2011)	Sets out the government's commitments to ensure the UK source of electricity is secure, low-carbon and affordable by 2030.	Promotion of sustainable energy.	Contribution to use of renewable / low carbon energy
Meeting the Energy Challenge A White Paper on Energy (2007)	Seeking to meet the challenges; <ul style="list-style-type: none"> <li>• Tackling climate change by reducing carbon dioxide emissions both within the UK and abroad; and</li> <li>• ensuring secure, clean and affordable energy as we become increasingly dependent on imported fuel.</li> </ul>	Promotion of sustainable energy.	Contribution to sustainable energy development and use.
BIODIVERSITY AND GEODIVERSITY			
GNDP, Green Infrastructure Strategy (2007)	Looks to establish a strategy for green infrastructure that will complement and support good quality housing and substantial economic growth by providing high quality, accessible green infrastructure within a comprehensive landscape structure; promoting ecological networks and continuity and links between habitats; improving quality of life; helping to address climate change; improving access to habitats and greenspace; and encouraging community wellbeing.	Protect, and where appropriate, enhance biodiversity through the protection of habitats and species and through creating new habitats through development,	Protection of and contribution to green infrastructure Impact on environmental assets Impact on / enhancement of countryside and the environment Mitigate potential adverse effects on climate change
Green Infrastructure Delivery Plan (2009)	Identification of Green Infrastructure Priority Areas (GIPA) Establishes methodology for project prioritisation Reviews possible projects for proposed GIPAs & identifies early start demonstration projects Makes proposals for the co-ordination and evaluation of GI projects & for community engagement Reviews existing arrangements for management & investigates future proposals for future management	Identifies five green infrastructure priority areas focused on Norwich City and the SW and NE sectors: <ul style="list-style-type: none"> <li>• Five Rivers</li> <li>• Wymondham to Norwich</li> <li>• Water City – Rivers Yare and Wensum</li> <li>• Long Stratton to Norwich</li> <li>• Norwich to the Broads</li> </ul>	Protection of and contribution to green infrastructure Impact on environmental assets Impact on / enhancement of countryside and the environment Mitigate potential adverse effects of climate change

Broads Biodiversity Action Plan	Aims include <ul style="list-style-type: none"> <li>Create and maintain new wetland and upland habitats</li> <li>Deliver best practice through the planning process</li> </ul>		
Norfolk Biodiversity Action Plan 2004	Conservation of species and habitats in Norfolk, incl. action plans	Protect and enhance the natural environment (habitats and species)	Impact on biodiversity
LANDSCAPE			
Broadland District Council Landscape Character Assessment Supplementary Planning Document (SPD) (2013)	Landscape Character Assessment of the District, at a 1:25,000 scale to serve as baseline of environmental information to enable a better understanding of Broadland's landscapes. Furthermore, to provide a tool kit of integrated guidance for the development management process in the consideration of impacts and potential measures for mitigation and development proposals.	- Landscape and sensitivities reflected in distinctive variations in local character within each landscape character type	- <i>Impact on environmental assets</i> - <i>Impact on / enhancement of countryside and the environment</i>
Broads Landscape Character Assessment (2006)	The main Character Assessment was completed in 2006. The Broads area presented some unique challenges in the assessment process due to the nature of its simple elemental, low lying physical landscape. The process identified a series of Local Character Areas each with a unique set of characteristics, which combine to give them their own distinct sense of place.	Landscape and sensitivities reflected in distinctive variations in local character within each landscape character type	Impact on environmental assets Impact on / enhancement of countryside and the environment
South Norfolk Landscape Designations Review (2012)	The original Landscape Character Assessment was completed in 2001. The 2012 review sought to update the previous studies regarding Landscape Character Areas, and previous policy protection for the setting of the Norwich Southern Bypass and strategic breaks between settlements.	Landscape and sensitivities reflected in distinctive variations in local character within each landscape character type. Consideration of policies to limit development in some areas.	Impact on environmental assets Impact on / enhancement of countryside and the environment
TRANSPORT			
Connecting Norfolk, Norfolk's 3rd Local Transport Plan (2011-2026)	Maintaining and managing the highway network Delivering sustainable growth Enhancing strategic connections Reducing emissions Improving road safety Improving accessibility	Focus development on accessible locations where need to travel is reduced , providing for transport improvements where necessary Provide for strategic transport Infrastructure Consider need for strategic transport improvements related to	Contribution to transport infrastructure  Necessary contributions to, and scope of infrastructure needed to support certain patterns of growth.

		development Reduce need for travel Provide for / require necessary transport infrastructure improvements	Contribution to transport infrastructure  Accessibility of development / location and links to jobs and services
NATS Review 2010	Cover; overall strategy, accessibility, congestion, pollution, safety, economic vitality and liveability and community. These embrace <ul style="list-style-type: none"> <li>• Catering for travel needs arising from growth</li> <li>• Promoting sustainable means of transport, minimizing trip lengths and encouraging reduced car use through land use policies, layout of development and travel planning</li> <li>• Minimising congestion and delays by improving the efficiency of the transport network</li> <li>• Reducing carbon dioxide emissions by encouraging transport by sustainable modes and less polluting fuels</li> <li>• Safety and accident reduction</li> <li>• Protection of residential amenity and minimise community severance</li> </ul>		
NATS Implementation Plan	Supports the achievement of NATS objectives	Postwick Junction & the Northern Distributor Road. Junction Improvements at Wymondham, Harford Bridges, Thickthorn, & Costessey Junction. Bus Station public transport interchange. Proposed BRT & Core Bus Routes. Proposed extension of Postwick P&R & relocation and expansion of Airport P&R. Possible Trowse P&R.	Contribution to enhancing accessibility Contribution to a safe environment Contribution to mitigate pollution and improve air quality Accessibility of development / location and links to jobs and services Impact on road safety

		<p>Rail Station Transport Interchange.</p> <p>Bittern Line: Longer Trains, possible implementation of tram train. Possible Rail Stations at Rackheath and Broadland Business Park.</p> <p>London Main Line: Shorter journey times, new rolling stock &amp; increased capacity.</p> <p>Cambridge Main Line: Longer trains &amp; increased frequency of service.</p> <p>Airport public transport interchange with improved public transport access.</p> <p>Norwich Cycle Network.</p> <p>City Centre Transport Initiatives: including cross city centre public transport and walking and cycle enhancements.</p>	<p>Contribution to strategic and local transport infrastructure</p>
<p>Norfolk Infrastructure Plan, NCC, 2014.</p>	<p>This plan pulls together information on key infrastructure needed to deliver economic growth in Norfolk.</p> <p>In summary, the key initiatives are:</p> <p>A11. To ensure that dualling of the final stretch of the A11 is completed by end 2014.</p> <p>Transport for Norwich. To put in place a funding package for the 'Transport for Norwich' strategy.</p> <p>A47. To promote the status of the A47 and secure funding for key junctions, a new river crossing in Great Yarmouth and other targeted improvements.</p> <p>Rail Improvements. To continue the high profile campaign to improve the Norwich-London route (Norwich in 90'), working with Network Rail and the franchise holder, Greater Anglia.</p> <p><b>Broadband.</b> By 31 March 2015, the 'Better Broadband for Norfolk' project seeks to achieve</p> <p>-A minimum speed of 2 megabits per second (Mbps) for all premises</p>		<p>Of general relevance when producing the Local Plan.</p>

	-'Superfast' Broadband (24Mbps+) for as many premises as possible		
Community Infrastructure Levy (CIL); Charging Schedules	Each district has adopted a CIL charging schedule, setting out the charges which apply to development in that district.	CIL charging schedule will apply to all qualifying development.	Contribution to infrastructure
Local Investment Plan and Programme (LIPP) (2012)	A programme to support the delivery of the Joint Core Strategy and the Greater Norwich Economic Strategy to deliver high-quality growth. Outlines the prioritisation of infrastructure funding, phasing and priorities. LIPP is regularly reviewed and updated to understand challenges to enable growth opportunities to develop.	Identifies the different types of infrastructure needed to support future development.	Contribution to regeneration and renewal Contribution to economic provision Contribution to strategic infrastructure
Local Infrastructure Plan & Programme (February 2012)	To set out the key packages and projects identified as necessary for the sustainable delivery of high levels of housing and jobs growth in Broadland, Norwich and South Norfolk.	Sets out the key packages of infrastructure and infrastructure projects to support. Packages and projects are set out both thematically and geographically. Thematic areas include: Green Infrastructure, transport, utilities, waste & recycling, community infrastructure, education, healthcare & emergency services. Spatial Packages include: north-east, Norwich city, southwest, Long Stratton. Provides further information on the priority, timing and delivery of infrastructure to meet the <b>Joint Core Strategy's</b> Development Strategy as adopted in March 2011.	Necessary contributions to, and scope of infrastructure needed to support certain patterns of growth. Contribution to transport infrastructure Contribution to strategic transport infrastructure

APPENDIX 2 – DEMONSTRATING COMPLIANCE WITH SEA DIRECTIVE

Note: A version of this appendix will be completed and incorporated in subsequent SA reports to show how the SA has met legislative requirements.

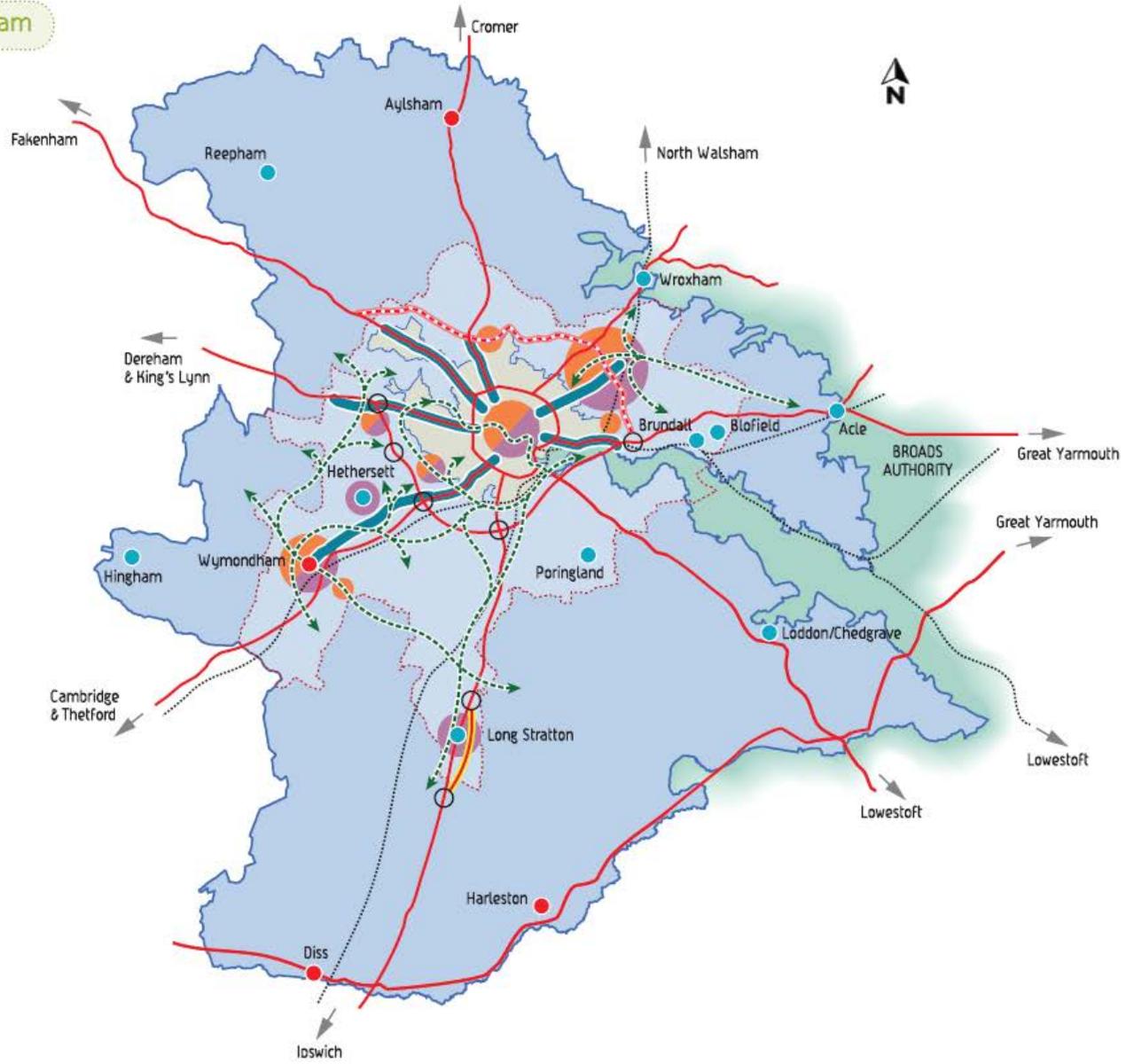
Demonstrating compliance with the SEA Directive <b>SEA Directive requirement (the 'environmental report' must include...)</b>		Where in the plan and SA documentation can this be found?
1. Non-technical summary	<i>"a non-<b>technical summary of the information provided...</b>" (Annex I(j))</i>	
2. The plan's objectives and the content of the plan	<i>"an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes" (Annex I(a))</i>	
3. The SA methodology, including in relation to consultation	<i>"an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information" (Annex I(h))</i> <i>"the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation" (Annex I(e))</i> <b>"The [environmental] authorities... shall be consulted when deciding on the scope and level of detail of the information which must be included in the environmental report" (Article 5(4))</b> <b>"The [environmental] authorities... and the public... shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme or its submission to the legislative procedure" (Article 6(2))</b>	
4. The policy context in which the plan is being prepared	<i>"an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes" (Annex I(a))</i>	
5. The sustainability objectives relevant to the plan	<i>"the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation" (Annex I(e))</i>	

Demonstrating compliance with the SEA Directive <b>SEA Directive requirement (the 'environmental report' must include...)</b>		Where in the plan and SA documentation can this be found?
6. The current baseline situation	<p><i>"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme" (Annex I(b))</i></p> <p><i>"the environmental characteristics of areas likely to be significantly affected" (Annex I(c))</i></p>	
7. The likely situation without the plan (the 'business-as-usual' scenario)	<p><i>"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme" (Annex I(b))</i></p>	
8. Key issues for the plan	<p><i>"any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC [Special Protection Areas under the Birds Directive] and 92/43/EEC [Special Areas of Conservation under the Habitats Directive]"</i></p>	
9. Key issues relating to European sites	<p><i>"any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC [Special Protection Areas under the Birds Directive] and 92/43/EEC [Special Areas of Conservation under the Habitats Directive]"</i></p>	
10. The alternatives considered and the rationale behind them	<p><b>"Where an environmental assessment is required ... an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated"</b> (Article 5(1))</p> <p><i>"an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information" (Annex I(h))</i></p>	

Demonstrating compliance with the SEA Directive <b>SEA Directive requirement (the 'environmental report' must include...)</b>		Where in the plan and SA documentation can this be found?
11.The likely significant effects of the plan including the alternatives considered	<p><i>"the likely significant effects (<sup>1</sup>) on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors"</i> (Annex I(f))</p> <p><i>(<sup>1</sup>) These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.</i></p>	
12.Mitigation and enhancement measures	<i>"the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme"</i> (Annex I(g))	
13.Monitoring arrangements	<b><i>"a description of the measures envisaged concerning monitoring..."</i></b> (Annex I(i))	
14.How the SA findings were taken into account	<i>"The environmental report... [and] the opinions expressed [through the consultation] shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure"</i>	

# APPENDIX 3 - JCS KEY DIAGRAM

## Key Diagram



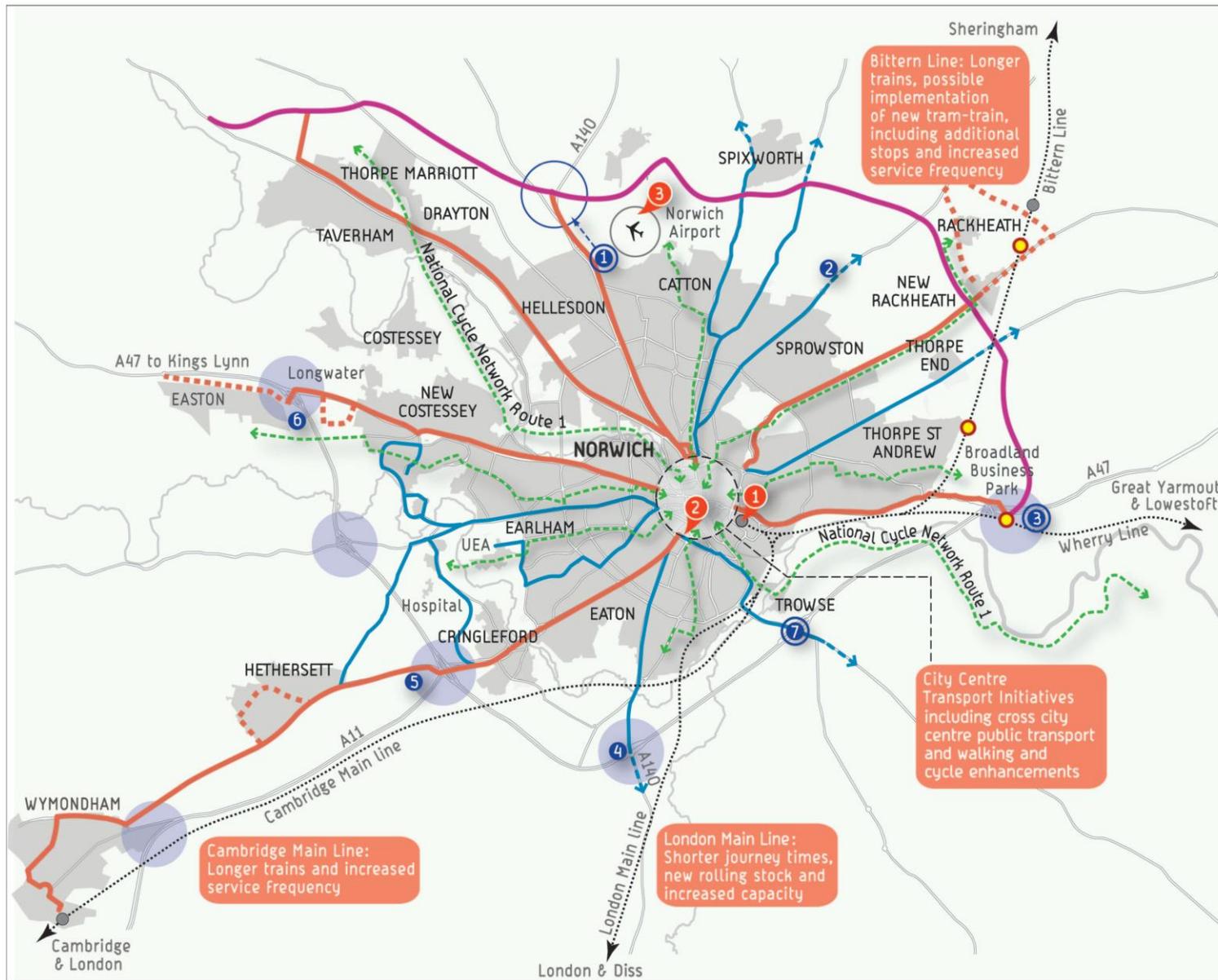
- Key**
- Joint Core Strategy Area
  - Norwich Policy Area
  - Norwich Urban Area
  - Broads Authority Area
  - Strategic Employment Sites
  - Major Housing Growth & Associated Facilities
  - Norwich Northern Distributor Road
  - Long Stratton Bypass
  - Major Junction Improvements
  - Bus Rapid Transit Corridor
  - Green Infrastructure Priority Corridors supporting key growth locations (Other Green Infrastructure opportunities throughout the area)
  - Main Towns
  - Key Service Centres
  - A Roads
  - Railways
- NB. For City Centre see separate City Centre Key Diagram

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APPENDIX 4 – THE NATS IMPLEMENTATION PLAN IN THE JCS



- Key**  
 – enhancements related to the growth strategy
- Junction Capacity Improvements
  - Existing Rail Station
  - Possible Rail Station
  - 1 Airport Park & Ride (Potential relocation and expansion)
  - 2 Sprowston Park & Ride
  - 3 Postwick Park & Ride (Expanded Facilities)
  - 4 Harford Park & Ride
  - 5 Thickthorn Park & Ride
  - 6 Costessey Park & Ride
  - 7 Possible Trowse Park & Ride
  - 1 Rail Station public transport interchange
  - 2 Bus Station public transport interchange
  - 3 Airport public transport interchange with improved public transport access
  - Northern Distributor Road
  - Bus Rapid Transit Corridors with Bus Priority Measures
  - Core Bus Routes
  - Indicative Key Cycle Corridors (exact routes to be defined)
  - Railways

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## APPENDIX 5 – MAP OF THE NORWICH POLICY AREA

