

Sustainability Appraisal (SA) of the Joint Core Strategy for Broadland, Norwich and South Norfolk

SA for the Broadland part of the Norwich Policy Area following the High Court ruling of 24 February 2012







Technical Annex

August 2012

Prepared for: Greater Norwich Development Partnership (GNDP)

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APPENDIX A – JUDGMENT OF THE HIGH COURT

Author: Mr. Justice Ouseley

Preface:

The full judgment handed down in the case Heard v Broadland District Council, South Norfolk District Council and Norwich District Council.



Neutral Citation Number: [2012] EWHC 344 (Admin)

Case No: CO/3983/2011

IN THE HIGH COURT OF JUSTICE QUEEN'S BENCH DIVISION ADMINISTRATIVE COURT

Royal Courts of Justice Strand, London, WC2A 2LL

Date: 24/02/2012

Before:

MR JUSTICE OUSELEY

Between

HEARD Claimant

- and -

BROADLAND DISTRICT COUNCIL SOUTH NORFOLK DISTRICT COUNCIL NORWICH CITY COUNCIL

Defendants

Mr R Harwood (instructed by Richard Buxton Solicitors) for the Claimant Mr W Upton (instructed by Sharpe Pritchard Solicitors) for the Defendants

Hearing dates: 6th and 7th December 2011

Approved Judgment

MR JUSTICE OUSELEY:

- 1. The Claimant, Mr Heard, challenges the adoption by the Defendants of their Joint Core Strategy on 22 March 2011, a development plan document created under the Planning and Compulsory Purchase Act 2004 for their areas. The challenge is brought under s113 of that Act, on the grounds that the Joint Core Strategy, JCS, was not within the powers of the Act, or there had been a procedural failing which had prejudiced the Claimant.
- 2. The three Defendants are district councils: Broadland DC and South Norfolk DC which surround Norwich City Council's area to the north and south respectively. The three have co-operated to produce a Joint Core Strategy for their areas. This includes the Norwich Policy Area, NPA, which covers the whole of the City Council's area and, putting it very broadly, the parts of the other two Councils' areas which lie closer to the City.
- 3. Part of the JCS involves meeting the growth requirements for the NPA laid down in the Regional Spatial Strategy, RSS, as adopted in 2008; it is now the Regional Strategy. The JCS, in order to meet its statutory obligation to conform generally to the RSS, had to provide for the stipulated levels of growth; but it was for the JCS to decide where that should take place. The JCS includes, as part of its provision for the RSS requirement, major growth in an area to the north east of Norwich known as the North East Growth Triangle, predictably, NEGT.
- 4. Mr Heard is a resident in that area north east of Norwich which is earmarked for major growth in the JCS. He is the chairman of an action group, Stop Norwich Urbanisation, SNUB. Although opposed to urbanisation generally, Mr Heard contends that the JCS is unlawful because the Strategic Environmental Assessment, SEA, which the Councils had undertaken, did not comply with two requirements: first, that it explain which reasonable alternatives to urban growth in the North East Growth Triangle they had selected to examine and why, and second, that it examine reasonable alternatives in the same depth as the preferred option which emerged. It was not said that the examination of the preferred option was itself inadequate, nor that changes in circumstance required a further examination of previously discarded alternatives. The Defendants contended that the work they had done was sufficient for these purposes.
- 5. His second ground was that the Strategic Environmental Assessment was further unlawful since it did not assess the impact of a proposed new highway, the Northern Distributor Road, the NDR, or of alternatives to it. The NDR was fundamental to the achievement of the full development of the North Eastern Growth Triangle, though there was a case for it even without that development. The Defendants contended that the NDR had been adequately assessed in documents prepared by the highway authority, Norfolk County Council, and that although the JCS supported and in some ways promoted the NDR, it was not for it to assess it or to consider alternatives to it. The County Council was part of the informal Greater Norwich Development Partnership, GNDP, with the three District Councils.

The legislative framework

- 6. A plan such as the JCS has to be subject to what is called Strategic Environment Assessment, by virtue of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment." This has been transposed into domestic law by the Environmental Assessment of Plans and Programmes Regulations 2004 SI no.1633. Regulation 8 prohibits a plan being adopted until regulation 12, amongst others, has been complied with. Regulation 13 requires the plan, when in draft, and its accompanying environmental report to be subject to public consultation. Regulation 8 prohibits the adoption of a plan before the environmental report and the consultation response have been taken into account. These reflect requirements of the Directive. Environmental assessment is thus, as Mr Upton submitted, a process and not merely a report.
- 7. Regulation 12 (2) (b) requires an environmental report "to identify, describe and evaluate the likely significant" environmental effects of implementing the plan, and of "reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme". The report has to include such of the information set out in Schedule 2 as is reasonably required although it can be provided by reference to relevant information obtained at other levels of decision-making. Item 8 in the Schedule is "an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties...encountered in completing the information." Mr Upton for the Defendants emphasised the word "outline". It is not, he said, a requirement to give reasons for selecting the option eventually pursued; but one would normally expect them to emerge reasonably clearly from the assessments.
- 8. European Commission has provided guidance on Article 5(1) of the Directive, the equivalent of regulation 12 of the UK Regulations, as to what level of assessment is required for alternatives. Alternatives to the option being promoted should be evaluated on the same basis and to the same level as the option promoted in the plan:

"In requiring the likely significant environmental effects of reasonable alternatives to be identified, described and evaluated, the Directive makes no distinction between the assessment requirements for the drafted plan or programme and for the alternatives. The essential thing is that the likely significant effects of the plan or programme and the alternatives are identified, described and evaluated in a The requirements in Article 5(2) comparable way. concerning scope and level of detail for the information in the report apply to the assessment of alternatives as well. It is essential that the authority or parliament responsible for the adoption of the plan or programme as well as the authorities and the public consulted, are presented with an accurate picture of what reasonable alternatives there are and why they are not considered to be the best option. The information referred to in Annex I should thus be provided for the alternatives chosen."

- 9. Mr Upton suggested that it was too simplistic to say that all alternatives had to be assessed to the same degree throughout a process in which, as the Directive and Regulations envisaged, options were progressively narrowed and discarded as successive stages moved towards a preferred option. Those options discarded at earlier stages did not have to be revisited at every subsequent stage; see *City and District Council of St Albans v Secretary of State for Communities and Local Government* [2009] EWHC 1280 (Admin), Mitting J para 14.
- 10. The guidance also deals with what constitutes a reasonable alternative: it must be realistic, fall within the legal and geographic competence of the authority, but it otherwise depends on the objectives, and geographical scope of the plan. Alternative areas for the same development are an obvious example. The longer term the plan, the more likely it will be that it is alternative scenarios which are examined.
- 11. Article 1 of the Directive is relevant because it makes clear that the objective of the Directive in providing for environmental assessment is to protect the environment and integrate environmental considerations into the adoption of plans with a view to "promoting sustainable development". This, with Article 4, which permits a national authority to integrate compliance with the Directive into national procedures, has led to the practical implementation of the Directive through the requirement in s19(5) of the 2004 Act that a plan be subject to a Sustainability Appraisal, SA, rather than through a separate document entitled an environmental report. Article 4(3) also recognises that there may be a hierarchy of plans, and that the assessment will be carried out at different levels.
- 12. To avoid duplication in this process, Article 5(2) permits the decision as to what information is reasonably required to take account of "the contents and level of detail in the plan ..., its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process...." This is reflected in regulation 12 of the domestic Regulations. Mr Harwood for the Claimant submitted, and I accept, that while options can be rejected as the plan moves through successive stages, and do not necessarily require to be re-examined at each stage, a description of what alternatives were examined and why had to be available for consideration at each stage, even if only by reference back to earlier documents, so long as the reasons there given remained sound. But the earlier documents had to be organised and presented in such a way that they could readily be ascertained and no paper chase was required to find out what had been considered and why it had been rejected; see *Save Historic Newmarket Ltd v Forest Heath District Council* [2011] EWHC 606 (Admin), Collins J, paras 17 and 40.
- 13. At para 40, he said, and it provides a useful summary of the test:
 - "40. In my judgment, Mr Elvin is correct to submit that the final report accompanying the proposed Core Strategy to be put to the inspector was flawed. It was not possible for the consultees to know from it what were the reasons for

rejecting any alternatives to the urban development where it was proposed or to know why the increase in the residential development made no difference. The previous reports did not properly give the necessary explanations and reasons and in any event were not sufficiently summarised nor were the relevant passages identified in the final report. There was thus a failure to comply with the requirements for the Directive and so relief must be given to the claimants."

The facts

- 14. The plan-making process is rather convoluted and the sequence of documents constituting it needs to be set out. I could not readily discern it from the parties' submissions.
- 15. Although the way in which the NDR was treated is the subject of a separate ground, the Northern Distributor Road and the North East Growth Triangle are closely linked and it is convenient to deal with them together chronologically, though it must be noted at the outset that it is Norfolk County Council which bears statutory responsibility for the transportation strategy, and not the Defendants.
- 16. The County Council consulted on various Norwich Area Transportation Strategy, NATS, options in 2003. An SEA was carried out in 2004 for the NATS, voluntarily since it preceded the coming into force of the Directive; it was not itself subject to public consultation. A number of options, sieved from a larger variety, were fully considered including three which involved differing lengths of NDR, and three which involved no NDR, but improved public transport and other measures to reduce car usage instead. The preferred strategy included what then was called the three quarter NDR; the NATS had been designed to help deliver the growth that would occur in the Norwich area with or without a supportive transport infrastructure, and to address the problems it would create. The NDR was identified as an important element to enable growth within and around Norwich; without it, developer led schemes to provide accessibility to individual developments would lead to a disjointed network. The NDR was "the only feasible solution for dealing with growth and transport problems and issues on a long-term basis."
- 17. Policy 2 of the NATS, adopted in 2006, provided that an NDR would be developed for implementation in conjunction with other measures. Its precise alignment was not for decision at that stage.
- 18. The County Council adopted its Second Local Transport Plan in 2006 as required by the Transport Act 2000. A Strategic Environmental Assessment was undertaken for this purpose, published in 2006, and summarised in the LTP itself. It assessed the overall environmental effect of the LTP, the impact of the two potential major schemes, one of which was the NDR, and the environmental effect of the LTP with and without those major schemes. An Environmental Report was consulted on with the Provisional LTP in 2005, but it did not deal with the NDR. The rather longer SEA of 2006, which was not itself consulted on, did not assess the LTP without the NDR alone, nor alternatives to the NDR. The LTP promoted

- the NDR as a major scheme, describing its purpose, advantages, position in the development plan framework, and its financing status.
- 19. Meanwhile, other parts of the development plan process were under way. The revised Regional Strategic Strategy, RSS, had been going through its draft stages, themselves informed by a Sustainability Appraisal at two stages which incorporated a Strategic Environmental Assessment. This was adopted in May 2008, as the East of England Plan, EEP, by the Secretary of State for Communities and Local Government. It became part of the statutory development plan framework under the 2004 Act, and local development plan documents such as the JCS had to conform generally to it. It covered the period 2001-2021.
- 20. The EEP dealt with transportation; Policy T15 identified the Norwich area as one which was likely to come under increasing transport pressure as a result of underlying traffic growth and the RSS development strategy. Appendix A listed the NDR as one of the regionally significant investments currently programmed for the region, a Major Local Transport Plan Scheme.
- 21. Policy NR1 dealt with Norwich as a "Key Centre for Development and Change", a regional focus for housing, employment and other activities: 33000 additional houses were to be provided in the NPA between 2001-2021, facilitated by LDDs prepared jointly by the three Defendants; requirements for consequential transport infrastructure "should be determined having regard to" the NATS. Policy H1 elaborated the housing strategy, setting district totals conforming to that total for the NPA parts of the three involved here.
- 22. During the preparation of the revised RSS, the three Defendant Councils had begun work on their Joint Core Strategy. In November 2007, the Councils issued, for public consultation, an "Issues and Options" paper. This identified the housing requirements for the NPA in the then draft EEP. The three strategic options for dealing with the required growth were dispersing growth across a large number of small scale sites, medium concentration on large estate size sites of 15-3000 units, or Larger Scale Urban Extensions and new settlements in the range 5,000-10,000 dwellings. An initial assessment of the broad locations for major growth, including the north east sectors inside and outside the NDR, was appended; a full sustainability appraisal was promised at the preferred options stage, but early indications on a comparative basis were provided under the heading "Some issues relating to potential growth locations". Comments were sought on which broad strategy should be preferred, (Q11) and on the various major growth locations outlined, (Q12). Potential combinations for large scale growth were identified and comments sought as to which were preferred (Q13):

"As well as identifying smaller urban extensions and growth in villages, the main pattern of large-scale growth could be:

- a) concentration on the north east and south west of Norwich and at Wymondham
- b) as a) plus a fourth location for large scale growth

- c) as a) plus two or more locations for medium scale growth
- d) a different combination for major growth options
- e) a more dispersed pattern of growth (perhaps an average of 1,500 dwellings in ten locations)."
- 23. This document also dealt with strategic infrastructure priorities. The NDR had been identified as essential to managing the demand for travel arising from the levels of growth planned in the EEP, providing access to the potential growth areas on the north eastern fringes of Norwich and enabling traffic to be removed from the city centre and improvements to non–car based transport.
- 24. The Sustainability Appraisal for the Issues and Options paper assessed the different strategies for locating growth, (Q11 above). There was also an appraisal of the growth locations identified in the appendix, (Q12): north—east sector inside NDR, north—east sector outside NDR, east sector outside NDR, and south and south west sectors; 12 sectors in all, including some combinations. The potential combinations for large scale growth, (Q13), were grouped for appraisal under two heads, which represented a concentrated option and a more dispersed option; option C was regarded as middle ground between the two and option D, a different combination of major growth areas, was not assessed at all. The responses were reported at length.
- 25. In August 2008, there was a technical consultation with statutory bodies on the practicalities of various major growth options in the NPA. It proposed that the planned housing should be in large scale developments concentrated in particular locations with a mixture of small scale development dispersed around the area: it put forward three options of combinations of large scale development, totalling 24000, allied to options for smaller scale development. No large scale site exceeded 6000, most were between 2-4000. The large-scale options were set out in Policy 5; no decision had yet been made on which was to be favoured. Appendices described them in more detail. Each involved development in the north-east sector with a NDR. (The 33000 units over the period 2008-2026 for the NPA included allocations and permissions as yet unbuilt, so the figure for new allocations was 24000, reduced later to 21000.)
- 26. In February 2009, the four authorities in the GNDP agreed on a favoured growth option as the basis for public consultation. The reports analysing why that option emerged were not before me, and are not part of the Sustainability Appraisals or Strategic Environment Assessments. Regulations requiring the production of a preferred options report had been changed.
- 27. The statutory public consultation did not begin until March 2009. The document included as Policy 2 what was required by the EEP for the NPA, and as Policy 5 what was by now the favoured option for providing for that growth in the NPA, a variant of the third option in the technical consultation paper, with 21000 in the larger locations, in Norwich, and in the North East Growth Triangle on each side

- of the NDR, moderate growth broadly to the south west of Norwich, with some sites elsewhere identified for small scale development.
- 28. The commentary to Policy 5 said that there was no significantly different public preference for the locations for major growth, but that the technical consultation included three more detailed options for larger growth in the NPA which were described in appendices. All required the NDR, and all involved major development in the NEGT. The favoured option, said the commentary, drew upon the consultation response and evidence, but was not specific as to what that was.
- 29. A draft Sustainability Appraisal was produced in April 2009. It dealt with the three original growth options in the technical consultation document of 2008, plus a variant, and with the newly favoured option. These all included the north-east sector with NDR. It appraised the various locations for major growth in Policy 5. It did not deal with the responses to the technical consultation.
- 30. In August 2009, a report on both statutory consultations was published.
- 31. Before the JCS was submitted to the Secretary of State for examination, a Sustainability Appraisal report and the pre-submission JCS were issued for yet further public consultation in November 2009. This SA was intended to fulfil the role of the SEA under the Directive and transposing regulations.
- 32. This SA makes the point that it was not the first stage of SA. However, the summary of the appraisal findings states that a key task of the JCS is to develop a "spatial strategy for distributing" the housing targets set for the area by the EEP. One component was a "major urban extension to the North-East of the city, based around two or three centres either side of the proposed" NDR. The summary noted the "broadly positive sustainability effects" of this element. Another element, because it included major development at Long Stratton, had some local benefits but strategic drawbacks.
- 33. The SA said that it set out the legal requirements of the SEA Directive and explained how they were or would be met. Chapter 5, (it meant 3), would provide "an outline of the reasons for selecting the alternatives dealt with"
- 34. Chapter 3 entitled "Developing the Options" set out the requirement that "reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme are identified, described and evaluated." Paras 3.3.2-3.3.3 read:
 - "3.3.2 The Pre-Submission JCS sets out the GNDPs current preferred approach in a series of draft policies. These policies represent the GNDPs preferred options, which have been selected and refined following consultation on alternative options that has occurred in the past. In particular, options were published and consulted during the 'Issue and Options' consultation in 2007. All options presented in the Issues and Options

- consultation document were also subjected to SA to establish the relative merits of options in sustainability terms and inform the identification of preferred options. The findings of the Issues and Options SA were summaries in a brochure, which is available to download from the GNDP website.
- 3.3.3 Following the Issues and Options consultation the GNDP were able to identify many of their preferred options. However, it transpired that there was a need to consult further on options for the spatial approach to growth. Identification of a spatial approach to growth is the single most important decision to be made by the JCS, and the decision with the most wide ranging and potentially significant sustainability implications. The section below gives further details as to how the preferred approach was developed."
- 35. The "Options for the spatial approach to growth" summarised the process by which the preferred option had been arrived at. It started with the three broad strategies from the Issues and Options paper, and the five options for their spatial distribution. The three new distribution options at the technical consultation stage were then set out as above; the NEGT was common to them all. Subsequent tables briefly rehearsed the relative sustainability merits of those three options. The preferred option was then set out; paragraph 3.3.8 said that after the technical consultation, the GNDP "were able to identify their preferred option" for the spatial distribution of growth, which had been published for public consultation. It had not changed since then, when it had been the subject of SA. It had been reappraised as part of this SA in the "light of further clarity about its implementation".
- 36. Although the later SEA checklist says section 3.2 is where the alternatives are considered along with chapter 5, the relevant passages on alternatives for this case are those which I have cited, save for the introduction to chapter 4 which refers to the directive obligation to provide an outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken. Chapter 5 concerns the preferred options themselves.
- 37. The appraisal in the annexe to the SA is an appraisal only of the preferred options against a comprehensive array of polices. It is not an examination of alternatives.
- 38. It included this on Policy 8 "Access and transport", which both sides put some reliance on:

"Recommendations

 One key area of concern relates to whether the NDR, which is promoted through this Policy, would preclude sustainable patterns of travel and transport associated with the North East Growth Triangle. It will be of great importance to ensure that the NDR does not have this effect. It will be important to design in ambitious measures that encourage residents to meet more of their needs locally by sustainable modes of travel, and that also allow ease of access to Norwich by rapid public transport. When considering the necessity for the NDR it should be possible to assume minimal use of this road by residents of the Growth Area."

- 39. Policy 8 said that the transportation system would be enhanced to develop the role of Norwich as a Regional Transport Node, particularly through the implementation of NATS, including construction of the NDR. Implementation of NATS was fundamental to the strategy, enabling the capacity which it would release in Norwich to be used for non-car modes of transport, and providing the access necessary to key strategic employment and growth locations. A corridor, 100m either side of the centre line of the current scheme, was protected and would be shown on the Broadland DC adopted Proposals Map. The NDR "is recognised" in the EEP, is a major scheme in the Local Transport Plan and is in the Department of Transport's Development Pool. This policy was to become Policy 6 in the adopted JCS.
- 40. Certain changes were made to the JCS which warranted further SA on these "focussed changes". The only point of relevance is that it is clear that the only purpose of the SA was to appraise those specific changes and not alternatives more generally.
- 41. The JCS was submitted in March 2010 for examination by Inspectors appointed by the Secretary of State. This was held in November and December 2010; their report to the Councils was published in February 2011, and concluded that the JCS was sound and in conformity with the EEP, but certain changes were required.
- 42. Issue 6 examined whether the JCS provided an appropriate and deliverable distribution of the planned growth required by the EEP for the NPA, coupled with a sustainable pattern of transport infrastructure. One of the issues was whether the distribution was sound given its asserted dependence on the NDR, which might not be built. The NEGT and NDR were closely linked in this argument; the Inspectors rejected a non-NDR package of transportation interventions in para 51:

"It has been argued that a non-NDR package of NATS interventions has not been modelled and that this could conceivably produce a better overall solution. However, we are not convinced that such an option would be realistic and place weight on the DfT's favourable 'in principle' assessments and the judgements which led to the NDR's acceptance into 'Programme Entry' and the 'Development Pool', as discussed above."

- 43. The Inspectors nonetheless saw the NDR as uncertain and particularly uncertain in timing. They asked whether suitable changes could be introduced to increase the resilience of the JCS in the face of this uncertainty. They thought that the JCS tended to portray the situation in terms which were too stark: no NDR, no development in the NEGT. Changes were proposed which provided "an appropriately qualified partial alternative approach to development in North East Norwich". Essentially, some development could take place in certain parts without an NDR, but were it not to have happened by the time that threshold had been reached, an Action Area Plan, AAP, would investigate whether any additional growth could take place in the NEGT without it, and subject to any further development which that AAP might show to be satisfactory, there would be a complete review of the JCS proposal for the NEGT.
- 44. The Inspectors rejected the argument that there should be no growth in the NEGT with or without the NDR, but concluded, para 59:

"The AAP is the proper mechanism for carrying out the site-specific investigations, considering the alternatives and undertaking the public consultations necessary to establish the point at which non-delivery of the NDR may, or may not, become a 'showstopper' for further development in the growth triangle. The JCS should not go beyond its strategic role and fetter the necessary thorough investigation through the AAP by making premature commitments based on untested scenarios."

45. They then turned to the NEGT. After some comments about how the scale of development came to be in the EEP, the Inspectors dealt with the merits, para 72:

"Moreover, there are strong reasons to support the selection of this area as a location for a major urban extension. Fundamentally, if development is to take place at the overall scale proposed by the GNDP constituent authorities (which we have found sound), the pattern of small towns and villages in Broadlands offers no realistic alternative 'dispersal' options capable of accommodating such numbers in ways likely to be sustainable and capable of respecting the characters of the host settlements. There is no evidence that Norwich could accommodate more than already reflected in the JCS account of existing commitments, and it appears (from our consideration of the South Norfolk options) that redistribution from the north of the NPA to south is not a viable option. Concentrating the proposed development at this major growth location is the most effective way of maximising its contribution to the NPA's sustainability and providing infrastructure economically."

46. After dealing with the arguments for and against other parts of the proposed distribution of growth, the Inspectors identified the next sub-issue as "Does the JCS distribution represent "the most appropriate plan when considered against reasonable alternatives?"". The question is drawn from PPS12. They said, para 90:

"With regard to the North East Norwich growth triangle, we have already concurred with GNDP's judgement that from a relatively early stage in the evolution of the JCS there has been no reasonable sustainable alternative to a substantial urban extension in that location if this scale of growth is to be accommodated."

47. They then referred to the 5 options for South Norfolk, including Long Stratton, which had been developed between May 2008 and February 2009. These had been subject to a comparative SA in February 2009. More evidence was now available. Para 94 contained this conclusion:

"We therefore conclude that South Norfolk's view that the JCS distribution represents the best overall 'political fit' is not inconsistent with judgements that it (a) represents the most appropriate plan when considered against the reasonable alternatives and (b) broadly fulfils GNDP's duty under S39 of the 2004 Act to exercise its DPD-making functions with the objective of contributing to the achievement of sustainable development."

48. Their overall conclusions on Issue 6 were in para 95:

"Our broad conclusion is that the major principles of NATS, as reflected in the JCS, represents a sound and sustainable transport strategy for the NPA. The implementation of these measures would enable the JCS to proceed with a pattern of growth which is justified, effective and consistent with national policy. This conclusion is subject to a number of necessary changes that have been discussed above. Together, these give the JCS greater resilience and effectiveness in the case of delay to, or non delivery of, the NDR by indicating a mechanism for transparently establishing the maximum extent to which development at the growth triangle could proceed before triggering the need for review of the JCS in that respect."

- 49. They recommended various changes as their analysis had foreshadowed.
- 50. The JCS, with the incorporation of the required changes, was adopted in March 2011. An Environmental Statement was required to accompany it by the 2004 Regulations. It had to set out, among other matters, the reasons for choosing the

plan as adopted, in the light of other reasonable alternatives. It said this on that topic:

- "5.1 The iterative plan making process set out above, informed by SA and consultation throughout, involved consideration of a number of reasonable alternatives.
- 5.2 This is particularly the case in relation to the spatial location of growth. At the Issues and Options stage ten potential growth options were put forward (plus brownfield sites in the city & suburbs). The Sustainability Appraisal was used to select options to take forward along with other evidence such as the water cycle study, public transport modelling and discussions with children's services.
- 5.3 The former preferred options document considered alternatives for growth options and area-wide policies. The alternatives were assessed and captured in the SA document and remain in it as evidence of considering reasonable alternatives.
- The strategy submitted to the Secretary of State has a relatively concentrated pattern of growth in Broadland, based on sustainable urban extensions and a more dispersed pattern in south Norfolk, with growth focussed on a number of existing settlements. Earlier plan drafts, supported by the SA, included options that had promoted a somewhat less dispersed pattern of growth in south Norfolk, with more limited development at Long Stratton.
- 5.5 Having regard to the technical evidence and public comment, the strategic preference of the GNDP was to promote growth in Long Stratton to achieve the consequent environmental improvements to the village.
- 5.6 The strategy has been adopted subsequent to a formal Examination in Public. The independent Inspectors concluded that the plan is sound, subject to a number of required changes. These changes have been incorporated into the adopted strategy."
- 51. The rest of the section summarised the support given by the Inspectors to the adopted strategy.

52. Policy 9 covers the growth strategy for the NPA: new allocations for a minimum of 21000 houses are to be identified across a number of locations against which the minimum number of houses in each was noted. This would be supported by construction of the NDR. Policy 10 identified the locations in the NPA for major new or expanded communities, including the NEGT on both sides of the NDR, the complete development of which required the NDR, but the scope for partial delivery, as required by the Inspectors is also reflected in the policy.

Ground 1: SEA and alternatives

- 53. Mr Harwood's Skeleton Argument for the Claimant contained a number of what seemed to me to be rather carping criticisms of the SEA and JCS, but he refined and improved his submissions in oral argument. He focussed wisely on the appraisal of alternatives to the NEGT, the Claimant's area of interest.
- 54. None of the high level options for growth in the Issues and Options Paper, (Q11), were actually chosen. The initial assessment of growth options, (Q13), did not cover two of the five options for the location of growth: 3 and 4 in the JCS SA, also denoted as C and D. D did not include growth in the NEGT. Three more specific options were put forward in the statutory technical consultation paper, but the Councils were not relying on the SA accompanying that paper. There was no analysis of why the alternatives selected at that stage only included ones with growth in the NEGT. The preferred option emerged from that process as a mixture of options 2 and 3, and the Environmental Report/SA of September 2009 dealt with it. There was no comparable assessment of reasonable alternatives considered by the three Defendants in it; the assessment of the options from the technical consultation paper was not done on the same basis as that of the preferred option. There was no explanation of the alternatives selected. contained no cross-reference to any other paper where the identification and equivalent appraisal of alternatives could be found. Its summary was silent on that topic. It was possible that the options considered in the Issues and Options SA were reasonable options, even the only reasonable ones considered, but the SA did not say so, and it was not obvious why every combination of options included a north east sector, especially as the NDR on which it depended was uncertain. There was no comparable assessment of reasonable alternatives against the one preferred, nor could there be one until the preferred option had been identified. It was not his argument that there was some topic of assessment which those options had failed to consider, nor did that meet his argument.
- 55. Mr Upton, for the Councils, took me through the evolution of the planning documents, placing considerable weight on the April 2009 SA accompanying the public consultation document, and the September 2009 SA. It was for the three Councils to decide what were reasonable alternatives in the light of the SA scoping report of December 2007 and the requirements of the RSS. A range of reasonable alternatives had been identified and assessed, in a way appropriate for the level at which the JCS was operating in the plan-making hierarchy. Many alternatives supported by SNUB were not alternatives which conformed to the RSS, and so could not be considered as alternatives at all. A wide range of options had been assessed on a comparable basis; the later document of September did not have to continue to examine so wide a range as at earlier stages as the *St*

Albans case held. There really was only one sensible way to meet the growth requirements, as the Inspectors found.

Conclusions on Ground 1

- 56. I accept much of what Mr Upton said as a description of the way in which the JCS had been arrived at. It could not be stigmatised as unreasonable. The JCS had been the subject of frequent public consultation. The preferred option had been properly assessed itself. A number of alternatives had been assessed.
- 57. I did not find it easy, however, to discern from Mr Upton's submissions how he answered the essential factual contention at the heart of Mr Harwood's submissions. Certainly it was not by showing me any document in which the outline reasons for the selection of alternatives at any particular stage were clearly being given. This is not the failing of the advocate, but in the factual material which he had to present. Nor was there any discussion in an SA, in so far as required by the directive, of why the preferred options came to be chosen. Nor was there any analysis on a comparable basis, in so far as required by the directive, of the preferred option and selected reasonable alternatives.
- 58. The Issues and Options Paper and its Sustainability Appraisal are in themselves perfectly sensible papers. However Option D, the different combination of growth areas, was not assessed, and the SA itself did not explain why not. There was therefore no assessment of an alternative which did not include development in the NEGT, nor an explanation of why that was not a reasonable alternative, even though one which might have been identified as an option. This was not unimportant in the light of uncertainty over the NDR and its significance for the full development of the NEGT.
- 59. The statutory technical consultation produced three more options but did not itself consider any option which did not include development in the NEGT, with an NDR. It did not describe the selection of those options.
- 60. There was an important report to the Councils in February 2009 which led to the selection of the preferred option; it explains why it was preferred, and could contain information as to why the options examined had been selected. But that was not produced before me, and more importantly, it was not cross-referred to or publicly available as part of any SA. By the time of public consultation in March 2009, the preferred option had been selected.
- 61. The April 2009 SA did not explain what alternatives had been chosen for examination; it explained the ones which had been considered but not why it was those ones which had been considered and not others. It did not explain why the preferred option had been selected. Again, the only options considered involved development in the NEGT, and the NDR.
- 62. The crucial stage was the SA submitted in September 2009 in connection with the pre-submission JCS, which the Councils intended as the fulfilment of their directive obligations. It would have been open to the Councils to describe here the process of selection of alternatives for examination at each stage. They could

have done this by reference to earlier documents, if earlier documents had contained the required material. But the earlier documents do not contain the required information as to why the alternatives considered had been selected. If the outline of the reasons for the selection of alternatives was not dealt with in the earlier documents, the Councils had to provide them in this document. But that is missing from the SA.

- 63. The SA itself only describes what has been done. It contains no further analysis of the selection of alternatives for consideration at various stages, nor for the choice of the preferred option. It contains only a brief assessment of the alternatives, and does not itself contain the explanation which it implies is in the earlier documents, but, which in fact, on this particular aspect is simply not covered in them. Crucially, it is not possible to tell from the SA itself or from earlier documents what the Councils' answer is to the Claimant's question: were the only alternatives it was thought reasonable to select ones involving development in the NEGT, and if so -in outline- why so, especially in view of the uncertainty over the NDR, and the importance attached to the NDR in achieving the JCS with development in the NEGT. The SA is wrong in saying that all the options in the "Issues and Options" paper were assessed.
- 64. I accept that the Inspectors' report contains much which is supportive of the JCS, including the statement that there was no reasonable alternative to a substantial urban extension in the NEGT, notwithstanding problems with the NDR. But although their report evidences a view about alternatives, it is not itself part of the SA. They may be required to consider alternatives by the Secretary of State in PPS12, but that is not in fulfilment of the directive obligation or of those in the regulations. It is possible of course, as well, that such a view is affected by a lack of examination of an alternative; and it is also possible that the answer to why no non NEGT growth scenario was considered is so obvious to a planner that it needs no explanation; it could not have been considered a reasonable alternative. But I did not receive such an explanation either from the Councils, nor does the Inspectors' conclusion suffice to answer it.
- 65. The final ES with the final JCS does not take matters further.
- 66. I conclude that, for all the effort put into the preparation of the JCS, consultation and its SA, the need for outline reasons for the selection of the alternatives dealt with at the various stages has not been addressed. No doubt there are some possible alternatives which could be regarded as obvious non-starters by anyone, which could not warrant even an outline reason for being disregarded. The same would be true of those which obviously could not provide what RS required, or which placed development in an area beyond the scope of the plan or the legal competence of the Defendants. But that is not the case here on the evidence before me, in relation to a non NEGT growth scenario, with or without NDR, and especially with an uncertain NDR. Without the reasons for the earlier selection decisions, it is less easy to see whether the choice of alternatives involves a major deficiency.
- 67. I accept that the plan-making process permits the broad options at stage one to be reduced or closed at the next stage, so that a preferred option or group of options

emerges; there may then be a variety of narrower options about how they are progressed, and that that too may lead to a chosen course which may have itself further optional forms of implementation. It is not necessary to keep open all options for the same level of detailed examination at all stages. But if what I have adumbrated is the process adopted, an outline of the reasons for the selection of the options to be taken forward for assessment at each of those stages is required, even if that is left to the final SA, which for present purposes is the September 2009 SA.

- 68. The reasons for the selection of the preferred option, as distinct from the reasons for the selection of the alternatives to be considered, have not been addressed as such either in the SA, although some comparative material is available. The parties dispute the need for these reasons. It was very surprising to me that the reason for the selection of the preferred option was not available as part of the presubmission JCS or the accompanying September SA, nor readily available in a public document to which the public could readily be cross-referred, with a summary.
- 69. This is not an express requirement of the directive or regulations, and I do not regard European Commission guidance as a source of law. However, an outline of reasons for the selection of alternatives for examination is required, and alternatives have to be assessed, whether or not to the same degree as the preferred option, all for the purpose of carrying out, with public participation, a reasoned evaluative process of the environmental impact of plans or proposals. A teleological interpretation of the directive, to my mind, requires an outline of the reasons for the selection of a preferred option, if any, even where a number of alternatives are also still being considered. Indeed, it would normally require a sophisticated and artificial form of reasoning which explained why alternatives had been selected for examination but not why one of those at the same time had been preferred.
- 70. Even more so, where a series of stages leads to a preferred option for which alone an SA is being done, the reasons for the selection of this sole option for assessment at the final SA stage are not sensibly distinguishable from reasons for not selecting any other alternative for further examination at that final stage. The failure to give reasons for the selection of the preferred option is in reality a failure to give reasons why no other alternatives were selected for assessment or comparable assessment at that stage. This is what happened here. So this represents a breach of the directive on its express terms.
- 71. There is no express requirement in the directive either that alternatives be appraised to the same level as the preferred option. Mr Harwood again relies on the Commission guidance to evidence a legal obligation left unexpressed in the directive. Again, it seems to me that, although there is a case for the examination of a preferred option in greater detail, the aim of the directive, which may affect which alternatives it is reasonable to select, is more obviously met by, and it is best interpreted as requiring, an equal examination of the alternatives which it is reasonable to select for examination along side whatever, even at the outset, may be the preferred option. It is part of the purpose of this process to test whether what may start out as preferred should still end up as preferred after a fair and

public analysis of what the authority regards as reasonable alternatives. I do not see that such an equal appraisal has been accorded to the alternatives referred to in the SA of September 2009. If that is because only one option had been selected, it rather highlights the need for and absence here of reasons for the selection of no alternatives as reasonable. Of course, an SA does not have to have a preferred option; it can emerge as the conclusion of the SEA process in which a number of options are considered, with an outline of the reasons for their selection being provided. But that is not the process adopted here.

72. Accordingly, the Claimant succeeds on this ground.

Ground 2: the absence of an assessment of the NDR in the JCS SA

- 73. Mr Harwood submitted that there was a duty on the councils to have regard to the LTP under regulation 15 (1)(b) and (c) of the Town and Country Planning (Local Development)(England) Regulations 2004 SI No. 2204. The RSS required regard to be had to the NATS. It did not require the NDR. Since the NDR was part of the JCS, and was said to be "promoted" through it, the JCS SA had to include an environmental assessment of the NDR. Instead, it had been taken as part of the baseline for the assessment of other development, colloquially as a given and not as a JCS proposal; Mr Doleman, a transportation planner with the County Council, made as much clear in his witness statement. The County Council was part of the GNDP, which as a partnership would promote the NDR, with the JCS supporting its provision and protecting its alignment, opposing inconsistent development. The NDR and NEGT went together: there may have been a case put forward by the County Council for the NDR without the NEGT, but there was no case for the full NEGT without the NDR. If the NDR were undesirable, it would affect the whole growth strategy, or at least the distribution of the major growth areas. The JCS protected an alignment corridor for the preferred three-quarter length NDR, yet that had not been assessed. However, his real concern was not with alternative alignments but with alternatives to the NDR altogether. Nothing in the Inspectors' report showed that there were no reasonable alternatives to the NDR. Given that there remains uncertainty over whether the NDR will be built, and the effect which that would have on the NEGT, there had to be alternatives to the NDR and NEGT. Those had not been considered.
- 74. The JCS did not cross-refer to other documents, notably the voluntary SA which accompanied the NATS, or the SA which accompanied the LTP. The NDR was not dealt with as a discrete option in them either. The voluntary NATS SA could not be equivalent to a statutory SA since the SA had not been subject to public consultation, unlike NATS itself, nor could any decision have been made in the light of consultation responses to it.
- 75. Mr Upton's essential contentions were that the NATS and LTP determined what infrastructure was required to support the level of development and its location. The RS explicitly required account to be taken of the NATS, of which NDR was part. The LTP had taken the general level and distribution of growth in the draft EEP into account. Mr Upton took me through the various planning documents which showed that the NDR had been part of the baseline since at least 2007. His submission was supported by PPS 12: "Local Spatial Planning"; para 4.10 said

that "the outcome of the infrastructure planning process [here the NATS and LTP] should inform the core strategy and should be part of a robust evidence base". It recommended that those responsible for delivering infrastructure and those responsible for the core strategy align their planning processes. Para 4.28 emphasises the importance of not advancing a core strategy which depended on others for its implementation when those others had not agreed it. No challenge had been made to the adequacy of its SEA. Incorporation into the JCS did not require a separate SEA. There was no need to duplicate or to repeat SEAs.

76. Those two plans were also the statutory responsibility of the County Council as highway and transportation authority. There were no reasonable alternatives for the District Councils to consider in promoting the JCS, since transportation was not within their statutory competence. So it had rightly been treated as part of the baseline, though the various levels of development in various locations on the NDR and on the roads leading to it would be relevant. Besides, the Inspectors had concluded that there was no reasonable alternative to the NDR. The reference in the SA of September 2009 to the NDR being promoted through the JCS was no more than a reference to its being relied on in the JCS. The detail of the route would be dealt with in the Broadland DC AAP.

Conclusions on ground 2

- 77. The starting point to my mind is that proposing or planning the NDR is not within the remit of the JCS. It is for the highway authority to plan and promote the NDR through its plans. The NDR is outside the Defendants' legal competence. There is no substance in the suggestion that the existence of the informal GNDP alters the allocation of statutory responsibility because it includes the Defendants, and all four Councils are in harmony on this issue.
- 78. Of course, there are references in the JCS to the role of the NDR, and there is a relationship between the policies for accommodating growth in the JCS, and the infrastructure to support it. The promotion of the NDR, its status in the EEP, NATS and LTP, and its budgetary status, make it a relevant factor in the judgment of where growth should be. It would be unwise, if not impossible, to create a coherent strategy for any plan if the proposals for major infrastructure were ignored. It may make it unreasonable to consider alternative means of providing for growth which do not use that proposed infrastructure. That may be very relevant to how the defendants approached, albeit not explicitly, the selection of reasonable alternatives for examination. Their uncertainty may have to be planned for as well, as the Inspectors' recommended amendments showed. But none of that, including reliance on it for the selection of the preferred option, makes the NDR part of the JCS in the sense that the environmental effect of the NDR has to be assessed, growth in the NEGT or not, as a proposal of the JCS. That does not turn the JCS into a plan or proposal for the infrastructure on which it relies.
- 79. True it is as well that the land use plan has to provide for safe-guarding of the corridor for the NDR, since to fail to do so could prevent its development, but that safe-guarding does not make the NDR a proposal of the plan for which alternatives and impacts have to be assessed. The fact that the JCS talks of promoting the NDR, a safeguarding and supportive role, does not amount to its

- adoption by another authority or create an obligation to assess it and alternatives. It merely reflects the importance which another public body's infrastructure proposal has.
- 80. In so far as the concern was with alternatives to any NDR rather than with alternative NDR alignments, that did not fall within the scope of the JCS. The alignment corridor itself is not a choice made within the JCS; the corridors were assessed in the 2006 LTP. Nor is the corridor a matter of concern to the Claimant who seeks an alternative to any NDR. The effect of different alignments within the protected corridor would be for assessment when the precise line came to be chosen.
- 81. The Defendants were right in my judgment to treat it as part of the baseline against which the environmental effects of the growth strategy were assessed. Of course the effects of the growth may be additional to the effects of the NDR which are part of the baseline in the assessment of the strategy, but the NDR is not itself a proposal for assessment in the JCS.
- 82. The second reason why this ground fails is that the NDR has been subject to environmental assessment as part of the adoption of the NATS, albeit voluntarily, and as part of the LTP. Those plans have been adopted. This challenge cannot review any inadequacies in that assessment. The time for such a challenge is long past. It is not the function of the JCS to remedy any deficiencies in earlier assessments undertaken for the purposes of other plans.
- 83. Accordingly this ground of challenge fails.

Discretion

- 84. Mr Upton submitted that no relief should be granted were he to lose on either of these grounds. A great deal of work had been done; the claims were in reality that the SEA had not been expansive enough on one topic. A number of alternatives had clearly been examined on a comparable basis as required. The reasons for selection and choice between alternatives and the preferred option were spelt out in a publicly available report, even though it was not part of the SEA. The Inspectors' Report gave reasons justifying the selection of the preferred option over the alternatives. The Directive had been substantially complied with. The Claimant had not been prejudiced by any procedural failings; he had put forward no realistic alternative which had been ignored.
- 85. Mr Harwood submitted that the failings he identified went to substance and not to procedure, and so questions of substantial compliance with procedural requirements did not arise. The obligation was to identify and explain the selection of reasonable alternatives, to assess them on a comparable basis, to consult the public about the plan and SA, and to reach a decision in the light of their responses. That was the essence of the process of environmental assessment. Berkeley v Secretary of State for the Environment [2000] UKHL 36, [2001] 2 AC 603 also showed that a disparate collection of documents, a paper chase through which the public might find its way, did not constitute substantial compliance with Directive requirements on environmental assessment. This case was to be

- distinguished from Younger Homes (Northern) v First secretary of State and Calderdale District Council [2004] EWCA Civ 1060, Laws LJ at paras 42-47.
- 86. S113 of the Planning and Compulsory Purchase Act 2004, as amended by the s185 of the Planning Act 2008, gave a wide variety of powers, short of quashing the whole JCS and starting again, which should be exercised here if relief were to be granted.

Conclusions on discretion

87. I am satisfied here that I should not exercise my discretion against the grant of any relief. There has been a series of failings in relation to the directive obligations. The Defendants may well be right that the option of no NEGT growth is unrealistic. But I cannot regard there as being substantial compliance with the directive. I will hear submission on the precise form of relief, in the light of the powers in s113 of the 2004 Act, as amended.

APPENDIX B - ORDER OF THE HIGH COURT

Author: Mr. Justice Ouseley

Preface:

Contains the Court Order, schedule of remitted text and Mr Justice

Ouseley's narrative.



In the High Court of Justice Queen's Bench Division Administrative Court

CO Ref: CO/ 3983/2011

HEARD

Claimant

and

BROADLAND DISTRICT COUNCIL
SOUTH NORFOLK DISTRICT COUNCIL
NORWICH CITY COUNCIL
Defendants

Order by Mr Justice OUSELEY

1. I have approved the Order in the form submitted with two amendments: 1 paragraph 8 is deleted since it would not be right for an order to be made in respect of the Secretary of State, a non party, let alone without notice, and without any evidence that it could be necessary. The Order therefore reflects the expectation that he will do what statute already requires him to do. 2 paragraph 9 is consequently amended by the deletion of "thereafter" and the insertion of after that examination" after "consider".

2. I have not altered the Schedule from that submitted by the Defendants. I am grateful to Counsel for their co-operation and hard work on this.

(a) I do not accept Mr Harwood's submission on the housing totals point in item 33. It seems to me that the Defendants' proposals do not prevent full argument on the NEGT. If further changes are required by modification, so be it. The removal of the totals would put uncertainty over what was required in other areas as a minimum. The meaning of the Defendant's proposed reading of the totals, given the deletion of some components seems to me clear.

(b) I did deal with the business park in the hearing on 29 February. But I accept the arguments, if new, that this is not a NEGT dependant proposal, and it does not have to be in the NEGT. It may

be relevant to whether there should be a NEGT, but that is not the point.

Signed

2.3. W. Oureley

Mr Justice Ouseley 25 April 2012

SIOS APA O E

SOUTHWORFOLK COUNTY

Sent to the claimant, defendant and any interested party / the claimants, defendants, and any interested party's solicitors on (date):

IN THE HIGH COURT OF JUSTICE **QUEENS BENCH DIVISION** ADMINISTRATIVE COURT

In the matter of Planning and Compulsory Purchase Act 2004, s.113

Before Mr Justice Ouseley 29th February 2012

BETWEEN

HEARD

Claimant

- and -**BROADLAND DISTRICT COUNCIL** SOUTH NORFOLK DISTRICT COUNCIL NORWICH CITY COUNCIL

Defendants

<u>ORDER</u>

UPON hearing Mr Richard Harwood of Counsel for the Claimant and Mr William Approveded in as pare 3200, in. is Upton of Counsel for the Defendants

IT IS ORDERED THAT:

- 1. The Claim be allowed;
- 2. The parts of the policies and text of the Joint Core Strategy for Broadland, Norwich and South Norfolk (hereafter referred to as the "JCS") set out in the schedule attached to this Order shall be remitted and be treated as not having been adopted;
- 3. The steps in the process that have resulted in the adoption of the remainder of the policies and text of the JCS shall be treated as having been taken;

- 4. The steps in the plan preparation process of those parts of the JCS set out in schedule attached to this Order shall be treated as having been taken up until the pre-submission stage and not having been taken thereafter;
- 5. The Defendants shall prepare a Sustainability Appraisal ("SA") of those parts of the JCS identified in the schedule attached to this Order, taking into account in particular the strategic growth in the North-East Growth Triangle and the reasonable alternatives (if any) to this;
- 6. Following their consideration of the SA, the Defendants shall publish the relevant parts of JCS (subject to amendments, if any) and its submission documents (including the SA) under regulation 27 of the Town and Country Planning (Local Development) (England) Regulations 2004 (as amended, or as repealed and replaced) before submitting the relevant parts of the JCS to the Secretary of State for examination under section 20 of the Planning and Compulsory Purchase Act 2004 and the relevant regulations;
- 7. Following consideration of the representations received to the Regulation 27 Publication the Defendants shall submit the relevant parts of JCS and its submission documents (including the SA and the representations received) to the Secretary of State for examination under section 20 of the Planning and Compulsory Purchase Act 2004 and the relevant regulations; alternatively, the Defendants may withdraw the remitted parts of the JCS.

8. The Secretary of State (or his appointed Inspector) shall re-examine the relevant parts of the JCS, pursuant to section 20 of the Planning and Compulsory Purchase Act 2004 and the relevant regulations, provided that the Defendants have carried out the steps set out in (5), (6) and (7) above.

9. The Defendant Councils shall thereafter consider whether or not to adopt the relevant parts of the policies and text of the JCS in the light of the Secretary of State's or Inspector's report and recommendations, pursuant to the Planning and Compulsory Purchase Act 2004 and the relevant regulations.

IT IS FURTHER ORDERED THAT

- 10. The Defendants shall pay the costs of the Claimant in the sum of £29,000 (including VAT).
- 11. For the avoidance of doubt, this order encompasses the costs previously reserved in this case.
- 12. Permission to appeal is refused to the Defendants.

By the Court

IN THE HIGH COURT OF JUSTICE **QUEENS BENCH DIVISION ADMINISTRATIVE COURT**

In the matter of Planning and Compulsory Purchase Act 2004, s.113

Before Mr Justice Ouseley, 29th February 2012

BETWEEN

HEARD

Claimant

- and -**BROADLAND DISTRICT COUNCIL** SOUTH NORFOLK DISTRICT COUNCIL **NORWICH CITY COUNCIL**

Defendants

SCHEDULE TO THE ORDER

The parts of the Joint Core Strategy for Broadland, Norwich and South Norfolk ("the plan") to be remitted following the High Court Judgment:

Reference	Part of plan	Text/diagram for remittance (in italics) [N.B. the words in square brackets are not remitted, and are included for clarification purposes only]
1	01 Our Strategy – fourth paragraph under heading "The dilemmas"	the area to the north east of the city and
		for a concentration of new [development]

2	01 Our Strategy – fifth paragraph under heading "the dilemmas"	In the case of Broadland, the historical pattern of development lends itself to further expansion with new growth locations in the parishes of Old Catton, Sprowston and Thorpe St Andrew, and the development of a low carbon community focussing on Rackheath, given its existing employment opportunities and railway line. The growth in these locations relies on the implementation of NATS. and By contrast,
3	04 Spatial vision: third paragraph under the heading "The spatial vision"	[Growth will be] and in a very large mixed use urban extension within the Old Catton, Sprowston, Rackheath and Thorpe St Andrew growth triangle (Appendix 5)
4	04 Spatial vision: under the heading "Climate change and sustainability" 3 rd bullet point	inspired by the proposed exemplar at Rackheath,
5	04 Spatial vision: under the heading "Working and getting around" Second bullet point	Old Catton, Sprowston, Rackheath, Thorpe St Andrew Growth Triangle
6	Key diagram –and under objective 3	The notation of the area to the northeast of the urban area as one of the "strategic employment sites" and "major housing growth and associated facilities"

7	05 Area-wide policies, Policy 4 Housing Delivery: under the heading "Housing with care"	Old Catton, Sprowston, Rackheath and Thorpe St Andrew growth triangle,
8	05 Area-wide policies, Policy 4 Housing Delivery: Table following paragraph 5.25	The figure of '9,000' for the 'New Allocations to 2026' in the Broadland (NPA) and the total of '11,099' recorded in the table for the 'New Commitment to 2026' in the Broadland (NPA). [The total recorded for the NPA is not remitted.]
9	06 Policies for Places: Introduction paragraph 6.3	[Large-scale mixed-use developments in the Norwich Policy Area are provided in a major urban extension in the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle, and
10	06 Policies for places, Policy 9 Strategy for growth in the Norwich Policy Area: 2 nd & 8 th bullet points	Old Catton, Sprowston, Rackheath and Thorpe St Andrew growth triangle: 7,000 dwellings by 2026 continuing to grow to around 10,000 dwellings eventually
		Broadland smaller sites in the NPA: 2,000 dwellings
11	06 Policies for places, Policy 9 Strategy for growth in the Norwich Policy Area:	

	Final bullet point:	including around 25ha of new employment land at Rackheath
12	06 Policies for places, Policy 9 Para 6.7	The Old Catton, Sprowston, Rackheath and Thorpe St Andrew growth triangle incorporates land at Rackheath promoted for an eco-community under the governments Eco-towns programme and development of the rest of the area will be expected to reflect similar high standards.
13	Para 6.12 4 th bullet point	Rackheath: around 25ha of new employment land for a range of employment uses to strengthen the employment role of this location and provide local opportunities for the new community in this area
14	Diagram after the end of the paragraph 6.12 – Relationship between strategic growth locations within the Norwich Policy Area	Notation for major housing growth and associated facilities and strategic employment location entitled "Old Catton, Sprowston, Rackheath, Thorpe St Andrew Growth Triangle".
15	Diagram on the following page after para 6.12, entitled "Main Housing Allocations"	The notation showing 10,000 new houses to the north east of the urban area within the Norwich policy area, and The notation for 2,000 houses in the NPA part of Broadland. and The notation for the Old Catton, Sprowston, Rackheath, Thorpe St Andrew Growth Triangle
16	Policy 10 Locations for major new or expanded communities in	[Major growth] in the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle, and

	the Norwich Policy Area: first sentence	
17	Policy 10 Paragraph headed "Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle"	Heading and the two paragraphs headed "Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle"
18	Policy 10: Para 6.15	The major urban extension in the Old Catton, Sprowston, Rackheath, and Thorpe St Andrew growth triangle will provide a concentration of growth which can support local services, facilities, and infrastructure including secondary education, high quality public transport links and significant green infrastructure. An Area Action Plan and a sustainable development code are being developed. The growth triangle is proposed to accommodate 10,000 dwellings after 2026. A large part of the [development at Rackheath] and then The Rackheath low carbon development remains part of this strategy.
19	Para 6.16 second line	<u>similar</u>
20	Para 6.19	significant development in the growth triangle and and in the Old Catton, Sprowston, Thorpe St Andrew growth triangle and

	(see supporting text for Policy 20).
D (00 C)	
Para 6.20 fourth sentence	in the Old Catton, Sprowston, Rackheath, Thorpe St Andrew area
	and
	'a' and 'route which may be via Gurney Road/Salhouse Road'
Paragraph 6.22	
	A new secondary school is needed to serve the new community in the north east.
	and, in the second sentence 'more'
Diagram following policy 10, entitled "Green infrastructure priority areas supporting key growth locations"	The growth location and green infrastructure priority area to the northeast of the urban area and priority corridor A entitled "Norwich to the Broads"
Policy 12: The remainder of the Norwich urban area, including the fringe parishes: introductory paragraph	[It will be expanded] through significant growth in the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle, and smaller
Policy 15 Service Villages	and Rackheath
third paragraph	
	Diagram following policy 10, entitled "Green infrastructure priority areas supporting key growth locations" Policy 12: The remainder of the Norwich urban area, including the fringe parishes: introductory paragraph Policy 15 Service Villages

26	Daragraph 6 77	T Oll C D II
20	Paragraph 6.77	The Old Catton, Rackheath, Sprowston and Thorpe St Andrew growth triangle in particular will be sufficiently large to require a district centre. Preferably this will include a food store as an anchor
		and sufficient leisure and ancillary activities to provide for the attraction of a range of trips. This
		may be through building on the proposed centre at Blue Boar Lane or the creation of a second
		district centre elsewhere in the Growth Triangle. This will be determined through the Area Action Plan for the area.
27	Policy 19, The hierarchy of centres	within the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle,
	Point 3.	and
		The Old Catton, Sprowston, Rackheath, Thorpe St Andrew Growth Triangle will be served by a district centre. This may be provided by building on the proposed district centre at Blue Boar Lane or the creation of a second district centre elsewhere in the Triangle as determined through the Area
		Action Plan for the Growth Triangle.
28	07 Implementation and monitoring, Paragraph 7.16	in the growth triangle
29	Table in paragraph 7.16	Growth Triangle
	first line	and
		New employment allocation at Rackheath
		and
		Smaller sites in Broadland NPA
30	Para 7.17	Broadland District Council is committed to preparing an Area Action Plan (AAP) for the growth
		triangle. As part of the preparation of this AAP there will be an investigation of any potential that
		may exist for further growth to take place (in addition to that shown in table 1 above) without

31	Para 7.18	confirmation of the delivery of the NDR. This will include testing whether interim schemes and/or alternatives to the NDR could help to facilitate growth without compromising the spatial vision and objectives of the JCS. Therefore, the analysis would need to cover capacity of all infrastructure, not just road capacity, the implications of particular sites, and the nature of the proposed development established through the AAP process
		and for the growth triangle
32	Appendix 5 Old Catton, Sprowston, Rackheath, Thorpe St Andrew Growth Triangle	The whole appendix, including map
33	Appendix 6 housing trajectory table entitled "Growth locations	The figures in the second to fourth rows are remitted, namely the lines entitled "Rackheath", "Remainder of Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle (inside NDR)", and "Additional smaller sites around Broadland NPA (2000)". The totals derived for Broadland in the first row and the Total in the last row of the table shall be read in the light of this remittal
34	Appendix 7 Table 1 Implementation Framework	The implementation framework lists the infrastructure required to facilitate the development promoted in the plan – so the inclusion in the list in relation to the North East Growth Triangle and the strategic housing growth identified in the part of the Norwich Policy Area in Broadland District is remitted. This applies where: In Column 2 (headed "Scheme") where there is a reference to Rackheath
		In Column 3 (headed "Required for growth in") where there is a reference to Old Catton, Sprowston,

The mention of "Including in the growth triangle where 3,000 dwellings are proposed the introduction to Appendix 7.	arter 2020 III
Rackheath and Thorpe St Andrew Growth Triangle, or to 'Broadland: smaller sites in (2000 dwellings)'.	

Note: For clarity the below Order has been produced by the Greater Norwich Development Partnership to show the final text approved by Mr Justice Ouseley. Mr Justice Ouseley's Order, and the Schedule to the Order, can be seen on the preceding pages

Case ref CO/3983/2011

IN THE HIGH COURT OF JUSTICE QUEENS BENCH DIVISION ADMINISTRATIVE COURT

In the matter of Planning and Compulsory Purchase Act 2004, s.113

Before Mr Justice Ouseley 29th February 2012

BETWEEN

HEARD <u>Claimant</u>

- and -BROADLAND DISTRICT COUNCIL SOUTH NORFOLK DISTRICT COUNCIL NORWICH CITY COUNCIL

Defendants

<u>ORDER</u>

UPON hearing Mr Richard Harwood of Counsel for the Claimant and Mr William Upton of Counsel for the Defendants

IT IS ORDERED THAT:

- 1. The Claim be allowed;
- The parts of the policies and text of the Joint Core Strategy for Broadland, Norwich and South Norfolk (hereafter referred to as the "JCS") set out in the schedule attached to this Order shall be remitted and be treated as not having been adopted;

Note: For clarity the below Order has been produced by the Greater Norwich Development Partnership to show the final text approved by Mr Justice Ouseley. Mr Justice Ouseley's Order, and the Schedule to the Order, can be seen on the preceding pages

- 3. The steps in the process that have resulted in the adoption of the remainder of the policies and text of the JCS shall be treated as having been taken;
- 4. The steps in the plan preparation process of those parts of the JCS set out in schedule attached to this Order shall be treated as having been taken up until the pre-submission stage and not having been taken thereafter;
- 5. The Defendants shall prepare a Sustainability Appraisal ("SA") of those parts of the JCS identified in the schedule attached to this Order, taking into account in particular the strategic growth in the North-East Growth Triangle and the reasonable alternatives (if any) to this;
- 6. Following their consideration of the SA, the Defendants shall publish the relevant parts of JCS (subject to amendments, if any) and its submission documents (including the SA) under regulation 27 of the Town and Country Planning (Local Development) (England) Regulations 2004 (as amended, or as repealed and replaced) before submitting the relevant parts of the JCS to the Secretary of State for examination under section 20 of the Planning and Compulsory Purchase Act 2004 and the relevant regulations;
- 7. Following consideration of the representations received to the Regulation 27 Publication the Defendants shall submit the relevant parts of JCS and its submission documents (including the SA and the representations received) to the Secretary of State for examination under section 20 of the Planning and Compulsory Purchase Act 2004 and the relevant regulations; alternatively, the Defendants may withdraw the remitted parts of the JCS.
- 8. The Defendant Councils shall consider after that examination whether or not to adopt the relevant parts of the policies and text of the JCS in the light of the

Note: For clarity the below Order has been produced by the Greater Norwich Development Partnership to show the final text approved by Mr Justice Ouseley. Mr Justice Ouseley's Order, and the Schedule to the Order, can be seen on the preceding pages

Secretary of State's or Inspector's report and recommendations, pursuant to the Planning and Compulsory Purchase Act 2004 and the relevant regulations.

IT IS FURTHER ORDERED THAT

- 9. The Defendants shall pay the costs of the Claimant in the sum of £29,000 (including VAT).
- 10. For the avoidance of doubt, this order encompasses the costs previously reserved in this case.
- 11. Permission to appeal is refused to the Defendants.

By the Court

APPENDIX C – 2007 SCOPING REPORT

Author: GNDP	
Preface:	
2007 Sustainability Appraisal Scoping Report	

Joint Core Strategy

for Broadland, Norwich and South Norfolk

Sustainability Appraisal Scoping Report Adopted December 2007









Joint Core Strategy

For Broadland, Norwich and South Norfolk

Sustainability Appraisal Scoping Report Adopted December 2007

For further information or an emailed version of the document, please contact:

Planning Policy South Norfolk Council Swan Lane Long Stratton Norfolk NR15 2XE

Email: Idf@s-norfolk.gov.uk

Tel: 01508 533805

Online: www.eastspace.net/gndp

Sustainability Appraisal Scoping Report

Adopted December 2008

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1. Introduction

1.1 This Scoping Report is the first stage of the Sustainability Appraisal of the Greater Norwich Core Strategy Development Plan Document.

A Core Strategy Development Plan for Greater Norwich

- 1.2 The Core Strategy will form part of the suite of plans within the Local Development Framework of each of the three authorities that make up Greater Norwich, i.e. Broadland District Council, Norwich City Council and South Norfolk Council. This is a development strategy that will set out the policies and proposals to guide future development in Greater Norwich until 2021, dealing with the broad strategic issues and setting the context for the other subsidiary documents that will follow the Core Strategy.
- 1.3 The Joint Core Strategy will guide development in the 'Greater Norwich' area. Greater Norwich consists of the three local authorities of Broadland District Council, Norwich City Council and South Norfolk District Council. It includes the largest urban area in Norfolk and is a regional focus for the East of England. The area is also adjacent to the Norfolk and Suffolk Broads, the only designated area with status equivalent to a National Park in South East England. Although not part of the Greater Norwich Core Strategy, it does form a key stakeholder in the area's plans.
- 1.4 Within Greater Norwich, The Regional Spatial Strategy also identifies a "Norwich Policy Area" based on Norwich, the adjoining suburbs and the adjacent rural area, within which most development in the Greater Norwich Area is to be concentrated. The importance of the 'Norwich Policy Area' within the region has been recognised by its designation as both a Growth Point, and a Key Centre for Development and Change in the Regional Spatial Strategy.

Background to Sustainability Appraisal

1.5 Sustainability Appraisal is a requirement of the Planning and Compulsory Purchase Act of 2004. The principle originated from the requirement for Development Plan Documents to undergo an environmental assessment under the terms of the Strategic Environment Assessment Directive (the SEA Directive 2001/42/EC), which was transposed into UK legislation by the Environmental Assessment of Plans and Programmes Regulations 2004. Sustainability Appraisal covers the requirements of the SEA to produce an Environmental Report, but it also expands on this by requiring social and economic matters to be addressed as part of an overall assessment of sustainability.

Purpose

- 1.6 Sustainability Appraisal (SA) is a systematic process undertaken throughout the preparation of a plan or strategy. It's role is to assess the extent to which emerging plans and proposals will help to achieve relevant environmental, social and economic objectives, identifying adverse effects and offering suggestions for minimising the possible impacts. As such, it is an integral part of producing a Local Development Framework that incorporates the principles of sustainability.
- 1.7 The Scoping Report is the first element of the Sustainability Appraisal. As the name implies, it sets out the scope of the appraisal, identifying the information, issues and means of assessment, the process of which is discussed further in the following sections. The purpose of the Scoping Report is to:

- Identify environmental, social and economic objectives contained in other plans and programmes that are relevant to the Greater Norwich Core Strategy;
- Identify the issues that the Core Strategy should seek to address by assessing the broad environmental, social and economic characteristics of Greater Norwich and how these may change during the period up to 2021;
- Set out an appropriate framework for the remainder of the SA, including objectives against which draft policies and options for strategy may be assessed, and their progress monitored into the future; and,
- Supplement the growing evidence base behind the Local Development Frameworks in Greater Norwich.

Method

- 1.8 There is a five-stage process to Sustainability Appraisal:
 - 1. Stage A Setting the context and objectives, establishing the baseline and deciding on the scope;
 - 2. Stage B Developing and refining options;
 - 3. Stage C Appraising the effects of the plan;
 - 4. Stage D Consulting on the plan and the SA report;
 - 5. Stage E Monitoring implementation of the plan.
- 1.9 Each stage is split into a number of smaller steps, as detailed in Figure 1, reproduced from the original Government guidance. This Scoping Report covers Stage A, and follows the same structure for ease of interpretation, although often stages overlap.

Figure 1: Summary of the course of the Sustainability Appraisal process

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope

- A1: Identifying relevant policies, plans, programmes and objectives.
- A2: Collecting baseline information.
- A3: Identifying sustainability issues and problems.
- A4: Developing the Sustainability Appraisal Framework.
- **A5**: Consulting on the scope of the Sustainability Appraisal.

Stage B: Developing and refining options and assessing effects

- B1: Testing the DPD objectives against the SA framework.
- B2: Developing the DPD options.
- **B3**: Predicting the effects of the DPD.
- **B4**: Evaluating the effects of the DPD.
- B5: Considering ways of mitigating adverse effects and maximize the benefits.
- B6: Proposing measures to monitor significant effects of implementing the DPDs.

Stage C: Preparing the Sustainability Appraisal Report

• C1: Preparing the SA Report.

Stage D: Consulting on the preferred options of the DPD and SA Report

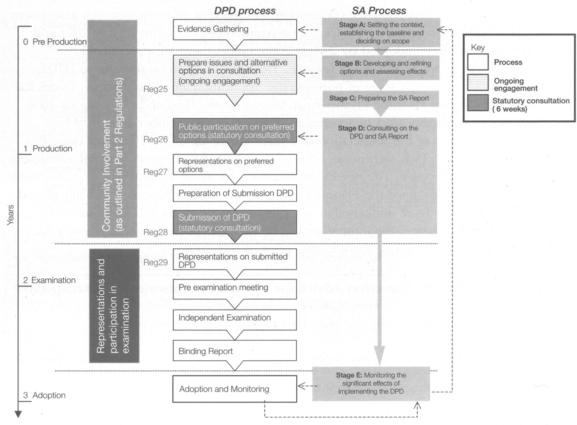
- D1: Public participation on preferred options of the DPD and the SA Report.
- D2(i): Appraising significant changes.
- D2(ii): Appraising significant changes resulting from representations.
- D3: Making decisions and providing information.

Stage E: Monitoring the significant effects of implementing the DPD

- E1: Finalising aims and methods for monitoring.
- E2: Responding to adverse effects.

- 1.10 The first stage in the production of the Scoping Report is two-fold; an assessment of the wider context of programmes under which the SA functions (Task A1) and an appreciation of the character of the area and its changing environmental, social and economic conditions (Task A2).
- 1.11 The results of these surveys then help identify key issues and problems that are likely to face the area and should be addressed throughout the duration of the plan (Task A3). Sustainability Appraisal Objectives then assess each strategy's ability to tackle those issues, by considering their effects against a number of key questions and indicators (Task A4); this assessment Framework is applied to each policy option. Crucially, this SA Scoping Report is subjected to consultation with key stakeholders (Task A5) to ensure that it remains accurate and relevant in providing an impartial and objective assessment of a plan's viability and likely success prior to its implementation.
- 1.12 Following the production of the Scoping Report, the Sustainability Appraisal process, and the Framework in particular, goes on to help the emerging Core Strategy options consider their sustainability impacts. It identifies the benefits, drawbacks and areas for improvement on all the emerging options and suggests ways for policy to improve its likely performance. The public will be able to see the findings of the Sustainability Appraisal as the Core Strategy undergoes continual development, and will be consulted on a Sustainability Appraisal Report that is published to accompany the Core Strategy Preferred Options consultation. Figure 2 illustrates the relationship between Development Plan Documents and their interaction with Sustainability Appraisal.

Figure 2: Development Plan Document preparation and inter-relationship with the Sustainability Appraisal process (taken from ODPM guidance, 2005).



2. Task A1 – The Review of Plans, Programmes and Policies

Identifying relevant plans, programmes and sustainability appraisal objectives

- 2.1 The first stage of the Sustainability Appraisal Scoping Report is to assess other relevant policies, plans and programmes that form the context in which the Greater Norwich Core Strategy is prepared. This is an exercise that can assist in identifying issues, opportunities and implications for both the Local Development Framework and the Sustainability Appraisal process.
- 2.2 The review should consider guidance at the international, national, regional and local level, and the SEA Directive specifically requires environmental protection objectives to be taken into account. There is a significant degree of overlap between these documents and often they are hierarchical in nature, with some documents reflecting and applying the objectives of more strategic plans. Policy documents at the regional level, for example, will have taken into account sustainability considerations from national and international level documents. Therefore, this review focuses on the main documents relevant to the Greater Norwich Core Strategy. Emerging policies in the Joint Core Strategy will have to pay regard to the concerns and possible conflicts of neighbouring authority development plans.
- 2.3 A list of the reviewed documents is included in Figure 3, below. The full review, which details the key objectives, targets and indicators of each document, and considers possible implications for the LDF and some emerging issues for the Sustainability Appraisal, can be seen in Appendix 1 of the Scoping Report.

Figure 3: Plans, programmes and strategies subjected to Literature Review

International Level:

The Rio Earth Summit, 1992

The World Summit on Sustainable Development, Johannesburg, 2002

Kvoto Protocol and the UN Framework Convention on Climate Change, 1992

The Conservation of Natural Habitats and of Wild Fauna and Flora Directive (92/43/EEC)

Directive on the Promotion of Bio-fuels and other Renewable Fuels for transport (2003/30/EC)

European Water Framework Directive (2000/60/EC)

European Spatial Development Perspective

European Air Quality Framework Directive (96/62/EC) (and supplementary ones)

European Renewable Energy Directive (2001/77/EC)

National Level:

Securing the Future - the UK Sustainable Development Strategy 2005

Sustainable Communities Plan: Building for the future

Air Quality Strategy for England etc (Jan 2000 and February 2003 addendum)

Airports White Paper, DfT (2003)

Planning (Control of Major Accident Hazards) Regulations (implements obligations under

Seveso II Directive Council Directive 96/82/EC)

Rural White Paper: Our Countryside (2000)

Rural Strategy 2004

Urban White Paper- Our Towns and Cities: The Future (2000)

Energy White Paper: Our Energy Future - creating a low carbon economy (2003)

Energy Review 2006

Saving Lives: Our Healthier Nation White Paper (1999)

UK Climate Change Programme – first published Jan. 1994, produced annually (latest version

March 2006).

Local Government White Paper 2006 – Strong and Prosperous Communities Code for Sustainable Homes (2007)

National Planning Policy Statements (including Annexes and Practice Guides):

PPS 1 Delivering Sustainable Development (2005)

PPS 3 Housing (2006)

PPG 4 Industrial and Commercial Development and Small Firms (2001)

PPS 6 Planning for Town Centres (2005)

PPS 7 Sustainable Development in Rural Areas (2004)

PPG 8 Telecommunications (2001)

PPS 9 Biodiversity and Geological Conservation (2005)

PPG 13 Transport (2001)

PPG 14 Development on Unstable Land (1990)

PPG 15 Planning and the Historic Environment (1994)

PPG 16 Archaeology and Planning (1993)

PPG 17 Planning for open space, sport and recreation (2002)

PPS 22 Renewable Energy (2004)

PPS 23 Planning and Pollution Control (2004)

PPG 24 Planning and Noise (1994)

PPS 25 Development and Flood Risk

Good Practice Guide on Planning for Tourism (May 2006)

Regional Level:

A Sustainable Development Framework for the East of England (EERA, 2001)

Woodland for Life - Regional Woodland strategy for the East of England (2003)

Sustainable Futures: The Integrated Regional strategy for the East of England (2005)

Living with Climate Change in the East of England, EERA and Sustainable Development Round Table for the East of England

Sustainable Communities in the East of England (2003)

Sustainable Tourism Strategy for the East of England (2004)

East of England Plan Regional Spatial Strategy - The Secretary of State's Proposed Changes to the Regional Spatial Strategy for the East of England (Dec 2006)

Water resources for the future: a strategy for the Anglian Region

Norfolk, Suffolk and Cambridgeshire Strategic Health Authority Health Strategy 2005 – 2010

Local Level:

Local Transport Plan for Norfolk 2006 – 2011 (inc. Transport Strategy to 2021)

Shaping the Future - an economic strategy for Norfolk and Waveney, and a social cohesion strategy for Norfolk

Norfolk Biodiversity Action Plan 2004

Norfolk Ambition

Gypsies and Travellers Strategy for Norfolk (2005-2008)

Broadland Rivers Catchment Flood Management Plan (Draft – June 2006)

Broadland Rivers Catchment Abstraction Management Strategy

The Broads Plan 2004

The Broads Core Strategy (2007)

Greater Norwich Housing Strategy (2005 – 2010)

Joint Municipal Waste Strategy for Norfolk (2006-2020)

Learning Disability Employment Plan for Norfolk (2006)

Broadland Community Plan

Broadland Culture and Leisure Strategy

Broadland Economic Development and Tourism Strategy (2004)

Broadland Crime and Disorder and Drugs Misuse Strategy (2005)

South Norfolk Local Agenda 21 Strategy

South Norfolk Economic Development Strategy (2004)

South Norfolk Empty Homes Strategy (2003)

South Norfolk Tourism Strategy (2004)

South Norfolk Corporate Equality Plan (2003)

South Norfolk Crime Reduction Strategy (2003)

South Norfolk Alliance Sustainable Community Strategy (2004)

Towards Stronger Communities: South Norfolk's Strategy for Community Cohesion (2006)

South Norfolk Cycling Strategy (2005)

South Norfolk Corporate Environment Strategy

South Norfolk Leisure/Culture & Countryside Strategy (2006 - 2016)

South Norfolk Council's Strategy for Health and Well-Being (2006 – 2016)

Norwich: City Destination Strategy (2004)

Norwich's Environment Strategy 2003 - 2008

Norwich City Council Economic Strategy 2003 – 2008

Norwich Community Safety Strategy and Audit Report 2005 - 2008

Norwich Homelessness Strategy

Norwich Sustainable Community Strategy 2007 -2020 (draft)

Norwich Area Transport Strategy Norwich River Valleys Strategy

50

9

3. Task A2 – Collecting baseline information

Collecting and using baseline information

- 3.1 There is a wide range of information and data relating to the Greater Norwich area. Certain aspects can be used to provide a 'baseline' of the current status of the three districts. Although Greater Norwich is considered as a wider entity, there are some significant characteristics within the three individual districts that should be recognised specifically. This helps to ensure that local detail and distinctiveness is still appreciated, and issues tackled, within emerging plans. Most of the sources of information are available publicly, such as though the Audit Commission, or from assessments such as the Census or Indices of Multiple Deprivation.
- 3.2 The baseline information will be monitored as the LDF is regularly reviewed and subsidiary strategies are developed. It will also be considered alongside the outcomes of the Annual Monitoring Reports, which are produced by each district as a mark of progress against certain aspects of plan delivery and implementation performance. The baseline information is intended to provide a characterisation or spatial portrait of Greater Norwich, to contribute to the identification of issues to be addressed through the LDF (Task A3). It will also help identify objectives that can be used to assess the emerging policies through the sustainability appraisal framework (Task A4). Whilst this chapter offers an overview of Greater Norwich, Appendix 2 provides information against more detailed key indicators that will be used to monitor the performance of a policy against the Sustainability Appraisal objectives.

The wider evidence base

- 3.3 The Local Development Framework process relies on a large and ongoing process of evidence gathering, including a number of public exercises throughout policy formulation. Producing the Core Strategy and further Local Development Documents will also be able to draw on a number of specialist background studies commissioned to inform the strategy production. Although these are not yet available in finalised form, the range of subjects covered by studies for Greater Norwich include:
 - Employment Growth;
 - Green Infrastructure:
 - Housing Market Assessment;
 - Infrastructure for Development;
 - Open Space and Leisure Audit;
 - Retail, Town Centre and large-scale Leisure;
 - Strategic Flood Risk Assessment; and,
 - Water Supply and Treatment Capacity.

A Spatial Portrait of Greater Norwich

- 3.4 The following chapter of the Sustainability Appraisal Scoping Report offers a characterisation, or a spatial portrait, of Greater Norwich. It provides baseline information to enable the identification of sustainability issues, which should be addressed through the Core Strategy. It will also act as a reference against which the sustainability implications of those Core Strategy policies can be monitored.
- 3.5 The spatial portrait is concerned with describing the wider Greater Norwich area but also highlights some key spatial differences within the area affected by the Core Strategy and subsequent local development plans. The section is structured such that various aspects of Greater Norwich are described within an overall theme, for example 'environmental characteristics', followed by certain nuances being highlighted at a district-level within individual summaries.

4. A Characterisation of Greater Norwich

Contents:

Geographical overview

Demographics Current population

Ethnic diversity

Population distribution Forecasted change

Environment Landscapes

Nature

Water resources and flood risk

Minerals provision and household waste management

Renewable energy

Carbon dioxide emissions and ecological footprints

District summaries

Society and housing Income patterns

Health and recreation

Crime Education

Housing markets Housing stock type Housing stock condition

Housing tenure

House prices and affordability

Housing need District summaries

Economy Employment patterns

Employment sectors
District summaries

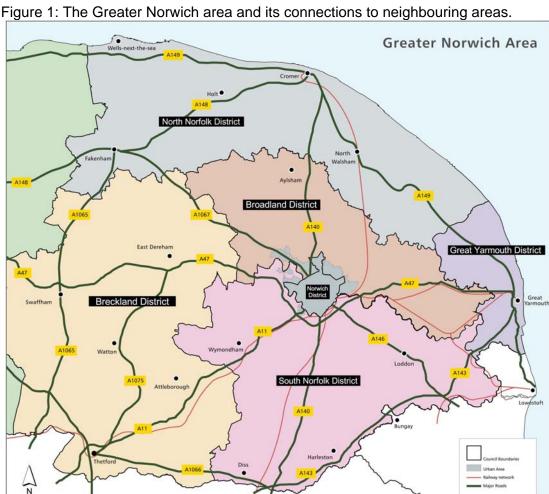
Transport and Access Transport availability

Travel to work trends

Minimising transport impacts

Geographical overview

4.1 Greater Norwich has important national and regional transport links via the A11 and A47 trunk roads, and mainline train routes to Cambridge, the Midlands and London, with links to the coast and rural fringes via local lines to Cromer and Sheringham to the north, and Great Yarmouth and Lowestoft to the east. Greater Norwich and its links to neighbouring areas can be seen in Figure 1. The opening of Stratford International station in 2007 will provide a fast rail link from Norwich to the continent via Eurostar. The recently expanded use of Norwich Airport has increased the international dimension of the area's economic and tourism opportunities. Norwich has a diverse, largely service-focussed, economic base. It benefits from hosting the internationally renowned University of East Anglia and its close links to the Norwich Research Park, which together offer a scientific research and development cluster to complement Cambridge and the M11 corridor.



The three authorities of the Greater Norwich Area cover an area of some 1,495 sq km (149,572 hectares) in total, some of which is also covered by the Broads Authority for planning purposes. Individually, Broadland covers some 546 sq km, South Norfolk 909 sq km, and Norwich 41 sq km. The area extends from places such as Foulsham to the north-west, Blickling and Aylsham in the north, Halvergate and Burgh St Peter to the east, Hingham in the west and Diss in the south. Much of the area has a strong rural character, with most of the land being countryside and largely in agricultural or forestry use. Scattered throughout this rural area are a

- number of small to medium sized towns, and many villages and hamlets. At its centre lies the large urban area of the city of Norwich.
- 4.3 The city of Norwich has grown from its historic core to develop a distinctive suburban fringe, including the recent expansion of nearby villages. In fact, approximately half of the population of Broadland is concentrated into the part of the district that forms part of the north and east of the Norwich urban area. To the south, expansion of the City has been constrained by the Yare river valley and the A47 Norwich Southern Bypass.
- 4.4 Outside Norwich there is a dispersed settlement pattern with a number of towns that provide local focuses. Wymondham, some 10 miles south-west of Norwich, is a significant local employment centre, and has a population of over 12,000. Diss, Harleston, Hingham, Loddon, Wroxham, Reepham, Acle and Aylsham are also important centres for population, services and employment, with Diss being the largest with a population of around 7,000. The rest of the area is very rural, characterised by numerous villages and hamlets.
- 4.5 Close to Norwich, the villages are heavily influenced by their proximity to the City, particularly in terms of employment and secondary education. Further afield the influence reduces, and other centres may also begin to have an effect; for example, Great Yarmouth and Lowestoft in the east; Dereham, Thetford and Cambridge in the west; and Ipswich, London and the South-East to the south.

5 Demographics

- 5.1 The demographic characteristics of Greater Norwich are varied and likely to continue to change over time, presenting many challenges for the Core Strategy to address. A significant characteristic of the need to provide extra housing is the continued division of household sizes, for example, as people both live longer and in smaller groups. The household structure of Greater Norwich generally follows from its slightly older population; there are more pensioner households and also adult couple households without children compared with England as a whole. The 2001 Census also shows the age structure of the population of Greater Norwich to include far fewer young families in the area than in England as a whole.
- 5.2 Greater Norwich is also expected to experience significantly increased in-migration as redevelopment and jobs growth occurs in the future. However, such calculated predictions for development-led growth are not yet available, so those figures shown in the following discussions are trend-based, i.e. being assumptions for future levels of births, deaths and migration based on observed levels over five years (2001 to 2006). They show what the population will be if recent trends in these continue.

Current population

- 5.3 The area has a varied population. Though the overall age-profile for Greater Norwich is similar to the rest of the country, examining demographic characteristics can help identify some sustainability issues. The overall population in Greater Norwich increased by 6.4% between 1991 and 2001 (20,974 people), particularly in Broadland (11.5%) as the city fringe expanded. If previous rates of growth are taken to predict a future trend in demographic change, then the population will be projected to increase by at least 16% from 2001 to 2021.
- 5.4 The Greater Norwich Joint Core Strategy will affect an area containing over 350,000 people between the three authorities; some 150,000 households. The 2001 Census showed that in general there is an older population in Broadland and South Norfolk, whereas more younger people aged between 15 and 44 live in the City. Migration between the districts is characterised traditionally by couples and older people moving out of the urban areas and into the suburban and rural locations, while younger people, or single people of all ages, show a preference for living in the city. Emerging evidence also suggests older, single people are moving back into the city.
- 5.5 There is generally the same proportion of children in all three authorities, but current mid-year estimates (2006) indicate a large majority of 16-44 year olds living in Norwich (48%). This is far more than in South Norfolk (32%) and Broadland (34%), which are home to more older people; nearly half of their populations are over 45, compared to only 35% in Norwich, a characteristic that is likely to remain unchanged throughout the plan period.

Ethnic diversity

5.6 In the 2001 Census, black and minority ethnic populations comprised just 4% of the total population in Greater Norwich (compared with 8.6% for the Eastern region and 12.5% for England and Wales) but there has been a gradual increase in multi-ethnicity as more people move to the area. Greater Norwich's largest ethnic minority groups in 2001 were recorded as White Other (1.7%), White Irish (0.5%), Indian (0.25%), Chinese (0.25%) and Other Ethnic Group (0.25%). Although migrants from other European Union states have increased rapidly in some other local authorities in Norfolk, where traditional labour markets of agriculture and food production are popular employment sectors, eastern European populations amount to less than 1%

of the total Greater Norwich population (Home Office, Workers Registration Scheme, 2006). Generally there is more diversity found in Norwich, where roughly 7% of the population were not classed as 'white British' in 2001, although this was though to have risen to 7.9% in the ONS mid-2003 population estimates¹.

5.7 Traditionally, Gypsy and Traveller communities have always been drawn to the more agricultural and rural parts of the area. Across the county of Norfolk, Gypsies and Travellers form the second largest minority ethnic population after the Portuguese. The Gypsy caravan count in July 2006 for South Norfolk was 79 (the second-largest in Norfolk), whilst Broadland (40) and Norwich (27) also contain significant groups.

Population distribution

- 5.8 Population distribution and density varies across Greater Norwich and can be divided into three broad zones:
 - Relatively high densities within Norwich itself, with particularly high densities in the city centre, especially on recent developments;
 - Medium density development in suburban fringe locations;
 - Mainly low density of development in rural areas, with market towns forming local focuses for higher densities.
- 5.9 The majority of the population in Greater Norwich lives in the main urban area (58%). Significant proportions live in the fringe and market towns (20%) and rural areas 22%) (Figure 2). South Norfolk in particular has one of the lowest population densities in the country; an average of only 1.2 people per hectare compared to 3.4 across England and Wales.

Figure 2: Spatial distributions of residential populations in Greater Norwich. (Source: Norfolk County Council, taken from 2001 Census)

Geographical	Broadland	South Norfolk	Norwich	Greater
area	population	population	population	Norwich
Rural	24 %	44 %	0 %	22 %
Towns / Fringe	25 %	36 %	0 %	20 %
Urban	51 %	20 %	100%	58 %

5.10 The Greater Norwich area is a particularly self-contained sub-region; 69% of people who moved home in 2000/01 stayed within the area covered by the three districts². However, residential movement between the three authorities is very fluid, causing each individual authority to have a rather lower rate of self-containment. South Norfolk and Broadland have similar, lower rates of self-retention for home-movers; of all their home-movers in 2000/01, only 44% and 46%, respectively, remained within the boundaries of their original district. Norwich showed itself to have the highest levels of self-retention, remaining home to 54% of those moving house in 2000/01.

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¹ Source: 2001 census.

² Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition (2006)

Forecasted change

5.11 Recent growth in the Greater Norwich population can be seen in Figure 3, below. There was approximately 12% growth between 1981 and 2004, which was in line with that of the East of England (13%). Based on 2003 estimates and previous trends, the population of Greater Norwich is projected to rise to 432,000 by 2028, as shown in Figure 4. This would be nearly a 20% rise between 2003 and 2028³.

Figure 3: Population of Greater Norwich, Eastern Region and England: 1981 - 2004 (Source: ONS Mid-Year Population Estimates⁴)

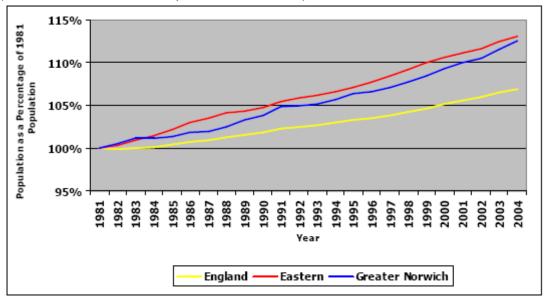
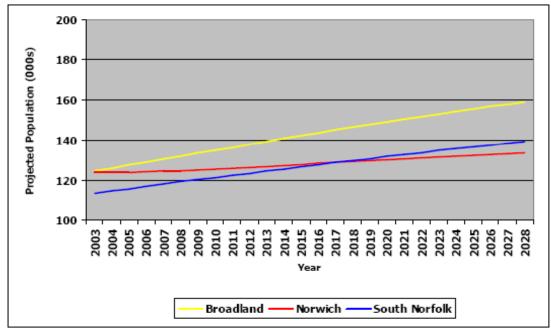


Figure 4: Population Projections for Greater Norwich: 2003 - 2028 (Source: ONS Sub-national Population Projections: 2003 based data⁵)



³ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition (2006)

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⁴ ibid

⁵ ibid

- 5.12 Trend-based population forecasts indicate that the overall Greater Norwich population will increase by some 16% between 2001 and 2021. However, from 2006 the area will experience a continued fall in the share of younger people (a drop of 5% in 0-44 year olds) against a 5% increase in the population aged over 45 years old. This shift is particularly noticeable in Broadland and South Norfolk whose residents over retirement age will form more than a quarter of their total populations by 2021.
- 5.13 The trend-based estimates also show that Greater Norwich would be expected to continue to experience one of the fastest rates of growth in the region in the next 15 years. An increase of 8.8% would be projected in the immediate future from 2001 to 2011, equivalent to some 30,717 people, the overwhelming majority of which will be in the city (13.4% growth). In the subsequent 10 years until 2021, growth projections would be expected to slow slightly (a 6.4% increase), and the majority of this growth would be in South Norfolk and Broadland (a combined extra 24,170 people) as growth in the Norwich population would plateau.
- 5.14 These forecasts are trend-based, assumed from previous rates of migration into the area and previous rates of household division. Further population statistics and forecasts can be seen in Figure 5, below. These trend-based projections do not take into account any future policy changes or requirements for extra housing provision, for example, that have not yet occurred. They are constrained at a national level by the national projections produced by the Government Actuary Department and are based on the 2004 mid-year population estimates. As improvements in the methodology are implemented, these projections may be subject to revision.
- 5.15 Nevertheless, there are also certain changes in key sequential migration patterns emerging too. As household sizes decrease overall, young people are moving into the city, particularly the city centre, as many new dwellings have recently been able to cater for this swell in numbers. This also coincides with a general trend that families of an early middle age and with young children are moving into the suburbs, fringe or rural villages. In addition to this, there is also anecdotal evidence that older single or divorced people are showing signs of moving back into the city to be close to services, some of which are catered for in specially-designed developments. These migrations, particularly around the Norwich urban area, are complemented by a wider influx into Greater Norwich from other areas, including, amongst others, European peoples.
- 5.16 The challenges of providing for the needs of such changing demographic circumstances are important ones for building sustainable, integrated communities with the facilities and services needed to benefit all of Greater Norwich's residents now and in the long-term.

Figure 5: Demographic characteristics of the Greater Norwich area in 2001. (Source: ONS and Norfolk County Council).

Note: These estimates are trend-based and do not account for future regional house-building requirements.

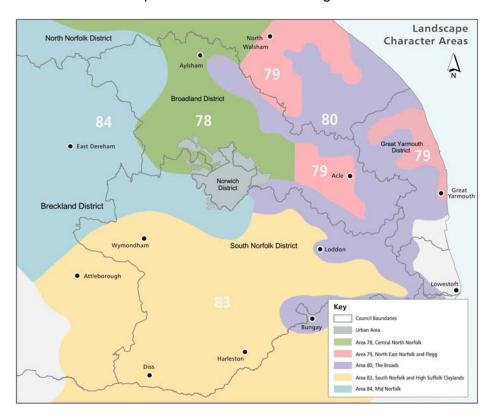
uilding requirements.	1	0 41-	I	0
	Broadland	South Norfolk	Norwich	Greater Norwich
Baseline figures		NOTIOIK		NOIWICII
Population 2001 total	118,513	110,710	121,550	350,773
Households 2001 total	50,009	46,607	54,584	151,200
Population age 2001	30,009	40,007	34,304	131,200
(%):				
	a) 17.0	a) 16.9	a) 16.3	a) 16.9
a) 0 - 14 yrs old b) 15 - 24	b) 9.4	b) 9.5	b) 16.6	b) 11.9
c) 25 - 44	c) 27.1	c) 25.6	c) 29.5	c) 27.5
d) 45 - 64	d) 27.2	d) 28.2	d) 20.8	d) 25.3
e) 65 and over	e) 19.3	e) 19.3	e) 16.8	e) 18.4
Urban : fringe : rural split				
(populations %)	51 : 25 : 24	20 : 36 : 44	100 : 0 : 0	58:20:22
Population density (mean)	2.2	1.2	30.0	2.3 p/ha
Growth trends and proje		1,2	30.0	2.0 p/11a
Previous	onono			
Population 1991 census				
total	106,292	102,612	120,895	329,799
Households 1991 total	41,715	41,100	52,733	135,548
Present				,
2006 Mid-Year	101 110	440,400	400 500	207.420
population estimates	121,440	116,160	129,520	367,120
2006 Mid-Year				
forecasted ages (%):				
a) 0 - 15 yrs old	a) 17.4	a) 18.5	a) 15.8	a) 17.2
b) 16 – 44	b) 33.8	b) 32.3	b) 48.1	b) 38.4
c) 45 – 64	c) 28.4	c) 29.1	c) 20.7	c) 25.9
d) 65 and over	d) 20.4	d) 20.1	d) 15.4	d) 18.5
Future: immediate				
Projected total	123,330	120,300	137,860	381,490
populations for 2011	-,	-,	- ,	,
2011 forecast ages (%):	-) 40 5	-) 47.0	-> 40 4	-> 400
a) 0 - 15 yrs old	a) 16.5	a) 17.9	a) 16.1	a) 16.8
b) 16 – 44	b) 31.7	b) 30.2	b) 47.6	b) 37.0
c) 45 – 64	c) 29.5	c) 29.6	c) 21.2	c) 26.5
d) 65 and over	d) 22.3	d) 22.3	d) 15.1	d) 19.7
Future: longer-term	1		I	
Projected total	136,700	131,100	137,700	405,800
populations for 2021	-	•		,
2021 forecast ages (%):	a) 14.6	a) 15.1	a) 14.1	a) 14.6
a) 0 - 15 yrs old	b) 30.4	b) 30.0	b) 48.4	b) 36.4
b) 16 – 44	c) 29.0	c) 28.5	c) 21.3	c) 26.2
c) 45 – 64	d) 26.0	ď) 26.4	ď) 16.2	ď) 22.8
d) 65 and over		, , , , , , , , , , , , , , , , , , ,		<u> </u>
Summary of growth rate	5		I	
Population trends:	0) . 44 5 0/	a) . 700/	0) . 0.5.0/	-> + 0 4 0/
a) 1991-2001	a) + 11.5 %	a) + 7.9 %	a) + 0.5 %	a) + 6.4 %
b) 2001-2011 (estimate)	b) + 4.1 %	b) + 8.7 %	b) + 13.4 %	b) + 8.8 %
c) 2011-2021 (estimate)	c) + 10.1 %	c) + 9.0 %	c) – 0.1 %	c) + 6.4 %

6 Environment

Landscapes

- 6.1 Norfolk is recognised widely for its quality of life, natural landscapes, and architectural heritage such as historic country estates and preserved town centres. The Greater Norwich area makes a significant contribution to this local identity and national recognition through its cultural heritage and historic environmental assets. A large area of the Norfolk and Suffolk Broads, which has the status of a national park, also falls within the area of Greater Norwich's three districts.
- 6.2 Although the Broads Area is outside the area covered by the Joint Core Strategy, it and the historic core of Norwich city are some of the primary environmental assets within the area and, indeed, in Norfolk and the East of England. Regard must be had to its national status as a landscape, nature and recreation resource, the implications of which may extend beyond the Broads area boundary to include its setting. The Broads Authority Local Development Framework will work to preserve these qualities, but it will need support from its neighbours.
- 6.3 There is a diversity of landscapes in the Greater Norwich area. This is reflected by the fact that five nationally defined landscape character areas converge around Norwich, a level of complexity unique within the East of England region. Figure 6, 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).

Figure 6: National Landscape Character Areas covering the Greater Norwich area.



- 6.4 Large tracts of rural Greater Norwich are valuable for the agricultural land they contain, a high proportion of which are grades 1-3a. This soil quality is vital to supporting the agricultural economy, which in turn shapes a large, important part of the overall rural landscape character. There is also a need to avoid degrading any landscapes whilst retaining and enhance the particular characteristics of each landscape area and their transition zones⁶. To assist this, more detailed landscape character assessments have been carried out for the non-urban parts of the area. A systematic assessment of countryside character helps to identify where change is occurring and how it affects the landscapes that people value. This will inform policies for enhancing and maintaining the character and quality of our countryside Understanding how landscapes will respond to climate and wider landscapes. change and development pressures will help to develop strategies for sustainable management of countryside and natural resources. The Countryside Quality Counts project found that between 1999 and 2003, existing landscape character was maintained for all four of the character areas within Greater Norwich except the Broads character area, where the landscape character was actually enhanced⁷.
- 6.5 Norwich has been able to meet many of its recent housing development needs by utilising brownfield or previously developed sites. In 2005/06, 70% of housing completions were on previously developed land, with the figure rising to 77% of all current outstanding permissions and allocations. The high level of allocations being made on brownfield sites is likely to continue within the City. However, in Broadland and South Norfolk there has been little brownfield land available for development recently. In 2005/06 there was only a 39% use of brownfield sites for housing in South Norfolk, and 54% in Broadland, although these were significant improvements on previous years (27% in 2004/05 in South Norfolk and 39% in Broadland). Although there are generally fewer brownfield sites available in rural areas, there has been greater emphasis in recent years to develop land at higher densities in order to make more efficient use of land.
- 6.6 The need to develop multi-functional accessible urban fringes is now a major policy nationally. The 'Fringe' area around Norwich benefits from a number of schemes that seek to improve its habitats, landscapes and recreational attractions. These include the Norwich Fringe Project and the Wensum Valley Trust, promoting landscape enhancement and biodiversity conservation, and the 'Water Cities International' scheme, which promotes opportunities for making the most of river corridors. A Green Infrastructure Strategy is presently being produced to guide the landscape, recreation and natural habitat policy as the population of the area expands, with the aim of creating linked networks throughout the area. The historic environment and many heritage features also make a valuable contribution to high quality green infrastructure across the Greater Norwich area.

Nature

6.7 The Greater Norwich area is also home to some significant nature conservation interests. Figure 7 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 [SPA] and Ramsar sites for wetland importance. There are also many nationally important Sites of Special Scientific Interest (SSSIs) and national and local wildlife sites dispersed widely across the area. Of the total of 3,578 hectares of SSSI, an average of only 44% of sites in Greater Norwich were

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⁶ The character of each of the five large areas are identified by Natural England, described in more detail at: Hhttp://www.countryside.gov.uk/LAR/Landscape/CC/the_east/index.aspH.

⁷ The Countryside Quality Counts project assessment can be seen at Hwww.cqc.org.ukH.

- considered to be in 'favourable' or 'unfavourable recovering' condition in May 2007, compared to a national average of 72% in 2006.
- 6.8 In addition to designated sites, the Norfolk Biodiversity Action Plan recognises 23 habitats and 37 native species that are distinctive to Norfolk, many of which can be found in Greater Norwich and which ought to benefit from specific habitat protection or restoration and re-creation programmes. Along with protected species and habitats (such as the great crested newt in South Norfolk), non-designated habitats, including a variety of areas such as open spaces, parks, graveyards, allotments, field edges, hedgerows and gardens, are increasingly being recognised for their wildlife value. Roadside verges are often important wildlife reserves in rural areas and an extensive network of roadside nature reserves are being established to improve ecological connectivity. Ecological networks, which are intended to form continuous links to the "core" habitats areas in river valleys, are also being developed across the area. Many schemes are also in place in the countryside in order to redress previous losses of biodiversity that occurred as a result of intensive agriculture.

Figure 7: Conservation and natural environment features in Greater Norwich.

Conservation and natural environment features in the Greater Norwich area.		Norwich	Broadland	South Norfolk	Greater Norwich
Built	Conservation Areas	17	17	51	85
Heritage	Listed Buildings	1580	1200	3,464	6,244
features	Scheduled Ancient Monuments	24	24	46	94
Landscape	Historic Parks and Gardens	9	19	18	46
features	Ancient Woodlands	1	30	123	154
	Tree Preservation Orders	411	500	415	1,326
	International sites (SPA, SAC, Ramsar)		1	1	2
	SSSI (Sites of Special Scientific Interest)	5	15	26	46
Wildlife Conservation	NNR National Nature Reserves	-	1 wholly in 1 1 in both		2
	LNR Local Nature Reserves	8	2	4	14
	CWS County Wildlife Sites	33	102	242	377

Water resources and flood risk

- 6.9 East Anglia is recognised as one of the driest areas of the country, with pressure on water resource supplies being exacerbated by lower rainfall, widespread agricultural water use and new residential and employment growth. Daily domestic water use per capita in Greater Norwich averages 140 litres, which is below the national average of 154 litres per person. Water is a shared resource and is important for tourism in the area, so the pressures from development on water quality, biodiversity and flood risk are also likely to be significant across boundaries, such as within the Broads Authority area. If development can reduce risks of damage, it should do so.
- 6.10 Rivers such as the Wensum, Yare and Bure are important aspects of the Broadland catchment, feeding into the Broads and providing an important nutrient resource, but also containing vital habitat of their own, including areas that are internationally

protected for their wildlife value. The River Waveney valley is also important, acting as the Norfolk-Suffolk border and containing a large, active flood plain. The majority of this dynamic catchment area is administered by the Broads Authority for planning, navigational and recreation interests.

- 6.11 Biological quality of the area's rivers is high. An average of 93% of the river length was assessed as being in 'good' status in 2005, and showed a generally positive trend of improvement in recent years since 2000, in comparison with a national average of 54%. On the other hand, chemical quality of the rivers is below average and would seem to be declining, particularly in Norwich.
- 6.12 Figure 8, below, illustrates the areas at risk of flooding in Greater Norwich, as defined by the Environment Agency in April 2007. Although protected, the Wensum Valley in the Norwich city centre is the area where flooding could most likely be a risk to development potential. As the map demonstrates, there is an important area of active functional flood plain around Norwich city centre, to the west (River Wensum) and to the east and south (River Yare). There are extensive areas where flood risk is considered relatively high, particularly along the rivers Waveney, Yare and Bure. A Strategic Flood Risk Assessment is being undertaken for all three districts, along with North Norfolk and the Broads area, which will also identify the types of sustainable drainage systems (SUDS) that might be used to help reduce flood risk.

North Norfolk District

Broadland District

Broadland District

Norwich District

No

Figure 8: Flood Zones in Greater Norwich (Environment Agency, April 2007).

Minerals provision and household waste management

- 6.13 Growth in Greater Norwich will also need to be supported by increased provision of minerals resources and household waste management and disposal facilities. These are planned for by Norfolk County Council, although the commercial sector provides the facilities according to need and cost. Their provision will have significant implications for spatial planning of homes and employment in Greater Norwich. There are currently 45 minerals workings sites in Norfolk, which produce sand and gravel, crushed rock, silica sand and secondary and recycled aggregates for the development industry. Restoration programmes cover all these minerals working schemes. These will help restore biodiversity and mitigate visual impacts⁸, or otherwise return the land to high quality agricultural use. There are also 153 waste sites active in Norfolk. Many of these minerals and waste facilities are situated in Greater Norwich, although pressures to locate new sites and provide alternative means of processing are intensifying as minerals resources run low and capacity for waste disposal decreases.
- 6.14 The importance of waste management in particular is more than simply disposal; expanding the service offers opportunities for job creation, improving local environmental amenity, and recovering heat or energy. In 2005/06, 87% of methane emissions from Norfolk's landfill sites were used in power generation, but on the whole little energy is recovered from Norfolk's waste, and 65% of household waste is still sent to landfill, which is high compared to the national average of 62%.
- 6.15 Although municipal waste is a major concern for Greater Norwich, the household waste stream is a small but very significant aspect of the overall waste management process. Household waste management standards in Greater Norwich have actually been improving of late. Figure 9, below, summarises the key aspects of household waste management performance in 2005/06. The area generates some 100kg less waste per person than the Norfolk average, a considerable difference, even more so compared to the national average of 505kg per head of population. The trends also show a near 6% decrease in the amount of waste produced per person than for the previous year (Best Value Performance Indicators [BVPIs] 84a and 84b).
- 6.16 The proportion of household waste recycled in 2005/06 actually showed a 0.2% drop on figures for 2004/05, but it was still particularly high in Broadland (31%) and South Norfolk (29.9%). Over the year, Greater Norwich sent some 34,617 tonnes of household waste for recycling (BVPI 82a), a quarter of all household waste, which is more than the Norfolk average and far more than the average for England (15.2%). Although South Norfolk and Broadland managed to collect at least two recyclable materials from all households (BVPI 91b), Norwich was only able to achieve this level of performance for 89% of its kerbside collections, possibly due in part to urban layout and design. Despite Broadland actually producing most waste per head of population, being the only authority to show an increased waste production on the previous year, and experiencing a 7.3% drop in recycling rates on the previous year, it did still achieve 12th place nationally for recycling performance in 2005/06.
- 6.17 Although 6,443 tonnes of household waste were sent for composting (BVPI 82b), this only accounted for 4.4% of all household waste in Greater Norwich, compared to the 11.1% average in Norfolk, although it should be noted that household composting is still a limited collection scheme that in fact has only been possible in Norwich for a matter of months. Despite this, Broadland contributes by far the most in this respect,

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⁸ Norfolk Minerals and Waste Development Framework; Core Strategy and Development Control Development Plan Document, Issues and Options (Norfolk County Council, May 2007).

managing to compost over 12% of its household waste, some 95% of the compost collection in Greater Norwich.

Figure 9: Waste management performance across Greater Norwich in 2005/06.

(Source: Local Authority Best Value Performance Indicators)

Best Value Performance	Broadland	South	Norwich	Greater	Norfolk
Indicator (BVPIs) – 2005/06		Norfolk		Norwich	average ⁹
84a - Kg household waste	407	329	403	380	486
collected per head of population					
84b - Household waste	+ 2%	- 11.6%	- 7.8%	-5.8%	-
collection per head, percentage					
change on last years' amount					
82a (i) - % of household waste	31.0%	29.9%	15.5%	25.5%	23.8%
recycled					
% of Greater Norwich total	44%	33%	23%	100%	-
household waste recycled					
82b (i) - % of household waste	12.5%	0.8%	0 %	4.4%	11.1%
sent for composting or					
treatment by anaerobic					
digestion					
% of Greater Norwich total	95%	5%	0%	100%	-
household waste composted					

Renewable energy

- 6.18 Sustainable energy includes both renewable energy and Combined Heat and Power (CHP). Renewable energy development locally should contribute to the overall East of England target set out in RSS14 of 14% of electricity needs from renewable sources by 2010 and 44% by 2020 (baseline figure for 2006 = 4.5%). There are no major renewable energy sites in Greater Norwich at present, though potential exists for wind farms and biomass power stations. Detail of the potential for wind power in South Norfolk is being looked into through research on landscape character areas and the visual impact of large-scale wind turbines.
- 6.19 There are a number of small-scale renewable energy installations across the three districts, generated mainly from Combined Heat and Power, Solar Hot Water, Landfill Gas and Ground Source Heat pumps. The total capacity for renewable energy generation installed in 2005/06 was approximately 41 MW.

Carbon Dioxide emissions and ecological footprints

- 6.20 Figure 10, below, indicates how Greater Norwich contributes to climate change, through Carbon Dioxide (CO₂) emissions, and impacts on the resources of the world. CO₂ emissions locally are below the national average of 10.6 tonnes per capita, the lower figure for Norwich being typical of the national picture, as emissions are generally lower in urban areas than more rural areas.
- 6.21 Vehicle emissions are also partly responsible for Norwich containing three areas of poor air quality, where action must be taken to improve the conditions. These are the only Air Quality Management Areas in Greater Norwich, and are located in areas of high traffic volumes within the city centre, at Grapes Hill, Castle Meadow and St Augustine's Street.

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⁹ Norfolk Minerals and Waste Development Framework; Core Strategy and Development Control Development Plan Document, Issues and Options (Norfolk County Council, May 2007).

6.22 Ecological Footprints, measured in global hectares (gha) per capita (through the REAP assessment tool developed by the Stockholm Environment Institute in 2006), represents the amount of land the average resident of an area needs to support their lifestyle (also shown in Figure 10). In Greater Norwich these are all above the national average, and significantly above the global average of 2.2 gha per capita and the 'sustainable world footprint' of 1.8 gha per capita.

Figure 10: Indicators of environmental impact across Greater Norwich.

Local Authority	CO ₂ emissions (tonnes) per capita 2003 (DEFRA)	Ecological footprint (gha per capita) (REAP)		
Broadland	10.2	5.76		
South Norfolk	10.2	5.80		
Norwich	6.8	5.49		

District Profiles

6.23 Whilst it is important to consider the Greater Norwich area as one entity, there are many locally-distinctive nuances that add to the character of the overall area and should not be forgotten. Summaries of these are included below:

Broadland

- 6.24 Broadland is a largely rural district and contains a wealth of environmental assets. Most of the land is 'countryside' with large areas being classed as of high agricultural quality, or used for forestry. Just over 5% is developed, with a further 1.8% containing roads and railways. The landscape varies from low lying fens and wide river valleys in the east, much of which is incorporated within the Broads Area, to the more rolling and wooded countryside and valleys to the north and west. The character of this landscape has been defined in more detail and assessed through a local Landscape Character Assessment. Much of this is defined as an Area of Landscape Value, parts of which are within the Broads Environmentally Sensitive Area management scheme.
- 6.25 Key features within this landscape are the historic parklands, including Blickling and Catton, (which have national designations), the 45 commons, and 8 village greens. There are extensive areas of woodland, including 30 ancient woodlands and nearly 500 Tree Preservation Orders applying throughout the district. There is also a considerable amount of valuable wildlife habitat, of international and national importance as well as numerous local County Wildlife Sites. Of the 2,216 hectares of SSSI, 47% were in 'favourable' or 'unfavourable recovering' condition in May 2007. In addition, the district's built heritage is recognised through the designation of large numbers of Conservation Areas, Listed Buildings and Scheduled Ancient Monuments. The countryside is also important as an informal recreation resource, accessed through the public rights of way and "open access" land.
- 6.26 Broadland is the leading district in Greater Norwich for household waste recycling success, achieving a 31% recycling rate and 12.5% composting rate of household waste collected in 2005/06. However, by nature of its rural geography and an increased reliance on the car, amongst other factors, Broadland and South Norfolk did contribute the most CO₂ emissions per capita in 2003, although these were still just below the national average. As with the rest of Greater Norwich, Broadland's ecological footprint is more than three times the size of the 'sustainable world footprint'.

South Norfolk

- 6.27 The South Norfolk landscape is a mixture of broad, open arable farmland plateaus and six main river valleys, including the major watercourses of the Rivers Yare and Waveney and the adjoining Norfolk and Suffolk Broads to the north and east. The district lies mainly on glacial deposit geology. The local Landscape Character Assessment refines the national Landscape Character Areas shown in Figure 6 and identifies seven separate landscape types across the district.
- 6.28 Throughout the district there are a number of areas of locally significant landscape value. Many of these follow the route of important river valleys, predominantly along the River Wensum and the rivers Waveney, Tiffey and Yare. Additional areas of landscape value also include areas of open land that maintain a separation between certain settlements, and a large landscape protection area around the A47 south of Norwich, which is considered important for preserving the historic context of the city of Norwich.
- 6.29 Like Broadland there are many valuable wildlife habitats of international and national importance, nearly 250 County Wildlife Sites and over 100 areas of ancient woodland. Of the 1,289 hectares of SSSI (some 26 sites), 36% were in 'favourable' or 'unfavourable recovering' condition in May 2007.
- 6.30 The towns and villages scattered around the district are home to many historic buildings and heritage features, which help create their own distinctive character. The district has a wealth of Listed Buildings, Scheduled Ancient Monuments, and Conservation Areas. In fact, there are three times as many Conservation Areas and Listed Buildings as in the other authorities, and nearly twice as many Monuments. There are also historic gardens covering 25 hectares remaining from significant estates in the District, although at least 26 more have been lost since the 1880s. There are also many areas of archaeological interest within the district, including a protected area of Roman-era hedgerow patterns in Dickleburgh.
- 6.31 Although South Norfolk produces the least household waste per capita in Greater Norwich (some 11% less than in 2004/05), and recycled almost 30% of this, the district composted less than 1% of its household waste in 2005/06. There are a number of small household-size renewable energy projects installed across the district, but as of yet no major renewable energy generation facilities exist. Along with CO₂ emissions being, with Broadland, the highest in Greater Norwich, South Norfolk's ecological footprint is also the most resource-intensive, with residents requiring some 5.8 global hectares of land per capita to support their lifestyles.

Norwich

- 6.32 Norwich is characterised largely by its historic townscape and its green setting with many trees. 25% of the city's area consists of open spaces, which form green wedges into the city. These include river valleys and other open spaces such as Mousehold Heath (the city's major ancient woodland to the east of the city), parks and golf courses. A number form continuous green links out to open countryside and include foot and cycle access. The Yare Valley forms a linear green space to the south of the city, providing an attractive gateway. The Wensum Valley provides a green link through the city and in places steep wooded ridges provide viewpoints to and from the city centre.
- 6.33 Key wildlife conservation designations in the city consist mainly of marshland and meadows in the river valleys and wooded former chalk pits. Norwich has 3.65 hectares of SSSI, with some 27% of these were in 'favourable' or 'unfavourable

recovering' condition in May 2007. Domestic gardens play a key role in providing habitats in many parts of the urban area. The pressure from development on the city's natural features is reflected in there being some 411 tree preservation orders issued and more Local Nature Reserves than elsewhere in Greater Norwich.

- 6.34 Norwich's distinctive townscape contains Conservation Areas covering 17% of the total area of the city, including the whole of the city centre. Scheduled Ancient Monuments include the medieval cathedral, castle and city walls. 32 pre-reformation churches are located within the walled city and there is a wealth of Listed (1,580) and locally listed buildings (2,600). Historic parks help to define the character of many suburban areas. Preserving and enhancing the distinctive landscapes and townscapes will be a key concern when considering development within the Greater Norwich urban area.
- 6.35 Norwich showed poorer performance in household waste management than South Norfolk and Broadland, recycling 15% of household waste but not sending any to be composted, although the net amount of household waste produced per head dropped by nearly 8% per person. It should also be noted that Norwich is in the formative stages of introducing a household composting collection service, which will serve to improve their recycling rates. Norwich residents have a smaller ecological footprint than the rest of Greater Norwich, and a far lower level of CO₂ emissions (only 6.8 tonnes per capita).

7 Society and Housing

- 7.1 The Greater Norwich Area is relatively affluent as a whole, but contains areas of significant urban deprivation and pockets of hidden rural deprivation, particularly for issues relating to access to jobs, services and housing.
- 7.2 The Index of Multiple Deprivation is a very useful tool to compare the three local authorities. It provides a wide variety of information, which is set out in 'domains' and updated regularly, first in 2000 and then in 2004. The information used to determine the rankings of each local authority will be updated regularly to provide a picture of the issues affecting the Greater Norwich area.
- 7.3 Each domain measures various indicators, and shows both an overall ranking score for each local authority and a score for each theme individually. There are 354 local authorities in England that the rankings are scored against, with a lower score indicating greater deprivation (i.e. 1 = most deprived, 354 = least deprived). The difference between the City and Broadland and South Norfolk is notable; while Norwich ranks 61st, South Norfolk is ranked at 291 with Broadland least deprived with a ranking of 302 (see Figure 11).

Figure 11: Relative deprivation in Greater Norwich (Source: Indices of Multiple Deprivation 2004 and Audit Commission)

	Broadland	South Norfolk	Norwich
Overall IMD score	302	291	61
Income deprivation IMD score	239	236	92
Employment deprivation IMD score	209	229	92
% of the Super Output Areas that feature within the 20% most deprived Super Output Areas in the country	0%	0%	37%
% of children that live in income deprived families	9.5%	9.3%	30.3%
% of the population over 60 who live in households that are income deprived	10.1%	11.1%	18.5%

Income patterns

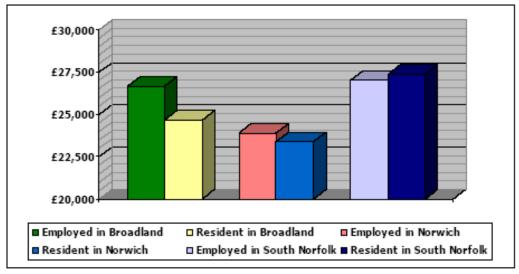
- 7.4 Figure 11 also shows that Norwich scores lower than its neighbours in employment and income deprivation, although the gap between the authorities is significantly reduced, particularly for employment deprivation. Income deprivation indicators also show a distinct difference between the urban and rural areas of Greater Norwich. Income deprivation is more severe in the city (particularly in Mancroft, Mile Cross, Wensum and Bowthorpe wards) where over a third of the city's Super Output Areas (areas of 1000 population) fall within the 20% most deprived nationally. Households with children are particularly vulnerable to income deprivation in the city. The same can also be said for households with residents aged over 60, although the latter is an issue spread more evenly across the three authorities.
- 7.5 There are some significant differences in household income levels within Greater Norwich; overall some 40% of households earn less than £15,000, but a third of households earn £30,000 or more. The average annual wage for full-time employees resident in Greater Norwich is £25,819, compared to the national average of £29,331 the United Kingdom (Annual Survey of hours and Earnings, 2006). Broken down to

district-level, average full-time salaries are notably lower for people living in Norwich (£23,649) than in Broadland (£26,164) and South Norfolk (£27,643).

7.6 As can also be seen in Figure 12, below, average wages paid to employees at South Norfolk's businesses have been consistently higher than elsewhere in Greater Norwich, although Broadland's are increasing far more rapidly than in South Norfolk and Norwich¹⁰. It is also apparent that average wages paid from city businesses and received by Norwich residents are the lowest in Greater Norwich, whilst Broadlands businesses are able to pay significantly higher wages than their residents earn.

Figure 12: Mean gross annual earnings for local authorities in Greater Norwich in 2005 for full-time employees.

(Source: ASHE 2005¹¹)



Health and recreation

7.7 An important factor in good health and well being is the benefit derived from sporting and recreational activities. Open space, sports and recreational facilities and public rights of way for example all have a vital role to play in promoting healthy living, preventing illness, and assisting in the social development of children through play and sport. Such activities can also contribute to more general social development and community cohesion, enabling individuals to interact with others in the community. The provision of, and access to, facilities has recently been assessed in Broadland and South Norfolk, with a similar assessment currently being undertaken in Norwich. This has been done in accordance with the Government guidance set out in PPG17: Planning for Open Space, Sport and Recreation. A summary of the results, for Broadland and South Norfolk, are set out in the table below (Figure 13). It is important to recognise that the tables illustrate provision across the districts, and that there may be wide variations in the scale or type of provision in specific areas.

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¹⁰ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006)

¹¹ ibid

Figure 13: Recreation facilities provision in Broadland and South Norfolk

(Source: Broadland and South Norfolk District Councils; PPG17 Open Spaces, Indoor Sports and Community Recreation Assessment, 2007)

Typology of open space, sports, recreation &	Provision in	n Hectares	Provision per 1,000 Population		
leisure facilities	Broadland	South Norfolk	Broadland	South Norfolk	
Formal Open Space (Parks, gardens and recreation grounds)	133.62 hectares	108.66 hectares	1.13 ha	0.98 ha	
Natural and semi-natural greenspace (Natural greenspace, woodland, commons)	443.46 hectares	562.08 hectares	3.74 ha	5.08 ha	
Amenity open space (passive and active space in housing areas)	26.38 hectares	78.16 hectares	0.22 ha	0.71 ha	
Provision for children and young people (Stand alone sites)	3.90 hectares	19.10 hectares	0.17 ha	0.84 ha	
Provision for children and young people (all play areas within other typologies) (all provision and per 1,000 young people aged 2-19)	8.52 hectares	44.3 hectares	0.36 ha	1.9 ha	
Allotments	18.90 hectares	12.09 hectares	0.16 ha	0.11ha	
Outdoor Sport (Stand alone)	115.27 hectares	113.51 hectares	0.97 ha	1.03 ha	
Outdoor Sport (all pitches, greens and courts)	199.21 hectares	201.61 hectares	1.68ha*	1.82 ha**	
District Total	741.53 ha*	893.6 ha**	6.2 ha	8.07 ha	

^{*1.6} ha of sports pitches; 0.08 ha of courts and greens.

7.8 Generally, Greater Norwich has a good level of health, although in comparison to the rest of the East of England, health in Greater Norwich is marginally worse, with 32.5% of households containing someone with a long-term limiting illness. Health levels vary across the area though. In the City, a larger percentage of people have limiting long-term illness than in Broadland and South Norfolk (Figure 14), reflecting the fact that residents of the most deprived wards generally have worse health conditions. This may suggest a generally better level of health exists in the more rural authorities, but there are areas within these where residents are less healthy.

^{**1.75} ha of sports pitches; 0.07 ha of courts and greens.

Figure 14: Health factors in Greater Norwich

(Source: 2001 Census(*) and Audit Commission(#))

	Broadland	South Norfolk	Norwich	Greater Norwich	England & Wales
% of population with limiting long term illness *	17.5	17.0	19.4	18.0	17.9
Life expectancy at birth – males #	78.3	79.1	76.2	77.9	76.6
Life expectancy at birth – females #	81.3	83.0	82.2	82.2	80.9
Infant mortality per 1000 births #	6.1	4.9	5.1	5.4	4.9

Crime

7.9 As Figure 15 shows, crime figures are generally higher in Norwich than they are in Broadland and South Norfolk. In 2004/5 the number of domestic burglaries per 1000 households in Broadland was 3.64 for example, but compared to the Norfolk average of 5.85, and the regional and national averages of just over 11, Norwich is performing rather less well, although this could be attributed to the city's urban nature.

Figure 15: Crime figures in Greater Norwich (2004/05).

(Source: Audit Commission)

	Broadland	South	Norwich
		Norfolk	
Domestic burglaries per 1,000 households	3.64	5.33	12.05
Violent offences committed per 1,000 households	7.79	9.65	32.92
Theft of a vehicle per 1,000 population	1.2	1.46	4.1

Education

7.10 Even though a high proportion of residents in Greater Norwich have a high level of qualifications (many with current or prior connections to the university), a high proportion of residents of working age have no qualifications. This latter figure is broadly the same across the three districts (a 27% average for Greater Norwich in 2001). There are however, significant differences in qualifications gained by school leavers; in 2006, 49% of students left school with 5 or more GCSEs at grades A*-C in Norwich, compared to 62% in Broadland, 66% in South Norfolk and 57% nationally. This is possibly linked to there being more deprived areas in Norwich than in Broadland and South Norfolk. Greater Norwich overall has a higher standard of GCSE-level educational attainment than the national average, though a slightly lower success rate at 'A'-level standard. Figure 16 expands on educational attainment.

Figure 16: Educational achievement across Greater Norwich

(Source: 2001 Census and Norfolk County Council)

Obdite: 2001 Denisus and Norion County Councily							
	Broadland	South Norfolk	Norwich	Greater Norwich	England & Wales		
% people of working age (16-74 yrs) with no qualifications (at 2001)	27.6	28.7	29.9	28.7	-		
% School leavers at Key Stage 4 (15/16yrs) with 5 or more GCSEs at A*-C grade (at 2006)	62.3	66.2	48.8	59.1	57.1		
% people of working age (16-74 yrs) with highest qualification gained from level 4/5 (GCE 'A'	14.9	17.6	20.6	17.7	19.9		

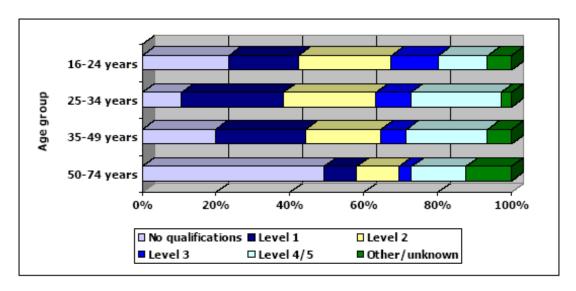
Level or equivalent) (at 2001)					
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7.11 The population of Greater Norwich is over-represented in the 'no qualification' category and under-represented in the 'degree and above' category. Figures 17 and 18, based on the 2001 Census, show that nearly 50% of the population of Greater Norwich aged over 50 years possesses no formal educational qualifications. The results for younger adult populations are much more encouraging, however, with around a quarter of everyone aged 25-49 years having achieved the educational level equivalent to a degree or higher (Level 4/5).

Figure 17: Qualifications by age group in Greater Norwich (Source: 2001 Census¹²)

Level	Percentage of Age group					
LEVEI	16-24	25-34	35-49	50+		
Level 0	23.5%	10.7%	19.9%	49.2%		
Level 1	18.7%	27.6%	24.2%	8.9%		
Level 2	25.3%	25.1%	20.4%	11.4%		
Level 3	12.7%	9.4%	6.8%	3.6%		
Level 4 / 5	13.3%	24.3%	22.0%	14.6%		
Other / unknown	6.5%	3.0%	6.7%	12.4%		
TOTAL	100.0%	100.0%	100.0%	100.0%		

Figure 18: Qualifications by age group in Greater Norwich (Source: 2001 Census¹³)



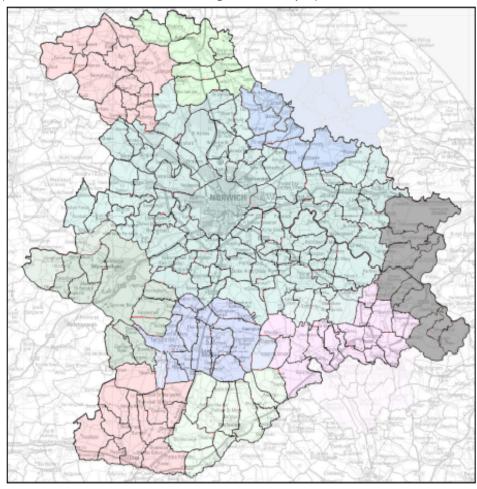
Housing markets

7.12 The Greater Norwich Housing Strategy has identified local housing needs and housing market issues. Alongside the Core Strategy, it will help to deliver housing solutions for the communities within Greater Norwich. The Housing Strategy covers ten local functional 'Housing Market Areas' (HMAs) based on local movements or migrations made by residents of Greater Norwich (see Figure 19). The largest HMA is focused on the extended urban area of Norwich and its fringe, but it also stretches to Loddon, Acle, Hethersett and Attlebridge. Market towns in both Broadland and

¹² Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition (2006)

¹³ ibid

South Norfolk form distinct localised housing market areas, each with their own centre of population and distinct migration and travel to work patterns. A collection of even smaller village housing markets in the Norfolk Broads also has an influence on the Greater Norwich housing market, as do the towns of Beccles and Bungay in Suffolk.



Map 19: Functional Housing Market Areas in Greater Norwich (Source: Greater Norwich Housing Partnership¹⁴)

- 7.13 The study shows the Greater Norwich housing market to include certain patterns:
 - One in every twelve households (8%) moved home within the last year, with more movements in Norwich (12%) than South Norfolk and Broadland (7%);.
 - The most significant turnover was in the private rented sector where 27% of tenants had lived at their current address for less than a year. By comparison, this was only 11% amongst owner-occupier households.
 - 40% of households moving home left the private renting sector to become owner-occupiers.
- 7.14 The housing assessment found that nearly half of the population in Greater Norwich (142,000 people) also work in the sub-region, representing around 83% of all those living in the area who have a job. This relatively sustainable pattern suggests that Greater Norwich is able to meet most of its accommodation and employment needs.

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¹⁴ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition (2006)

Housing stock type

7.15 The housing stock of Greater Norwich is similar to the position found for England as a whole, but with a slightly higher proportion of detached houses and flats. As seen in Figure 20 below, in both Broadland and South Norfolk, around 50% of dwellings are detached properties (Norwich has 10%). 35% of homes in Broadland are semi-detached, reflecting the 'suburban fringe' nature of the district, compared to about 27% in South Norfolk and 21% in Norwich. For HMAs other than Norwich the availability of a particular dwelling type is less likely to influence home movers than location would, but this is not the case in the city where nearly 40% of its housing stock are terraces and over 30% are flats.

Figure 20: Housing stock by type in percentages.

(Source: Greater Norwich Household and Physical Survey 2005/06¹⁵)

Housing stock in districts	Broadland	South	Norwich	Total Stock in
(Amounts & % of total)		Norfolk		Greater Norwich
Detached	25,000	27,900	6,100	59,000
	48%	56%	10%	37%
Semi-detached	18,700	13,300	12,500	44,600
Semi-detached	35%	27%	21%	27%
Terraced	6,100	5,800	21,600	33,400
rerraceu	12%	12%	37%	21%
Flats	2,500	2,500	18,900	24,000
Flats	5%	5%	32%	15%
Total dwellings	52,400	49,500	59,100	161,000
Greater Norwich contribution	32 %	31 %	37 %	100%

Housing stock condition

- 7.16 Housing stock condition is also indicative of the quality of residential accommodation in Greater Norwich. When considered against the Decent Homes Standard¹⁶, Greater Norwich properties classified as being 'non-decent' number some 42,900 dwellings, 29.7% of the overall housing stock. This is only slightly below the proportion in England (30.1%) as a whole (Greater Norwich Household and Physical Survey 2005/06¹⁷). Assessing the tenure of non-decent housing (see Figure 21) reveals that rented homes in the private sector are most culpable, particularly in Broadland, despite the district as a whole containing the smallest proportion of non-decent homes.
- 7.17 Presently in Greater Norwich, there are 30,570 private sector dwellings occupied by 'vulnerable' residents in receipt of means-tested benefits. Of these, 24% live in non-decent dwellings. On this basis Greater Norwich currently exceeds the minimum standard required by 2006/07 for decent homes occupied by vulnerable people in the private sector (65%) by approximately 170 dwellings¹⁸.

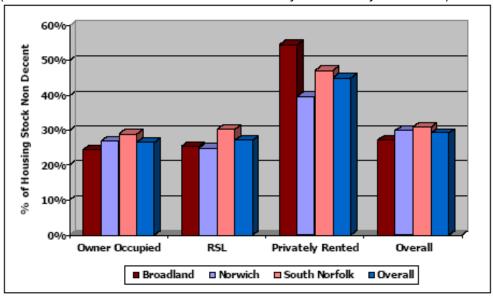
¹⁵ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition (2006)

¹⁶ The Decent Home Standard assesses whether properties are: within legal standards; in a reasonable state of repair; have reasonably modern facilities/services; and provide effective heating and insulation. ¹⁷ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006)

¹⁸ ibid

- 7.18 Although the city contains areas where development has taken place and which have much lower rates of non-decency, Norwich does contain high levels of non-decency in areas of older, terraced housing adjacent to the city centre. The survey shows that converted flats provide the highest proportion of non-decent dwellings (66%), failures being strongly associated with unfitness and repair issues, particularly so in the privately rented sector. Most non-decent dwellings were also built prior to 1919 (49%), with failings relating to disrepair and non-compliance with thermal comfort criteria.
- 7.19 In general, areas that have significant amounts of rural stock often have higher-than-average levels of non-decency (Reepham and Harleston HMAs in particular), due to age-related problems of energy efficiency, such as mains gas supply, damp and cold exposure. Overall, South Norfolk has the largest proportion of homes failing to meet the 'decent homes standard' (31.2%), as seen in Figure 22.

Figure 21: Non Decent dwellings by tenure in Greater Norwich. (Source: Greater Norwich Household and Physical Survey 2005/06¹⁹)



7.20 Estimates suggest there are 4,300 vacant dwellings, 3% of the housing stock, within Greater Norwich, roughly the same as the national average. 1.2% (1,570) of these are long-term vacant (for six months or more) or subject to unlicensed occupation (Figure 22). Whilst the overall number of vacant properties may be high, in relative terms there is not a substantial problem with properties remaining long-term vacant.²⁰

Figure 22: Housing stock condition across Greater Norwich

(Source: Greater Norwich Household and Physical Survey 2005/06²¹).

	Broadland	South	Norwich	Total Stock in
		Norfolk		Greater Norwich
Total number of dwellings	51,404	48,384	56,957	156,745
% vacant dwellings	2.7%	1.8%	3.7%	2.7%
% of dwellings failing to meet	27.6%	31.2%	30.5%	29.7%
'non-decent' homes standard				

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¹⁹ ibid

 $^{^{20}}$ ibid

²¹ ibid

Housing tenure

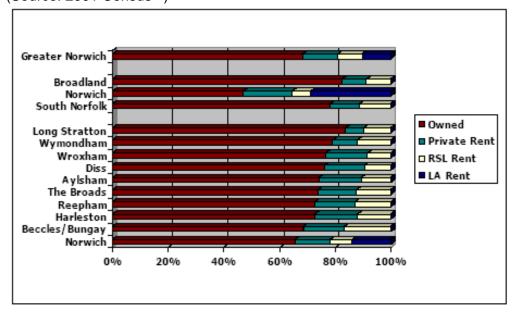
7.21 Figures 23 and 24 show the housing stock of each area by tenure. The dominant form of tenure is owner occupation, with nearly 68% of all properties across Greater Norwich being owned outright or with a mortgage. Whilst the overall proportion of social housing in Greater Norwich exceeds both the English and Eastern Region averages there are key differences within Greater Norwich. Norwich City has the highest proportion of social housing in the East of England (36% of all dwellings), but Broadland and South Norfolk Districts have amongst the lowest proportions (8% and 11% respectively)²².

Figure 23: Housing Tenure across Greater Norwich (not including empty dwellings)

(Source: Greater Norwich Household and Physical Survey 2005/06²³)

(Source: Greater Norwich Flouse	/ 2003/00)		
Tenure of Housing Stock (Amounts & % of total)	Broadland	South Norfolk	Norwich	Total stock in Greater Norwich
Owner Occupied	<i>4</i> 2,100 82%	38,000 78%	26,800 47%	106,800 68%
Private Rented	<i>4,500</i> 9%	<i>5,100</i> 11%	10,000 17%	19,500 13%
Registered Social Landlord / Housing Association	<i>4,500</i> 9%	<i>5,500</i> 11%	3,900 7%	13,800 9%
Local Authority (Norwich stock not transferred to a RSL)	<i>0</i> 0%	<i>0</i> 0%	16,300 29%	<i>16,300</i> 10%
Total dwellings Greater Norwich contribution	51,000 33 %	48,600 31 %	<i>57,000</i> 36 %	<i>156,500</i> 100%

Figure 24: Housing tenure by housing market area and local authority. (Source: 2001 Census²⁴)



²² Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006). Figures may not tally due to roundings.

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²³ ibid

²⁴ ibid

House prices and affordability

7.22 The relationship between local property prices and local incomes is clearly important, especially for single person households without existing equity. Figure 25 shows how relative property prices in Greater Norwich compare to average incomes. In 1999, the average property price in Greater Norwich was just over 4.5 times the average earnings. By 2003 this had risen to over 8 times the average earnings²⁵, although by 2006 it seems to have reduced slightly to over 6 times average household income (Figure 25b). This still remains a very high figure for those people who wish to secure mortgages without encountering financial difficulty.

Figure 25a: Average house price in Greater Norwich relative to average gross annual earnings, 1999 - 2005.

(Source: Land Registry, New Earnings Survey and ASHE²⁶)

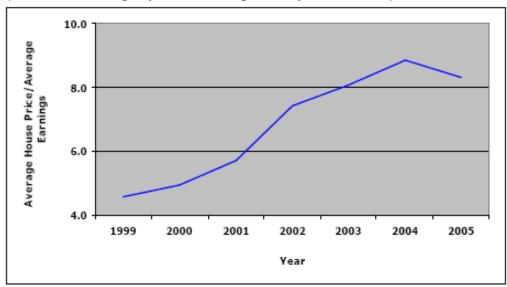


Figure 25b: House price to income ratio December 2006.

(Source: Norfolk Data Observatory and Land Registry)

(a contract the contract of t						
	Average House	Mean Household	House Price to			
	Price (Dec. 2006)	Income (Dec 2006)	Income Ratio			
		(Approximate)	(Approximate)			
Broadland	£201,918	£32,500	6.21			
Norwich	£170,678	£27,500	6.21			
South Norfolk	£209,420	£32,000	6.54			
Greater Norwich	£194,005	£30,666	6.33			

7.23 Figure 26, below, illustrates how property prices have changed in Greater Norwich since 2000 when over 60% of all property sales were priced at less than £80,000. However, this price band comprised less than 5% of all sales in 2005²⁷. Conversely, the number of houses selling for over £150,000 has risen sharply, from less than

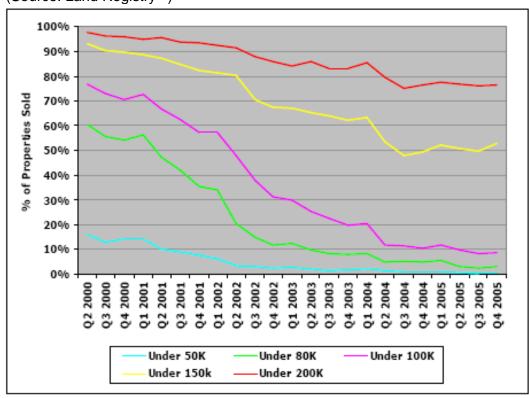
²⁶ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006).

²⁷ £80,000 is a key price band because it is around the maximum mortgage, which is likely to be available to single first-time buyers from key worker groups such as teachers, nurses and police officers. Therefore, affordability for this group of workers has declined sharply.

10% of the market in 2000 to around 50% in 2005. Although this increase may be due in part to more sales of detached properties, an overall surge in property prices in Greater Norwich in 2002-2004 is clearly shown in the falling proportion of properties selling for less than any of the given categories. House prices may have stabilised in 2005 but the level at which this has happened has left the vast majority of properties in Greater Norwich beyond the reach of many first time buyers.

7.24 Between 1999 and 2005 the average property price in Broadland rose by 160%, in Norwich by 141% and in South Norfolk by 180%. Much of the increase in property prices occurred between 2002 and 2004; average prices fell in 2005 in Broadland and Norwich and rose only marginally in South Norfolk. Since then, however, the Land Registry has identified that prices across Greater Norwich have risen substantially, on average by some £20,000 between April 2005 and December 2006 (see Figure 27). This makes it difficult for first-time buyers to access the market, particularly as the average price of flats or maisonettes in Greater Norwich has reached £140,000 and £156,000 for terrace homes, the traditional 'starter-units'.

Figure 26: Percentage of houses sold for less than key price bands in Greater Norwich between the 2nd quarter in 2000 and the last quarter in 2005. (Source: Land Registry²⁸)



²⁸ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006).

Figure 27: Average house prices across Greater Norwich, Apr 2005 – Dec 2006.

(Source: Land Registry; www.landregistry.gov.uk)

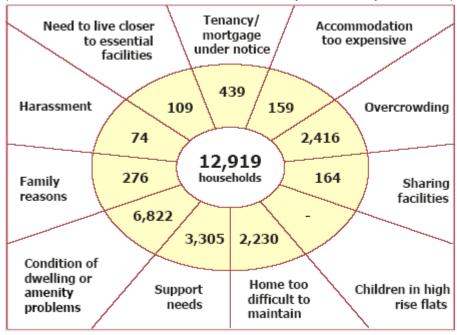
ADD 1111 0005		Semi-			
APR - JUL 2005	Detached	Detached	Terraced	Flat	Overall
	Ave Price £	£	£	£	Ave Price £
Broadland	221,217	150,725	136,233	136,857	178,266
South Norfolk	255,130	157,741	135,745	89,711	190,724
Norwich	245,085	154,221	142,863	113,231	151,961
Greater Norwich	240,477	154,229	138,280	113,266	173,650

		Semi-	-		
OCT - DEC 2006	Detached	Detached	Terraced	Flat	Overall
	Ave Price £	£	£	£	Ave Price £
Broadland	242,758	179,242	148,918	148,495	201,918
South Norfolk	256,962	170,489	160,075	146,264	209,420
Norwich	265,795	170,777	159,634	132,573	170,678
Greater Norwich	255,171	173,502	156,209	142,444	194,005

Housing need

7.25 An important element of housing requirements is housing need – i.e. households lacking their own housing or living in housing which is inadequate or unsuitable, who are unlikely to be able to meet their needs in the housing market without some form of assistance. Overall, a total of 12,919 households were assessed as living in unsuitable housing, some 8% of all households in Greater Norwich (though many may not need to move home as in-situ solutions may be more appropriate). Figure 28, below, illustrates the proportion of existing households in Greater Norwich registered as being in housing need due to various reasons.

Figure 28: Established households living in unsuitable housing in Greater Norwich. (Source: Greater Norwich Household and Physical Survey 2005/06²⁹)



²⁹ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006).

- 7.26 Of those households deemed to be in housing need, young adults and households with teenage children are most likely to live in unsuitable housing: 15% of single parent households, 11% of adult groups without children and as many as 26% of adults with dependent children are living in unsuitable housing. Most unsuitably-housed households are in Norwich City (11%) though this reduces to 9% when the entire Norwich HMA is considered, which suggests that relatively low levels of unsuitably housed households are found in the South Norfolk and Broadland areas of the Norwich fringe.
- 7.27 For those people who are unable to access the open housing market, perhaps because current prices are beyond their means, the local authorities have been trying to provide affordable housing to meet the identified need. Figure 29 shows the number of affordable homes that have been developed across Greater Norwich in recent years, indicating an increasing trend in numbers although this will often remain dependent on the overall number of homes built on the private market.

Figure 29: Affordable home construction in Greater Norwich, 2004-2006.

(Source: Annual Monitoring Reports of each authority)

	Broadland	South Norfolk	Norwich	Greater Norwich
Affordable units provided in 2004/05	82	6 (1%)	255 (37%)	343
Affordable units provided in 2005/06	32 (23% of all new housing)	32 (9%)	209 (23%)	275 (19%)
Net change in affordable unit completions per year: 2004/05 – 2005/06	- 50	+ 26	- 46	- 68

District Profiles

7.28 Whilst it is important to consider the Greater Norwich area as one entity, there are many locally-distinctive nuances that add to the character of the overall area and should not be forgotten. Summaries of these are included below:

Broadland

- 7.29 Although infant mortality is higher in Broadland than the Norfolk average, the life expectancy in Broadland is relatively longer; for males it is 78.3 years and females 81.3 years, both higher than for Norfolk and nationally. Provision of healthcare is also relatively good; more people can obtain a routine appointment quickly in Broadland than for Norfolk as a whole or nationally.
- 7.30 Educational provision reflects the largely rural geographical nature of the district; first/primary level schools are located in villages of reasonable size but high schools are situated in the market towns, large villages and the Norwich fringe, which entails travel for many children. Further education is available in the adjoining urban centres, primarily Norwich, Great Yarmouth and North Walsham.
- 7.31 Crime levels in Broadland are amongst the lowest in England, particularly for domestic burglaries. In addition, people's perception of crime levels is also encouraging; in 2003/04, 52.9% of Broadland's residents thought that the level of crime in their local area, over the previous three years, had reduced or stayed the same (compared to 39.8% for Norfolk, 38.6% regionally, and 42.8% nationally).

7.32 Broadlands housing stock is dominated by family-sized housing, with over 80% of homes being owner-occupied. Despite adding 114 affordable homes built between 2004 and 2006, the share of social housing only amounts to 9% of the total housing stock. Average house prices are highest for semi-detached homes, but starter units offer more accessible prices as terraces and flats are evenly priced (£148,000 in Dec. 2006). Although this does represent a significant jump in prices between the traditional 'starter-unit' and family-sized home, the fluidity of movement between housing markets possibly lessens this impact. Related to this, Broadland does have relatively few households in unsuitable accommodation.

South Norfolk

- 7.33 The residents of South Norfolk are some of the healthiest in the country, although the higher levels of deprivation in Costessey and Diss do present challenges of a less healthy population. If present trends continue, South Norfolk as a whole is the only district in Norfolk expected to achieve all 4 Our Healthier Nation targets by 2010. Educational achievement in 2006/07 was higher than the national average at GCSE grade level. Crime levels are lower than the national average but are slightly higher than the figures for Broadland.
- 7.34 The district is not ranked highly in the Index of Deprivation (ranking 291 out of 354), although some pockets of deprivation exist. Old Costessey is the most deprived ward in the district, and is within the third most deprived nationally for income, education and child poverty. The District's rural character presents some problems in accessing services, with five wards in the district being within the thousand most deprived nationally.
- 7.35 Similar to Broadland, the housing is predominantly owner-occupied (78%) and contains only 11% social housing. However, provision of new affordable housing has been slower in South Norfolk than elsewhere in Greater Norwich, as only 38 affordable homes were provided between 2004 and 2006. Characterised by a large proportion of older, rural housing stock, South Norfolk has the highest share of the Greater Norwich housing stock that fails to meet the 'decent homes' standard. The price of houses in South Norfolk has increased the most rapidly in Greater Norwich, and the average price in Dec. 2006 stood at almost £210,000.

Norwich

- 7.36 There are distinct differences in deprivation levels between different areas of the city, although overall Norwich is the most deprived local authority within the East of England, and has higher crime rates than elsewhere in Greater Norwich. Health standards are not markedly different to the rest of Greater Norwich. Two wards within Norwich are ranked in the 10% of most deprived wards nationally, with a further six in the worst 20% (Source: IMD, 2004). The City performs particularly badly in the 2004 Index of Multiple Deprivation domain for education, which measures a variety of indicators related to skills and education. Five wards, Mile Cross, Crome, Wensum, Lakenham and Bowthorpe, are within the worst performing 5% of wards nationally for this indicator. Norwich has a lower level of educational attainment at GCSE standard (49% of school leavers had 5 or more GCSE's at A*-C standard in 2006). The proportion of those in employment with qualifications at 'A'-level standard or equivalent (15%) is also lower than the national average (19%).
- 7.37 Norwich is characterised significantly by areas of terraced housing adjacent to the city centre, which, being older properties, comprise the largest proportion of homes that fail to meet the 'decent home' standards. Unfortunately there are higher-than-

average numbers of 'vulnerable' residents in Norwich residing in non-decent homes. The city also contains a significant number of flats and apartments, which together comprise some 30% of the housing stock. Norwich also contains higher proportions of households living in accommodation that is unsuitable for their needs.

7.38 House prices in Norwich have increased at a slower rate than other areas in Greater Norwich, but this was still a rise of some 141% between 1999 and 2005. Although average house prices in Norwich are lower than elsewhere in Greater Norwich (£170,678), the relative scarcity of detached units in particular make these more expensive even than those in South Norfolk and Broadland where average prices are generally significantly higher. It could be said that there are more opportunities to access the housing market in Norwich as there are more starter units available, with flats in particular being some £15,000 cheaper than elsewhere. Norwich continues to provide the most affordable homes in Greater Norwich (over 450 in the past two years), and actually contains the largest proportion in the East of England; some 36% of the housing stock is social housing.

8 Economy

Employment patterns

- 8.1 In general, the Greater Norwich area has a successful and growing economy, with a buoyant jobs market. With Norwich at its centre, the area provides the largest concentration of jobs in the eastern region. Businesses have access to a high skills base; a high proportion of people are employed in professional occupations and there is a high graduate retention rate, particularly in Norwich itself.
- 8.2 Figure 30 shows that despite having lower wages than the regional average there is generally the same level of employment and a sizeable number of small businesses. Business start-ups indicate the health of an economy's innovation and entrepreneurship by assessing VAT registrations and de-registrations. As Figure 31 shows, Greater Norwich may have experienced less business turnover than the rest of England, due to its large agricultural area, but the number of businesses in Greater Norwich is growing as registrations have exceeded de-registrations since 1996.

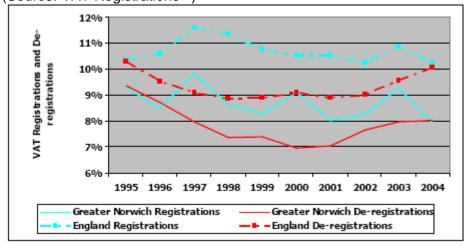
Figure 30: Employment figures for Greater Norwich (various sources)

	Broadland	South Norfolk	Norwich	Greater Norwich	East of England
Average gross weekly pay by residence – full time (2006)	£411.80	£435.80	£409.00	£418.90	£470.00
Unemployed – February 2007 (% claiming JSA)	1.4 %	1.5 %	3.6 %	2.2 %	2.1 %
Number of small businesses (2005)*	3,662	4,184	4,181	12,027	-
Total number of VAT registered businesses at the end of 2004 (Source: NOMIS)	3,645	4,270	3,335	11,250	1

^{*} Figure excludes farm-based agricultural data.

Figure 31: New VAT Registered and De-registered businesses in Greater Norwich and England as a % of previous years' stock: 1995-2005.

(Source: VAT Registrations³⁰)



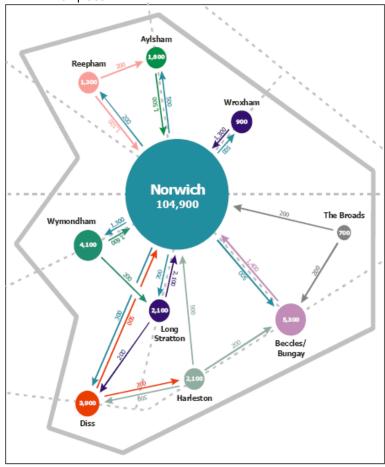
³⁰ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006)

- 8.3 A recent study into the relations between employment patterns and the Greater Norwich housing market found that of the 171,700 employees working in the area, 83% also live there. Of the 164,100 people in employment who live in the subregion, 86% work in the area³¹. The desire amongst residents to remain within Greater Norwich when considering moving home is in part a reflection of the area's economic appeal and the job opportunities offered in Greater Norwich.
- 8.4 As Figure 32 demonstrates, a survey into the commuter patterns of Greater Norwich residents between April 2000 and 2001 found that by far the majority of movements to the workplace from and to Norwich were from the Wymondham Housing Market Area. Norwich draws heavily on commuter-input from other areas of Greater Norwich, most notably from Long Stratton and closer areas and less so from Diss and Harleston. Relatively few commuter movements occur between other HMAs, and most of these are between areas on the periphery of Greater Norwich. Wymondham, Diss and Beccles/Bungay HMAs (the largest population areas) are the most independent in terms of the overall live/work self-containment.

Figure 32: Travel to work patterns within Housing Market Areas in Greater Norwich (Source: 2001 Census³²)

Note:

- (i) Figures rounded to nearest 100; flows of 100 or less are not shown.
- (ii) The figures within each location show the number of people who both live and work within the HMA, whereas the arrows show the number of people travelling between HMAs to the workplace.



 $^{^{31}}$ ibid

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³² ibid

Employment sectors

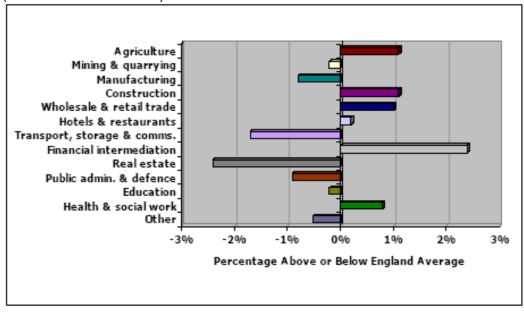
8.5 The Annual Business Inquiry of 2005 showed that the area's workers are employed across a varied mix of sectors, though dependent on the service industry. The financial sector is particularly important to Norwich (31% of employment), whilst public administration, education and health are the main sector for employment in South Norfolk (35%). Broadland has a more even distribution of employment across sectors. Despite being the traditional form of employment, agriculture only accounts for 2% of employment in Greater Norwich. Instead, financial services and the hotelier industry accounts for nearly half the workforce collectively. The spread of employment across Greater Norwich is seen in Figure 33, below, and compared against the average sector-based spread for England in Figure 34.

Figure 33: Employment sector distribution across Greater Norwich local authorities.

(Source: Annual Business Inquiry 2005)

(Source: Arrifual Dusiness	s inquiry 2000)			
Sector (% of total employment)	Broadland	South Norfolk	Norwich	Greater Norwich	England & Wales
Agriculture and fishing	2.5	3.5	0	2.0	0.9
Manufacturing	16.8	11.3	8.7	12.3	11.1
Construction	7.0	6.5	4.0	5.8	4.6
Distribution, hotels and restaurants	24.2	20.6	24.2	23.2	24.1
Transport and communications	4.6	3.4	5.2	4.4	6.0
Banking, finance and insurance	16.9	14.4	31.4	20.8	20.7
Public administration, education and health	24.3	35.4	21.3	27.0	26.9
Others	3.7	4.9	5.2	4.5	5.8

Figure 34: Employment sectors in Greater Norwich compared to the English average. (Source: 2001 Census³³)



³³ Greater Norwich Sub-Region, Evidence base for a Housing Market Assessment: A study of housing need and stock condition. (2006)

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- 8.6 The evening and night-time economy is becoming increasingly important for the economy of Norwich, which has developed into something of a sub-regional hub for the cultural and evening economy; around 29,000 people visit the pubs and clubs of the city centre on a Saturday night, for example. The tourism and leisure industry accounted for approximately 8% of total jobs in the City, Broadland and South Norfolk in 2005 (Annual Business Inquiry, 2005).
- 8.7 Norwich is a regional cultural centre. For a city of its size, it is extremely well provided with a wide variety of cultural venues, including a range of theatres and museums, and the Norfolk and Norwich Millennium Library, one of the busiest libraries in the country. These facilities are mainly located within the city centre. Outside of Norwich there are smaller, localised hubs of cultural significance based in market towns, Wymondham being a more prominent example. In Diss and Aylsham there is also a cultural initiative for supporting healthy, local food production, farmers markets and the promotion of living a generally less hectic pace of life, known as the Cittaslow movement.
- 8.8 More specific employment activities in Greater Norwich are:
 - Financial and insurance services, consisting of both major companies and many specialist companies;
 - Health and life science: Norwich Research Park is Europe's largest single-site concentration of research and development in plants; microbes; food, diet and health; the environment and information systems. The Norfolk and Norwich University Hospital is another major employer in this sector;
 - Media and creative industries: the largest cluster in the eastern region, this sector includes long-established companies such as regional broadcasting headquarters and the UK's largest independent regional newspaper, as well as young, innovative companies, all of which are likely to play an important role in employment growth in the Greater Norwich area;
 - Tourism: Tourism is becoming increasingly important to Greater Norwich, and especially the rural areas of South Norfolk and Broadland where it can help to diversify the employment base and offset the loss of jobs and incomes in agriculture. The natural landscape is very important for the tourism economy in Greater Norwich; the Norfolk and Suffolk Broads, nearby north and east Norfolk coasts, and the Norfolk countryside all ensure that tourism is an important element of the local economy. The important heritage of the area is invaluable in terms of both the local character and the local economy and tourism industry. The continued preservation of these assets will have many far-reaching benefits. Norwich is a gateway to the Broads National Park, and many of the towns and villages in the locality benefit from related trade. Tourism is becoming increasingly important, supporting approximately 6,000 jobs in the sector with recent figures suggesting that tourism is worth some £400 million a year to the area and is expected to continue to grow;
 - Retail and leisure: Norwich is also regularly ranked as one of the top ten most popular shopping destinations in the UK. There are many modern facilities, for example the Chapelfield centre, retail parks and traditional town centre shopping environments in the Greater Norwich area. Norwich city attracts

five million day visitors per year for shopping, tourism and leisure interests; and,

- Higher Education: A range of high quality and expanding higher education facilities are located in the Greater Norwich area at the University of East Anglia (UEA), City College, Easton College and the Norwich School of Art and Design.
- Other characteristic elements of the economy include high quality engineering (at such facilities as the nationally-important Hethel Engineering Centre), including industry-leading automotive engineering, distribution services, and business park uses.
- Agriculture is still a dominant land-use in Broadland and South Norfolk.
 However, employment in this sector is declining, and currently only accounts for 2.5% and 3.5% of employment in these two districts respectively.
- 8.9 Employment in Norfolk is expected to grow by 9% between 2000 and 2010, with most growth anticipated in the hospitality, financial services, business sectors and retail sectors. Traditional agriculture and industry sectors are declining (Norfolk Employment Growth Study, Roger Tym and Partners, 2005).

District Profiles

8.10 Whilst it is important to consider the Greater Norwich area as one entity, there are many locally-distinctive nuances that add to the character of the overall area and should not be forgotten. Summaries of these are included below:

Broadland

- 8.11 A large proportion of jobs are located outside the district, primarily within the City of Norwich. 2001 Census 'Travel to work' data shows that only 13.6% of working residents in Broadland travel less than 2km to the workplace (compared to over 20% for Norfolk) despite over half the population living in the Norwich city suburbs. This may suggest there to be a general lack of local employment opportunities in Broadland, particularly in the more rural areas as people are forced to travel away from their residential areas to find work.
- 8.12 There are a significant number and range of employers within Broadland; the number of VAT registered businesses was 3,645 at the end of 2004 (Nomis). The majority of these businesses are small, employing one to five people, though there are also large employers. In total, there are over 40,000 employee jobs in the district, nearly 15,000 of these being part-time, many possibly within the important tourism sector.

South Norfolk

- 8.13 For a predominantly rural area, South Norfolk is relatively affluent, and does not have the significant issues of unemployment or deprivation of more urban areas. Some residents do experience issues associated with low income, at or towards the minimum wage (average adult earnings are only 85% of the national average) and obtaining access to services, especially in the more remote parts of the district, is often problematic in accessing the workplace.
- 8.14 Within South Norfolk, the biggest employers are the Norfolk and Norwich Hospital and the science research park at Colney. More than half of South Norfolk's resident workforce is employed within Norwich city. Wymondham is recognised as a

- regionally important strategic employment centre and is already home to Lotus Cars, the Hethel Engineering Centre, Gateway 11 Business Park and the Norfolk Police Headquarters.
- 8.15 The majority of employers are small; only 5% employ more than 25 people. To the south of the district, most of the land is used for agriculture and food related uses, which remains a significant influence. Despite the rural nature of the district, agriculture and fishing only form 3.5% of employment. The economy continues to move from traditional agriculture and industry towards an office-based economy.

Norwich

- 8.16 The economy of Norwich is characterised by a high proportion of jobs in large businesses. One third of all jobs in Norwich are in only 66 large organisations (200+ employees). There are a significant number of high-level, professional jobs, and there is potential to increase this number.
- 8.17 A positive aspect of Norwich' economy is the high retention of graduates, although they fill a large proportion of intermediate jobs for which they are over-qualified. As a consequence, this creates problems for less well-qualified people and those who grew-up in Greater Norwich to access the jobs market, and it means that there are fewer opportunities to move from lower paid employment into intermediate employment.

9 Transport and Access

Transport availability

- 9.1 Access to jobs and services is an important issue in both rural and urban areas. Public transport is available to those living in the city and built-up areas close to Norwich, but is limited in the more rural areas. There are local branch rail-lines serving parts of the district east and north of Norwich, with additional main line stops at Wymondham and Diss, however, the main form of transport remains the private motor vehicle.
- 9.2 Greater Norwich also contains the Norwich International Airport, the main part being within the City of Norwich, with some operational land being in Broadland. The airport carries over 400,000 passengers a year, and is a major link for tourism and business both nationally and internationally. It is expected that airport usage will grow in the future.
- 9.3 In the rural areas, the use of a car is often essential in reaching vital services. Due to the more dispersed population and the longer distances it can be less viable to use more sustainable forms of transport. Realistically, in the more rural areas there is limited alternative to the use of the private car to meet transport requirements. Public transport primarily provides links to and from Norwich and the main service centres, and supports the need for specific services such as school bus services and rural hopper services. In some rural villages and towns there are demand-responsive community transport schemes that may be funded by parish councils to offer a vital service for the community, in particular those with less mobility.

Travel to work trends

9.4 Figure 35 below shows the different methods by which residents travel to work. In the whole Greater Norwich area, the majority of residents use private motor vehicles at similar levels to the average for the region and in England. However, this disguises substantial differences within the area, with relatively low levels of private motor vehicle use in Norwich, but the proportion increases significantly outside Norwich. Correspondingly, travel by foot or cycle is high in Norwich, but low in Broadland and South Norfolk. Public transport use is relatively low compared to regional and national levels, even in Norwich. These differences are probably a reflection of the urban / rural split with the Greater Norwich Area, and the focus of employment provision being within Norwich.

Figure 35: Travel to work data (resident working population) from 2001 census.

(Source: National Statistics – Neighbourhood Statistics)

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Modes of travel to work (%)	Broadland	South Norfolk	Norwich	Greater Norwich	East of England	England
Private motor vehicle	72.0 %	72.2 %	51.5 %	65.4 %	65.8 %	62.1%
Public transport	7.8 %	5.3 %	9.9 %	7.7 %	11.3 %	15.4 %
On foot or cycle	9.8 %	9.8 %	31.5 %	16.9 %	12.9 %	12.8 %
Works at or mainly from home	9.8 %	12.0 %	6.7 %	9.5 %	9.4 %	9.2 %

9.5 Also of interest is the distances travelled to work, as seen in the table below (Figure 36). In Broadland and South Norfolk most journeys to work in 2001 were of medium distances, between 2km and 20km, with relatively few travelling less than 2 km. In Norwich, a significantly higher proportion of people had short journeys to work, which ties in with the substantial numbers that walk or cycle. In addition, overall in the Greater Norwich Area fewer people travel large distances (over 20 km) to work than do so for the region or in England. Long distance commuting is noticeably lower in Norwich and Broadland, but higher in South Norfolk. This would seem to indicate that most Norwich residents work within Norwich and that most Broadland residents do not live close to where they work, and not within walking distance, but that they do work within the district or adjoining areas, such as Norwich. In South Norfolk the greater size of the district, and perhaps the attractions of urban areas to the south and west, eased by the presence of rail connections to London, Ipswich and Cambridge, result in higher levels of longer distance commuting.

Figure 36: Travel to work data (resident working population) from 2001 census.

(Source: National Statistics – Neighbourhood Statistics)

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Distances travelled to work	Broadland	South Norfolk	Norwich	Greater Norwich	East of England	England
Less than 2km	13.6%	14.6 %	34.2 %	20.6 %	20.6 %	20.0 %
2 – 20km	62.2 %	53.9 %	46.0 %	54.3 %	45.4 %	53.5 %
More than 20km	9.1%	13.9 %	8.8 %	10.5 %	19.7 %	12.6 %
Works at or mainly from home	9.8 %	12.0 %	6.7 %	9.5 %	9.4 %	9.2 %

(Note: Tables exclude "other" such as no fixed place of work, working outside UK etc)

9.6 In particular, the tables above illustrate the advantage of residents living closer to work in order to encourage walking and cycling, and the opportunity that arises for public transport to cater for commuters in 'middle distance' areas. For the future, there is perhaps scope for the improvement of public transport usage, particularly for the mid-distance travel that arises outside Norwich. Schools need to be sited as close as possible to the homes they serve to encourage alternatives to the car, and safe and pleasant pedestrian and cycle paths to schools need to be designed into neighbourhoods. Frequent public transport connections need to be available to all schools, especially with connections to the more distant residential areas they serve.

Minimising transport impacts

- 9.7 One of the main disadvantages of motor vehicle use is the pollution that is generated. Air pollution does have an impact on the health of those people working and living in the areas of concentrated pollutants, so minimising pollutants' impacts is essential. In the Greater Norwich area there are particular problems within Norwich, where traffic levels are concentrated. Norwich contains three Air Quality Management Areas. NO₂ levels in these areas are higher than the maximum allowed by DEFRA, and therefore the local authority has to reduce these. The three Air Quality Management Areas are:
 - St Augustines Street
 - Grapes Hill
 - Castle Meadow
- 9.8 Traffic counts (2001-2004) show that the number of cars crossing Norwich Inner Ring Road around the city centre has decreased. In the same period there has been an

increase in the number of pedestrians and cyclists (Norfolk Local Transport Plan). This is partly due to an expanding Park & Ride service providing access to the city centre. There are currently six Park & Ride sites with over 5,000 parking spaces round the periphery of the city. This has led to an increase in bus patronage to the city centre and a significant reduction in vehicle miles - in excess of 2 million by 2006 – and consequent carbon dioxide emissions.

- 9.9 Transport improvements for the area are included in Norfolk County Council's (the Transport Authority) Local Transport Plan, together with the Norwich Area Transport Strategy. Current key proposals include high quality public transport improvements, pedestrian priority measures in the centre, and a range of traffic restraint measures. Another significant project is the provision of a 'Northern Distributor Road' to the north of Norwich, which will address orbital traffic movements and tackle congestion problems in the northern urban fringe, whilst providing opportunities for improvements for other travel modes.
- 9.10 The many miles of public rights of way (e.g. footways and bridleways) in the districts are important in providing informal access to the Greater Norwich countryside. Particular schemes to encourage people to access the countryside for leisure and recreation include long-distance routes such as the national cycle route 1 which runs the length of Greater Norwich to connect Fakenham, Norwich and Beccles. The Weaver's Way, Marriotts Way, Wherrymans Way, Boudica Way and Bure Valley Walk and Cycleway are all popular recreational routes. There is also designation of a number of shared use 'Quiet Lanes' in the south of South Norfolk. Public access is also available to certain areas classed as "open access land".

10. Task A3 – Identifying Sustainability Issues

- 10.1 Reviewing the relevant plans and strategy documents (Task A1), and considering the baseline character of the area (Task A2) highlights a number of "key sustainability issues" facing Greater Norwich. These are relevant to producing the Local Development Framework for the Greater Norwich area and must be considered when undertaking the Sustainability Appraisal of the Joint Core Strategy. The issues identified (Task A3) are summarised in the tables in Figure 37, below, grouped under environmental, social and economic themes.
- 10.2 As issues emerge they help to identify Sustainability Appraisal Objectives. These objectives form the basis of the appraisal framework (Task A4), and will help to assess how sustainable the Core Strategy options are as they are developed. Links between the issues and the objectives are shown to highlight how the framework will ensure the issues are considered throughout the appraisal process.
- 10.3 The Sustainability Issues also fall under the remit of certain topics identified by the SEA Directive that need to be covered within development strategies. These are also identified within Figure 37. In addition, an important link exists between the issues and the objectives of the East of England Regional Sustainable Development Framework, itself part of the emerging Integrated Regional Strategy. The relationship between issues in Greater Norwich and their links to both the SEA topics and the objectives of the regional framework are also identified within Figure 37.

Sustainability Issues summarised:

- 10.4 The issues identified in Task A3 are those faced across Greater Norwich, which need to be tackled by the Core Strategy. They reflect shared issues and implications for managing growth throughout Greater Norwich. Although certain aspects may appear spatially specific, these do reflect important differences faced across the area. A very brief overview of the main issues reveals that:
 - As the population grows and ages, the need to supply facilities and services, and in particular the access to them, especially in the rural area, will become increasingly pressing;
 - The retention and attraction of young people through jobs provision and access to the housing market will be a key priority;
 - The character/quality of natural and built environments must be preserved and enhanced whilst being faced by widespread development pressure;
 - The Greater Norwich area is the principle access to the Broads national park, and has a critical role in promoting tourism, preserving character and protecting the environment through its spatial policies.
 - Reducing contributions to, and mitigating against the impacts of, climate change will be crucial to the long-term viability of Greater Norwich as a place to live and work, to visit and to invest in.
 - Reliance on the car should be reduced through improved access to public transport and improved cycling and walking links to local facilities / services.
 - Creating balanced and integrated communities will be an essential aspect of providing new development, through design benefits, for example.
 - Promoting healthy lifestyles will be important throughout policy.
 - Lifelong learning opportunities should be increased for all members of society, particularly in providing vocational training for school leavers.
 - Difficulties in accessing the housing market must be minimised;
 - Housing of all types and tenures is essential for mixed communities;

• Employment businesses, particularly in rural areas, need support to diversify. This will be particularly important to strengthening the tourism industry, although promoting the tourism product of the area will need to be done in a sustainable way.

Figure 37: The Key Sustainability Issues identified as needing to be addressed through the Greater Norwich Core Strategy.

SEA Directive Topic	Key Sustainability Issues for the Greater Norwich Core Strategy	East of England Sustainable Development Framework Objectives	Sustainability Appraisal Objectives
ENVIRONMENT			
Biodiversity, Fauna and Flora Water and Soil / Land Cultural Heritage and Landscape	 Natural environment: There is a wealth of natural assets and ecology (including high levels of water quality), which needs protecting, maintaining and enhancing, and re-creating where lost. There is a wealth of high quality agricultural land, which makes Greater Norwich an important supplier to the food industry. This will need protecting, as its loss would be irreversible. Improving sustainable access to the countryside. Making the city and urban areas greener and with increased links to the fringe areas. This will require some retrofitting of existing areas if a genuine sustainable city is to be developed. Green spaces and green corridors will need to be integrated into development, and include the use of walking and cycling networks. There is a generally poor status of SSSIs, particularly in Norwich. Overall, the quality of habitats needs to be improved and some areas need extending. Pressures from new development means that a significant area of Greenfield land may be needed for new development. Landscape character and heritage should be retained, reflected and enhanced through the designs of new developments. Cross-boundary effects are also an important consideration. Activity promoted through the Joint Core Strategy is also likely to have an effect on areas outside its administrative boundary, such as the Broads Authority area. Water quality and biodiversity downstream will be particularly vulnerable to changes from new development. 	To protect and maintain our most valuable regional assets such as designated habitats, landscapes of natural beauty, and our historic built heritage, and to improve the wider environment by means of adequate investment and management. (3)	 ENV 2 ENV 4 ENV 5 SOC 7 EC 4

	 (Natural environment continued) Water quality is important for freshwater ecosystems and as a secondary effect the angling and tourism industry. Biological and chemical water quality will need to be enhanced through land use practices, such as installing SUDs and treatment works. Built environment: 		
Cultural Heritage and Landscape The Urban Environment	 The Greater Norwich Area has a wealth of Scheduled Ancient Monuments, Listed Buildings and other architecturally distinctive structures all of which need protection. The special historic character of Norwich and its hinterland should be preserved and enhanced; the unusual number of churches in the city, the valued listed buildings and the largest groups of industrial monuments in the country, namely windmills, will be important in retaining the city's unique character and heritage. Preserve the distinctive character of the historic built environment and landscape, protecting and enhancing these and using them to promote the Greater Norwich and Broads areas. New developments will need to be integrated into the existing form and character of local areas in order to minimise the negative impacts that could be brought to the heritage of the area. Historic Landscape Characterisations can provide valuable assistance for integrating landscape distinctiveness into new developments. Brownfield land is in increasingly short supply, particularly in rural areas, so there is pressure to make best use of sites that do exist. New construction can have negative impacts on existing development, town and cityscape from noise, air quality and dust. Indirect impacts on the built environment could arise from the additional pressures of development and climate change. Measures should be taken to enhance the historic core of Norwich and other distinctive heritage features, by making them able to withstand development pressures arising in the immediate future, such as traffic growth. 	To protect and maintain our most valuable regional assets such as designated habitats, landscapes of natural beauty, and our historic built heritage, and to improve the wider environment by means of adequate investment and management. (3)	• ENV 5 • SOC 7 • EC 4

	Climate change:		
Biodiversity, Fauna	Climate change threatens the long-term future of some habitats and	To deliver more sustainable	• ENV 3
and Flora	species; their capacity to withstand these changes must be improved.	patterns of location of	• ENV 4
Water and Soil /	Significant areas in Greater Norwich are at risk of flooding, including	development, including	• ENV 6
Land	previously developed areas in the City. The area at risk of flooding	employment and housing (2)	• ENV 7
Lanu	will increase with climate change.Flood risk in areas like the Broads can also be exacerbated by		• SOC 7
Natural Resources	developments upstream causing a change to natural watercourses		• EC 4
and Climate	and the water cycle.		
	 There is a need to reduce greenhouse gas emissions and ensure 		
The Global	that contributions to climate change are reduced throughout,	To reduce our consumption	
Environment and	particularly as the rural areas of Broadland and South Norfolk are so	of fossil fuels (4)	
Local Resources	much more reliant on using the private car.		
The Urban	 All new, and some existing, developments will need to adapt to the 		
Environment	likely consequences of climate change through their design and	To avoid using the global	
LIMIOIIIICII	locations.	environment to underwrite	
	 Adapting to the effects of climate change will need to include the ability to design developments that are water efficient and recycle 	our own unsustainable way	
	water resources as Norfolk is one of the drier parts of the country.	of life (8)	
	 Some aspects of retrofitting existing development, such as improving 		
	energy efficiency in private sector housing, tackling traffic congestion		
	and promoting reduction, reuse and recycling of waste.		
	Some aspects of change could bring benefits e.g. more wetlands.		
	Renewable energy solutions for the area will be essential and should		
	be sought in order to minimise the use of carbon-burning technology		
	for energy generation. This would also have the benefit of opening a		
	number of new opportunities for economic development, such as a		
	hydrogen energy sector. Norwich and Norfalk's carbon footprints are currently unsustainable.		
	 Norwich and Norfolk's carbon footprints are currently unsustainable, and promoting adaptive lifestyles will be necessary to reduce them. 		
	 New developments in all sectors, land uses and activities will need to 		
	minimise their carbon emissions. The growth in popularity of Norwich		
	Airport use will also need to be redressed though carbon-saving		
	elsewhere.		

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Natural Resources and Climate Water and Soil / Land Air The Global Environment and Local Resources	 Natural resources There is increasing pressure on the natural resources needed to facilitate new development, which will impact on water quality and supply, air quality, energy and minerals use. Water quality must be enhanced given the rise in phosphate levels that are occurring in water courses. The irrevocable loss of quality soil resources should be minimised. Water supplies must be sufficiently able to service new developments and new designs of development must conserve water use as much as possible and seek to reduce the water use throughout the area. Greater Norwich should consider the impact on catchment reserves. Minerals efficiency will need to be improved to minimise the environmental impact of extraction and processing, including increasing the use of aggregate captured from recycled construction material. Ensuring that existing and new development is resource efficient. There is a need to reduce the amount of waste from Greater Norwich sent to landfill sites, and find alternative methods of disposal. Energy captured from waste should be increased. Waste management will experience increased pressure on services to accommodate growth, supply new treatment facilities and minimise waste production overall. Efforts should be made to treat and use contaminated land as a priority for restoration, provided it's use won't present health risks. 	To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible (6) To avoid using the global environment to underwrite our own unsustainable way of life (8)	 ENV 3 ENV 6 ENV 8 ENV 9 EC 4
Air	 Transport High motor vehicle use, particularly in rural areas, stemming from a general dependency on the private car. 	To deliver more sustainable patterns of location of	• ENV 1 • ENV 3
Natural Resources and Climate	 Use of transport, in urban areas in particular, and its growth in volume has impacts on human health through contributing to poorer air quality in urban areas. 	development, including employment and housing (2)	ENV 5ENV 6SOC 2
Population and Human Health	 There is an ongoing an urgent need to encourage a modal shift in transport use away from private cars and into public transport, and to replace CO₂ emitting modes with less polluting forms of transport. 	To reduce our consumption of fossil fuels (4)	• SOC 8 • EC 3
The Urban	General environmental amenity will be put under pressure from new		

Environment	development, particularly due to noise, air and water pollution.
	Transport movements associated with minerals, waste and other
	service provision will need to be minimised.

SEA Directive Topic	Key Sustainability Issues for the Greater Norwich Core Strategy	East of England Sustainable Development Framework Objectives	Sustainability Appraisal Objectives
SOCIAL			
Population and Human Health The Global Environment and Local Resources Natural Resources and Climate	 Rising population through inward migration requires more homes, services and facilities. Creation of unbalanced communities through: Increasingly ageing population in rural areas; Increasingly younger population in the city; and, Migration of families from the city towards the suburban and rural areas. Household sizes are becoming smaller as more people remain single for longer or become single, and as a result require more homes to cater for this trend. In-migration of populations from other areas in the region, and nationally and internationally, is increasing the demand for housing, community facilities and services. The proportion of the population for whom English is their second language is increasing. This is likely to have implications for the future provision of services and facilities such as education and community learning. Reducing the environmental impact of individuals will be important in maintaining sustainable communities. 	To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region (5) To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible (6) To avoid using the global environment to underwrite our own unsustainable way of life (8)	 ENV 6 ENV 9 SOC 1 SOC 5 SOC 7 SOC 8 EC 4

Population and Human Health	 Deprivation Deprivation affects certain sectors of the community in many different ways, including distinct variations between urban and rural areas. Deprivation is generally heightened in urban areas, but also affects significant pockets of rural communities. Reducing deprivation includes: Education and attainment Income deprivation Health and environmental quality Crime Social exclusion Reducing levels of unemployment will help reduce poverty and inequality and improve home affordability. If the house price – income ratio continues to widen, home owners will have less disposable income as mortgages/rents increase. 	To achieve sustainable levels of prosperity and economic growth (1) To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region (5)	 SOC 1 SOC 2 SOC 3 SOC 4 SOC 5 SOC 6 SOC 7 SOC 8 EC 1 EC 4
Population and Human Health The Urban Environment	 Access to services The Greater Norwich population dispersal has a distinct urban, rural and urban-fringe split, which has implications for accessing facilities, providing services for dispersed communities, and identifying a role for some settlements. There is a pressing need to find the best location for new development to have access to services and facilities. Services must be provided for an increasingly aging population, and all services must take into account the rising levels of disability in the population. This includes building homes to lifetime homes standards as well as providing specialised accommodation. Access to higher education establishments is problematic for pupils in the more rural areas where public transport links are poor. Difficulties in accessibility should not be allowed to restrict training opportunities, as this would have economic impacts for the future. As the population is rather dispersed, the roles of towns and local settlements will be important in order to cater for people's needs. 	To revitalize town centres to promote a return to sustainable urban living (9)	 ENV 5 SOC 1 SOC 2 SOC 3 SOC 5 SOC 6 SOC 8

Population and Human Health	 Health The need to promote healthy lifestyles, particularly through the design of, and access to, new developments. More health infrastructure, and better access to health facilities, is needed for all communities. Addressing the links between lower levels of health and higher deprivation will help to reduce social inequalities. Air Quality Management Areas should be mitigated and the impacts of congestion and localised emissions concentrations should be reduced through traffic management schemes. Projects such as the CIVITAS Initiative can help cities to achieve a more sustainable, clean and energy efficient urban transport system through integrated technology and policy based measures. Traffic can have negative health impacts across the area and these should be mitigated against, such as if the airport expands. Providing permanent sites for Gypsy and traveller groups will lead to better access to health care facilities as well as education. Localised health facilities, such as cottage hospitals, could be more viable and provide an essential service to new growth, particularly in the rural areas, to relieve pressure on the major hospitals. 	To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region (5)	 ENV 3 ENV 5 SOC 2 SOC 7 SOC 8
Population and Human Health The Urban Environment	 Crime Some higher crime levels exist in the urban areas, particularly in the more deprived wards. Improving community identity and welfare will be needed to help to reduce anti-social behaviour and increase the feel of local ownership of an area. Reducing anti-social behaviour will be closely associated with managing the evening economy. Building-up community cohesion will increase the viability of local community-based events and facilities, and improve local democracy and public participation in local elections and Parish planning. 	To revitalize town centres to promote a return to sustainable urban living (9) To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region (5)	SOC 1SOC 5SOC 7EC 4

	Leisure, culture and recreation		
Population and Human Health The Urban Environment	 Need to provide access to a good range of cultural and leisure facilities, including improved access to the countryside and local green spaces. Facilities for local play and interaction are needed to help build strong communities. Access to cultural activity is very important for recreation and personal development and community integration. Adequate cultural provision, such as libraries, will be integral to sustainable communities and need to be planned for from the outset. Lifelong learning can also utilise cultural facilities and provision of community centres where community capacity and neighbourhood identity can be promoted. An emphasis on good design of new facilities will ensure that communities can benefit from improves standards and it will bring some more 'identity' and community involvement in the area. Tourism can play an important part in building-up cultural awareness and also for providing jobs and business growth. Support should be given to local tourism-related development linking cultural, social and economic aspects. Town and village centres should be retained and encouraged as a focus point or a hub of community activity, particularly in response to local services and facilities being amalgamated or withdrawn from villages into larger settlements, affecting the viability of communities. 	To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region (5)	 ENV 5 SOC 2 SOC 5 SOC 7 SOC 8 EC 1 EC 2 EC 4
Population and Human Health The Urban Environment	 Education There are varying levels of attainment across the area; generally lower levels are experienced in the urban area and amongst older people. Ensuring the viability of educational services in rural areas will be increasingly difficult as populations in those areas become collectively older. This has implications not only for facilities provision but also for maintaining the existing high standards of educational achievement. 	To achieve sustainable levels of prosperity and economic growth (1) To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in region (5)	 SOC 1 SOC 3 SOC 5 SOC 6 SOC 8 EC 2 EC 4

	 (Education continued) Opportunities for lifelong skills and training need to be encouraged in order to 'up-skill' the overall workforce. Links between lower educational attainment, workplace qualifications and deprivation need to be addressed. As in-migration rises there may be a need to improve educational opportunities within communities. Housing		
Population and Human Health	 There is a variety of housing tenure across the area, with significantly more owner-occupation outside Norwich city. There is a need to provide a sufficient and appropriate mix of housing types and tenures to meet the needs of all and reduce the number of household in unsuitable accommodation, for example Norwich may prove to contain too many flats and not enough family units. The most sustainable locations for a substantial number of new housing developments will need to be found, exact numbers of which must be planned for as arise from the Regional Spatial Strategy. The need to improve the quality of new and existing housing stock. There is an increasing gap between house prices and income levels, particularly in South Norfolk and Broadland. The affordability of new housing stock needs to be at a level that will ensure that local communities and key workers can access their local housing markets. The potential for providing new affordable homes must be maximised in each development proposal. Gypsies and Travellers should also benefit from a measured provision of sites across Greater Norwich and be treated equally. More effective use of the exiting housing stock, such as returning vacant homes to beneficial use, could increase access to housing. 	To deliver more sustainable patterns of location of development, including employment and housing (2)	 ENV 1 ENV 5 ENV 6 ENV 7 ENV 8 ENV 9 SOC 1 SOC 2 SOC 4 SOC 5 SOC 7 SOC 8 EC 4

Population and Human Health Transport and accessibility Improving access to jobs, services and facilities by public transport and reducing the need to travel by private car. Providing appropriate transport infrastructure. Improving the accessibility to services and facilities for those who wish to walk and cycle. There is a need to improve the opportunities to walk and cycle and use open space provisions as a means of recreation and for leading a more sustainable lifestyle.	To deliver more sustainable patterns of location of development, including employment and housing (2)	 ENV 1 ENV 3 ENV 6 SOC 1 SOC 2 SOC 3 SOC 6 SOC 7 SOC 8 EC 3 EC 4
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SEA Directive Topic	Key Sustainability Issues for the Greater Norwich Core Strategy	East of England Sustainable Development Framework Objectives	Sustainability Appraisal Objectives
ECONOMIC			
Population and Human Health The Global Environment and Local Resources	 Growth There is a generally diverse, successful and growing economy, with a strong Research and Development industry. There is a focus of employment provision in the city, with a smaller, growing importance of areas outside the city. Currently, there is an emphasis towards large employers being located in the City, and small employers in Broadland and South Norfolk. This may suggest a need to improve diversity of employers across the economy. Maintaining high levels of employment and improving the ability of local populations and those with fewer qualifications to access employment markets. Where agricultural viability declines, diversification and indigenous investment needs support in rural economies. Locating employment growth in the most sustainable locations will be a key factor for a prosperous economy. 	To achieve sustainable levels of prosperity and economic growth (1) To deliver more sustainable patterns of location of development, including employment and housing (2)	 SOC 1 SOC 3 SOC 6 SOC 8 EC 1 EC 2 EC 3 EC 4

	 The evening economy can bring a 24-hour business diversity for business opportunities in some areas. Increasing the provision of jobs in local areas will increase local economic growth and prosperity, so local jobs provision should be encouraged that can also offer vocational training opportunities. Allocations for new jobs, as required under the Regional Spatial Strategy must be provided for in the most sustainable locations. Diversification and extension of the tourism base across the area. Promotion of tourism development whilst protecting the important landscapes, environment and cultural heritage of Greater Norwich and the Broads area. 		
Natural Resources and Climate The Global Environment and Local Resources	 Resources Domestic and business waste management, including waste minimization, increased recycling and resource efficiency improvements, such as energy generation and recovery. Maximising opportunities for economic growth and employment through new waste management facilities. Promotion of sustainable energy technologies. Enabling sustainable production and consumption. Agriculture provides a significant resource for the Greater Norwich economy and its ability to compete in the national and regional sector needs to be supported. An environmentally-sustainable economy can be developed through a general reduction in food and business mile generation, improved energy savings, development of the renewable energy sector, and through enterprises such as eco-tourism. 	To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible (6) To minimize our production of by-products or wastes, aiming for 'closed systems' where possible (7)	 ENV 6 ENV 8 ENV 9 SOC 7 SOC 8 EC 2 EC 3 EC 4
Population and Human Health	 Skills Promoting the knowledge economy will be a key influence in the growth of Greater Norwich and will require support through business infrastructure and training opportunities. There is an unbalanced workforce, as graduates take up intermediate jobs and so present difficulties for those with lower qualifications to access jobs. 	To achieve sustainable levels of prosperity and economic growth (1) To achieve a more equitable sharing of the benefits of	 SOC 1 SOC 3 SOC 6 SOC 8 EC 1 EC 2

	 Improving the levels of educational attainment amongst school-leavers will be a vital part of improving the skills and training of the Greater Norwich workforce. The knowledge economy needs to be able to develop an environmentally-friendly sector that helps provide localised training to provide skills for creating sustainable communities, such as sustainable construction skills. 	prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region (5)	• EC 4
Population and Human Health	 Transport Infrastructure Access to jobs needs to be improved, particularly for those in rural areas where local employment opportunities may not be so readily available. Providing job opportunities closer to centres of population, particularly in the rural areas, will be important in reducing the dependency on the private car, reducing the need to travel, and building community cohesion. Links to regional, national and international transport networks should be maximised for their ability to bring growth and investment. 	To deliver more sustainable patterns of location of development, including employment and housing (2)	 ENV 1 ENV 3 ENV 5 ENV 6 SOC 8 EC 1 EC 2 EC 3

11. Task A4 – Developing the Sustainability Appraisal Framework

- 11.1 A framework of objectives, key questions for decision-making criteria, and indicators have been developed to cover the broad range of environmental, social and economic factors arising from the characterisation and issues assessment. Together, these form the basis of the Sustainability Appraisal matrix that will be used to assess the emerging options and policies as they are developed. The appraisal process examines the effects and implications of policy over short-, medium-, and long-term time-scales, and considers the cumulative impacts that might arise as one or more policies are put together. The appraisal will be able to offer a summary of the possible environmental, social and economic effects.
- 11.2 Sustainability Appraisal Objectives are used to guide a strategy's creation, to assess the viability of a proposal in being as sustainable as possible. These objectives are based on those suggested in Government guidance³⁴, and are tailored from findings of the policy review, baseline characterisation and identification of issues. As part of the framework, they will clarify where there are any conflicts between the aims for reaching sustainability and the policies in the plans. The Sustainability Appraisal Objectives that form the basis of the Appraisal Framework can be seen in Figure 38, below. In addition, the compatibility of the SA Objectives can be considered to identify possible tensions in the assessment, such as those seeking to preserve land and those advocating growth (as seen in Appendix 3).
- 11.3 During the appraisal process, the SA objectives are complemented by a series of decision-making criteria key questions. These suggest to the policy writer some important considerations that should be included within the assessment of emerging policy. These questions do not necessarily require individual answers and commentary but rather seek to prompt lines of enquiry.
- 11.4 Objectives are accompanied by a number of indicators that offer an insight into how trends have recently been experienced. They will measure how closely policies are able to achieve their wider aims, as well as suggesting targets for a policy to work towards. Indicators will offer comparisons between the local data and wider picture, a 'comparator value'.
- 11.5 Appendix 4 contains the Sustainability Appraisal Framework as an assessment matrix. Each of the objectives is listed alongside the decision-making criteria and indicators. As an assessment is made, the likely effects are considered and noted in the framework, in accordance with the rating system of 'positive' or 'negative' or 'uncertain' effects. As well as providing a summary of the effects, the Framework also provides recommendations for how each policy option can be improved or their negative effects lessened.

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³⁴ 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks: Guidance for regional planning bodies and local planning authorities', (ODPM, 2005).

Figure 38: Sustainability Appraisal Objectives for assessing Core Strategy policies.

Environmer	ntal Objectives:
ENV 1	To reduce the effect of traffic on the environment.
ENV 2	To improve the quality of the water environment.
ENV 3	To improve environmental amenity, including air quality.
ENV 4	To maintain and enhance biodiversity and geodiversity.
ENV 5	To maintain and enhance the quality of landscapes, townscapes and the historic environment.
ENV 6	To adapt to and mitigate against the impacts of climate change.
ENV 7	To avoid, reduce and manage flood risk.
ENV 8	To provide for sustainable use and sources of water supply.
ENV 9	To make the best use of resources, including land and energy and
	to minimise waste production.
Social Obje	ctives:
SOC 1	To reduce poverty and social exclusion.
SOC 2	To maintain and improve the health of the whole population and promote healthy lifestyles.
SOC 3	To improve education and skills.
SOC 4	To provide the opportunity to live in a decent, suitable and affordable home.
SOC 5	To build community identity, improve social welfare, and reduce crime and anti-social activity.
SOC 6	To offer more opportunities for rewarding and satisfying
	employment for all.
SOC 7	To improve the quality of where people live.
SOC 8	To improve accessibility to essential services, facilities and jobs.
Economic C	· ·
EC 1	To encourage sustained economic growth.
EC 2	To encourage and accommodate both indigenous and inward investment.
EC 3	To encourage efficient patterns of movement in support of economic growth.
EC 4	To improve the social and environmental performance of the economy.

12. Task A5 – Consulting on the Scope of the Sustainability Appraisal

- 12.1 The Sustainability Appraisal Scoping Report was open to comment from various stakeholders with an interest in the effects of development plans. It is important to ensure that key organisations are able to play a part in the ongoing SA process and help the emerging development plans take into account the wide variety of factors identified through the Scoping process. In accordance with the Strategic Environmental Assessment Directive, the Scoping Report was available for consultation for a minimum of five weeks, and was specifically opened to consultation by three statutory bodies, and others as deemed appropriate.
- 12.2 The three statutory bodies consulted on the Scope of the Sustainability Appraisal were:
 - Natural England (formerly the Countryside Agency and English Nature);
 - English Heritage;
 - Environment Agency.
- 12.3 In addition, the Scoping Report was also sent to:
 - Breckland District Council;
 - Broadland District Council:
 - Great Yarmouth Borough Council;
 - Kings Lynn and West Norfolk Borough Council;
 - North Norfolk District Council;
 - Norwich City Council;
 - South Norfolk Council;
 - The Broads Authority;
 - Norfolk County Council;
 - Waveney District Council;
 - Mid-Suffolk District Council:
 - Suffolk County Council.
 - The Norfolk Alliance; (Local Strategic Partnership)
 - Norwich Community Partnership: (Local Strategic Partnership)
 - Broadland Community Partnership (Local Strategic Partnership)
 - The South Norfolk Alliance (Local Strategic Partnership)
 - East of England Development Agency
 - Norfolk Primary Care Trust
 - Royal Society for the Protection of Birds
 - Council to Protect Rural England
 - Norfolk Biodiversity Partnership
 - Norfolk Chamber of Commerce
 - Shaping Norfolk's Future
- 12.4 Consultation on the Scoping Report took place between July 27th and August 31st 2007, and was also available on the Internet for public viewing. The consultation process specifically asked the following questions:
 - 1. Are the relevant policies, plans and programmes reviewed in the Literature Review (Appendix 1) appropriate, or are there others that should be assessed?

- 2. Is the baseline data provided for Greater Norwich appropriate (Appendix 2), or are there other areas that should be investigated?
- 3. Are the sustainability issues (Task A3) identified for Greater Norwich correct, or are there more concerns that should be addressed through the Core Strategy?
- 4. Are the sustainability appraisal objectives within the SA Framework (Task A4) appropriate to Greater Norwich, or should they be amended?
- 5. Do you have any other comments on the Sustainability Appraisal Framework?
- 12.5 The consultation generated comments from all three statutory bodies as well as The Broads Authority and Norfolk County Council. The comments received were responded to as detailed in Appendix 5. These helped to create this finalised version of the Scoping Report that was taken forward for use in the Issues and Options stage, and beyond, to help shape the Core Strategy for Greater Norwich.
- 12.6 The Framework devised through the Scoping Report will play a significant role in developing policies within the emerging Core Strategy. Its application will be documented in a Sustainability Appraisal Report, the suggested structure of which can be see in Appendix 6, the template for the full Sustainability Appraisal Report, which will be published to accompany the Core Strategy's Preferred Options stage of public consultation. This latter report will document how the sustainability appraisal process has been accounted for throughout the development of the different Joint Core Strategy policy options.

Appendix 1.

Literature Review assessment: a review of relevant plans, programmes and strategies for sustainable development.

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
INTERNATIONAL				
The Rio Earth Summit, 1992	Prive separate agreements made at the Summit: The Convention on Biological Diversity The Framework Convention on Climate Change Principles of Forest Management The Rio Declaration on Environment and Development – 27 key principles Agenda 21 - an action plan for developing the planet sustainably into the 21 st century. Particular issues include - systematic scrutiny of patterns of production — particularly the production of toxic components, such as lead in gasoline, or poisonous waste alternative sources of energy to replace the use of fossil fuels which are linked to global climate change new reliance on public transportation systems in order to reduce vehicle emissions, congestion in cities and the health problems caused by polluted air and smog		Promotion of renewable energy & energy efficiency. Promotion of sustainable development patterns & public transport. Promotion of water efficiency. Promotion of biodiversity	- sustainability of new development patterns - contribution to public transport - contribution to renewable energy and efficiency - contribution to biodiversity
The World Summit on Sustainable Development, Johannesburg, 2002	Reverse trend in loss of natural resources, e.g. through resource efficiency Increase renewable energy and efficiency Reduce loss of biodiversity	Strengthen global commitments on sustainable development set out at Rio (Plan of Implementation). Agreements were made to halve the 2	Promotion of sustainable development patterns. Promotion of renewable energy and energy efficiency. Protection and enhancement of biodiversity. Protection of natural resources. Promotion of health and economic well-	- sustainability of new development patterns - contribution to renewable energy and efficiency - contribution to biodiversity - maintenance of natural resources - minimisation of waste - impact on health

Kyoto Protocol and the UN	To achieve stabilisation of greenhouse gas	billion people living without clean water by 2015, to set up a solidarity fund to wipe out poverty, to restore depleted fish stocks by 2015 and to reduce the loss of species by 2015. UK target is set at	being. To encourage a reduction in	- contribution to economic well-being - impact on greenhouse gas emissions
Framework Convention on Climate Change, 1992	concentrations in the atmosphere at safe levels	12.5% less than the 1990 output emission levels by 2012. (Domestic goal of 20% reduction of CO2 emissions below 1990 levels by 2010 - Climate Change - UK Programme 2000)	greenhouse gas emissions (directly or through the use of alternatives).	- contribution to renewable energy and efficiency
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 - particular consideration of SACs and SPAs
Directive on the Promotion of Biofuels and other Renewable Fuels for transport (2003/30/EC)	Creating a European wide framework for the adoption of biofuels in transport fuel.	National targets of 5.75% by 2010 and 10% by 2020.	Consider infrastructure requirements for expansion in biofuels (farming, manufacture, delivery etc)	- contribution to use of biofuels
European Water Framework Directive (2000/60/EC)	Framework for the protection of inland, surface, transitional and coastal waters		Protection and management of water resources.	- impact on water resources - integration of different sectors
European Spatial Development Perspective	Across the regions of the EU:		Management of economic, social and environmental matters	- balancing of potentially conflicting economic, social and environmental issues
European Air Quality Framework Directive (96/62/EC) (and supplementary ones)	Maintain air quality where it is good, and improve where it is not.		Avoid detrimental impacts on air quality. Help to mitigate those areas that have been designated Air Quality Management Areas.	- impact on air quality - need to identify areas where improvement is necessary.
European Renewable Energy Directive (2001/77/EC)	Promotion of development of renewable energy sources and their use		Promotion of renewable energy	- contribution to use of renewable energy

NATIONAL	NATIONAL				
Securing the Future - the UK Sustainable Development Strategy 2005	A sustainable, innovative and productive economy that delivers high levels of employment; and a just society that promotes social inclusion, sustainable communities and personal wellbeing; done in ways that protect and enhance the physical and natural environment, and use resources and energy as efficiently as possible.	Promotion of a sustainable economy and sustainable communities. Protecting and enhancing the environment. Promotion of resource and energy efficiency.	- contribution to economy - contribution to sustainable communities - impact on / enhancement of environment - contribution to resource efficiency - contribution to energy efficiency		
Sustainable Communities Plan: Building for the future Part 1 Decent homes, decent places	Ensure all social tenants have a decent home Ensure all communities have a clean, safe, and attractive environment Ensure that existing housing stock standards are improved.	Provision of housing for all sectors of the community. Promote good community environments. Promote improved housing standards.	- contribution to meeting housing requirement - contribution to environmental quality - contribution to housing suitability		
Part 3 Housing supply	Tackle the housing shortage - more homes of the right type in the right place; address the needs for more affordable housing; make best use of existing housing stock. To work towards a better balance in the housing market in the longer term. To ensure communities are sustainable, the environment is enhanced and countryside protected	Provide for housing development that meets the needs of the community, in type and location, whilst protecting the environment.	- contribution to housing requirement - appropriateness of type and sustainability of location - efficiency / management of land - impact on / contribution to environment		
Part 4 Land, countryside and rural communities	Protect the countryside and enhance its quality, avoiding urban sprawl. Address the housing needs of rural communities	Encourage brownfield development. Protect and enhance the countryside. Provide for rural housing needs	- impact on countryside - contribution to meeting rural housing needs		
Part 5 Sustainable Growth	Alleviate pressures on services and housing caused by economic success where these pressures cannot readily be dealt with within existing towns and cities Ensure new and expanded communities are sustainable, well-designed, high quality and attractive places in which people will positively choose to live and work.	Provide for adequate levels of housing and service development. Apply the aims of sustainable development to new / expanded communities	- contribution to meeting housing requirement - contribution to meeting services requirement - sustainability of policies and proposals		
Air Quality Strategy for England etc (Jan 2000 + Feb. 2003 addendum)	Improve air quality to protect people's health and the environment without imposing unacceptable economic or social costs, with objectives for nine main air pollutants	Encourage a reduction in air pollutants	- contribution to reducing air pollution		
Airports White Paper, DfT (2003)	There is scope for Norwich airport to help meet local and regional demand and its further development is supported in principle, subject to relevant	The importance of air travel to our national and regional economic prosperity should be recognised.	appraisal should help to reduce and minimise the impacts of airports on those who live nearby, and on the		

	environmental considerations.			natural environment;
Planning (Control of Major Accident Hazards) Regulations (implements obligations under Seveso II Directive Council Directive 96/82/EC)	Prevent major accidents from hazardous substances and limit their consequences		Consider location of establishments where hazardous substances are used or stored Consider issue of development within vicinity of establishments where hazardous substances are present	- consideration of hazardous substances and impact on health and the environment
Rural White Paper: Our Countryside (2000)	Sustain and enhance the distinctive environment, economy and social fabric of the English countryside for the benefit of all.		Consider the means for contributing to the environmental, social and economic fabric of the rural area	- contribution to rural environment, economy and social wellbeing
Rural Strategy 2004	 Economic and Social Regeneration – supporting enterprise across rural England, but targeting greater resources at areas of greatest need; Social Justice for All – tackling rural social exclusion wherever it occurs and providing fair access to services and opportunities for all rural people Enhancing the Value of our Countryside – protecting the natural environment for this 		Consider the means for contributing to the environmental, social and economic fabric of the rural area.	- contribution to rural environment, economy and social wellbeing
Urban White Paper- Our Towns and Cities: The Future (2000)	and future generations. Urban areas that offer a high quality of life and opportunity for all. Urban renaissance should benefit everyone, making towns and cities vibrant and successful, and protecting the countryside from development pressure. Promotes- Community involvement Good sustainable design and planning Prosperous and inclusive cities Good quality services Protection from crime		Consider the means for contributing to the environmental, social and economic fabric of the urban area	- contribution to urban environment, economy and social wellbeing
Energy White Paper: Our Energy Future – creating a low carbon economy (2003)	Long term strategic vision for energy policy, combining environmental security of supply, competitiveness and social goals.		Promotion of sustainable energy	- contribution to sustainable energy development and use
Energy Review 2006	to tackle climate change by reducing carbon dioxide emissions; and to deliver secure, clean energy at affordable prices, as we move to increasing dependence on imported energy	Energy Savings of 6-9 MtC by 2020 (this is on top of savings –12 MtC - announced in the Climate Change Programme of 2006 by 2010)	Promotion of energy efficiency, more efficient transport, distributed energy generation, renewable energy, security of supply.	- contribution to sustainable energy development and use

Saving Lives: Our Healthier Nation White Paper (1999)	An action plan to improve the health of everyone, focusing on particular illnesses.		Consider how spatial planning can contribute to improved health	- contribution to health
UK Climate Change Programme – In Jan. 1994 first published, identifying obligations and commitments to help tackle climate change. Produced annually (latest version March 2006).	Strategy for climate change, reducing emissions that contribute to climate change and adaptation to climate change	The Climate Change Programme sets out how energy efficiency will save 10.2 million tonnes of carbon (MtC) per year by 2010. These savings will be split between the business sector (5.1MtC); the household sector (4.8MtC); and the public sector (0.3MtC).	Consider the means for reducing emissions and designing / locating development that deals with the risks from climate change	impact on greenhouse gas emissions contribution to renewable energy and efficiency risks of flooding
Local Government White Paper 2006 – Strong and Prosperous Communities	Responsive services and empowered communities Effective, accountable and responsive local government Strong cities and strategic regions Local government as strategic leader and place-shaper Performance framework Efficiency in transforming local services Community cohesion	(sisting):	Consider how spatial planning can contribute to better communities	- contribution to community wellbeing
Code for Sustainable Homes: A step-change in sustainable home building practice. (2006)	Minimum standards for improved performance in:		The Core Strategy should ensure that all homes strive towards improved environmental standards to minimise impact on the environment and improve social wellbeing and health from home occupation. Consider how housing can enhance the environment and create a healthy living environment for residents.	- impact on greenhouse gas emissions - contribution to renewable energy and efficiency - contribution to water conservation - making best use of recycling material - minimising waste and increasing recycling - minimising impacts from pollution - contribution to community wellbeing - improving health of residents - improved security / minimised crime - contribution to enhanced biodiversity
	ncluding Annexes and Practice Guides)			
PPS 1 Delivering Sustainable Development (2005) Para. 4	Sustainable development is the core principle underlying planning Four aims to be tackled in an integrated way: - Social progress which recognises the needs of		Apply the aims of sustainable development. Strategies should ensure that new	sustainability of policies and proposals integration / potential conflicts

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(draft Supplement – Planning and	everyone - Effective protection of the environment - Prudent use of natural resources - Maintenance of high and stable levels of economic growth and employment Planning should contribute to reducing emissions and	development takes account of the historic environment. Consider the means for reducing	- contribution to reducing greenhouse
Climate Change. Dec 2006)	stabilising climate change (mitigation) and take into account the unavoidable consequences (adaptation).	emissions and designing / locating development that deals with the risks from climate change	gas emissions - risks of flooding
PPS3 Housing (2006) Para 9	Ensure that everyone has the opportunity of living in a decent home, which they can afford, in a community where they want to live: - To achieve a wide choice of high quality homes, both affordable and market housing, to address the requirements of the community. - To widen opportunities for home ownership and ensure high quality housing for those who cannot afford market housing, in particular those who are vulnerable or in need. - To improve affordability across the housing market, including by increasing the supply of housing. - To create sustainable, inclusive, mixed communities in all areas, both urban and rural.	Provide for housing development that is sustainable as regards location, layout and design and meets the needs of the community.	- contribution to meeting housing requirement (market and affordable) - sustainability of choice of locations - efficiency / management of use of land - quality of design - contribution to inclusive communities
PPG4 Industrial and Commercial Development and Small Firms (2001) Para. 5	Provide for industrial and commercial development, including small businesses Ensure adequate and appropriate land is available for businesses	Identify business development needs and provide for in policies and allocations	- contribution to economic provision
PPS6 Planning for Town Centres (2005) Para. 1.3	Promote vitality and viability of town centres, by planning for growth and development of existing centres; and focusing development in such centres and encouraging a wide range of services in a good environment, accessible to all.	Identify retail and service centre requirements, considering the network and hierarchy of centres, and provide for in policies and allocations.	- contribution to retail and service centre provision
PPS7 Sustainable Development in Rural Areas (2004) Para. 2 Para. 3 Para. 6/7/19	Facilitate and promote sustainable development patterns Sustain and enhance towns and villages whilst maintaining local character and environment Focus development on local service centres Provide for appropriate and accessible economic and community needs	Promote sustainable development patterns. Identify and provide for rural needs. Protect countryside and rural character. Provide for tourism needs.	- contribution to meeting rural needs and quality of life - sustainability of choice of locations - protection of countryside and character - contribution to tourism provision
Para. 13/14	Maintenance and enhancement of countryside and		

	rural character			
Para 35	Provide for tourist needs in appropriate locations			
PPG8 Telecommunications (2001) Para. 1	Facilitate the growth of new and existing telecommunication systems whilst keeping environmental impact to a minimum.		Provide for telecommunications development, having regard to environmental impacts and technical constraints	- contribution to telecommunications system development and sustainability
PPS9 Biodiversity and Geological				
Conservation (2005)				
Objectives, bullet point 1	Biological and geological diversity are conserved and enhanced as part of sustainable development.		Identify, protect and enhance biodiversity and important geology	- impact on biodiversity (habitats and species) and geology
bullet point 2	Conserve, enhance and restore diversity of wildlife and geology			- contribution to enhancement and restoration
bullet point 3	Contribute to rural renewal and urban renaissance (taking account of biodiversity's role in quality of life and high quality environments)			
PPG13 Transport (2001)	Promote more sustainable transport choices for people		Promote development in sustainable	- accessibility of development (inc.
Para. 4	and freight	National maximum	locations (good accessibility by walking,	links to jobs, services etc)
	Promote accessibility to jobs, shopping, leisure	parking standards	cycling and public transport)	
	facilities and services by public transport, walking and	(Annex D)		
	cycling			
DDO44 Danalar are at a collectable	Reduce the need to travel, especially by car			
PPG14 Development on Unstable Land (1990)	Minimia the risks from land instability		Consider and address risks from land	- risks from land instability
Para. 21	Minimise the risks from land instability		instability	- risks from land instability
PPG15 Planning and the Historic	Effective protection for all aspects of the historic		Identify, protect and enhance the	- impact on historic environment
Environment (1994)	environment		historic environment	- contribution to enhancement and
Para. 1.1				restoration
PPG16 Archaeology and Planning				
(1993)	Ensure archaeological remains are not needlessly or		Consider and address archaeological	- impact on archaeology
Para. 6	thoughtlessly destroyed		interests	
Para. 7	Presumption in favour of physical preservation of			
2201221	nationally important remains and their setting			
PPG17 Planning for open space,	Local networks of high quality and well managed and	Local standards to be	Assess recreational needs, set	- impact / contribution on recreational
sport and recreation (2002)	maintained open spaces, sports and recreational	set	standards, protect and enhance	provision
Planning objectives and paras. 10-9	facilities and the maintenance of an adequate supply.	200/ of LIV algoritati	appropriate provision	contribution to renovable energy
PPS22 Renewable Energy (2004) Govt's. Objectives	Increased development of renewable energy resources	20% of UK electricity to be from renewables	Promotion of renewable energy. Set criteria for renewable energy	- contribution to renewable energy provision
Govi s. Objectives		by 2020	projects,	provision
PPS23 Planning and Pollution	Protecting and improving the natural environment,	~, _0_0	Consider risks from pollution, balance	- risks / impact from pollution
Control (2004)	public health and safety, and amenity		with other factors	
Para.9				
PPG24 Planning and Noise (1994)	Minimise the adverse impacts of noise		Consider the risk of impacts from noise	- risks of noise impacts
- ` ` '			generating development	
PPS25 Development and Flood	Avoid flood risk where possible, manage and reduce		Consider and limit risks of flooding,	- risks of flooding

Risk (2006) Para. 5/6	risk, avoid increasing flood risk	avoid locating development in areas at risk where possible, reduce flood-risks.	
Good Practice Guide on Planning for Tourism (May 2006) Para. 2.7	Maximising the economic, social and environmental benefits of tourism, and achieving these in the most sustainable manner.	Promote sustainable tourism	- contribution to tourism - impact on economy, environment, and social issues
REGIONAL			
A Sustainable Development Framework for the East of England (EERA, 2001) (section 6.1) (nb. This provides the framework for a number of regional strategies including the: Regional Environment Strategy Regional Economic Strategy Regional Housing Strategy Regional Social Strategy Regional Cultural Strategy, and also the integrated strategy (Sustainable Futures) included below. These have also been taken into account in the regional spatial strategy discussed below).	 High level objectives: To achieve sustainable levels of prosperity and economic growth. To deliver more sustainable patterns of location of development, including employment and housing. To protect and maintain our most valuable regional assets such as designated habitats, landscapes of natural beauty, and our historic built heritage, and to improve the wider environment by means of adequate investment and management. To reduce our consumption of fossil fuels. To achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region. To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible. To minimise our production of by-products or wastes, aiming for "closed systems" where possible. To avoid using the global environment to underwrite our own unsustainable way of life (eg. dependence on unsustainably produced and/or transported food imports or timber). To revitalise town centres to promote a return to sustainable urban living. 	Promote sustainable development, including location and urban living. Protect and enhance environmental assets. Promote resource and energy efficiency. Improve access to jobs, services and facilities for all.	- sustainability of development - impact on environment - impact on resources - contribution to energy efficiency and renewable energy - accessibility of development
Woodland for Life - Regional Woodland strategy for the East of England (Nov. 2003)	Improve the lives of individuals and the places in which they live and work. Add to the general economy of the region, with the woodland economy at the heart of providing the wide range of social and environmental benefits associated with woodlands. The use of wood as an alternative source of energy to fossil fuels. Deliver wider societal benefits using woodlands	Consider the retention and enhancement of woodland for its contribution to social, economic and environmental factors	- impact on, or contribution to enhancement of, woodlands

	as resources for learning.		
	A high quality natural environment that is		
	protected and enhanced.		
Sustainable Futures: The Integrated	Priorities include:	Ensure that priorities are ac	
Regional strategy for the East of	Achieving high quality and sustainable solutions in	an integrated and sustainal	
England (2005)	areas facing growth and regeneration pressures.		- contribution to sustainable
	Harness strengths in science, research and		development and construction
	development.		- contribution to quality of life
	Address persistent deprivation and social		
	exclusion.		
	Use and manage resources and environmental		
	assets efficiently.		
	Sustainable management of transport		
	infrastructure.		
Living with Climate Change in the	Key messages:		
East of England	By planning ahead we can avoid the worst	Consider and limit risks of f	looding risks of flooding
	impacts and take advantage of opportunities.		- contribution to quality of design /
EERA and Sustainable	Climate change will create opportunities as well	Promote good design that a	
Development Round Table for the	as threats eg tourism.	climate change (eg flood ris	sk,
East of England	Business activity will be significantly affected.	ventilation, shading).	
(Summary Report supported by	The "northern heartland", which includes the		
technical report)	Greater Norwich Area, is the least vulnerable area		
	in the East of England (with fluvial flooding and		
	agricultural impacts likely being the most		
	significant impacts)		
Page 9	Planning policies should influence the location and		
	design of new buildings to minimise vulnerability to		
	climate change.		
Table of a a 47			
Table at pg. 17	Address impacts on economic development.		
	Adapt properties to make them more resilient to		
	flood damage and ensure siting does not		
	exacerbate flood risk. Improve ventilation, cooling		
	and shading in properties.		
	 Include Water conservation measures. 		
	Create well shaded green spaces.		
Sustainable Communities in the	Creation of sustainable communities, addressing	Encourage creation of sust	ainable - contribution towards community
East of England (2003)	housing, planning and neighbourhood renewal issues.	communities	wellbeing
Sustainable Tourism Strategy for	Achievement of tourism goals in a sustainable manner	Encourage sustainable tou	rism - contribution to sustainable tourism
the East of England (2004)			
East of England Plan Regional	(i) To reduce the region's impact on, and exposure to,	Locate development so as	to reduce - accessibility of development

Spatial Strategy	the effects of climate change.	the need for travel.	- contribution to more sustainable
			modes of travel
The Sec. of States Proposed	(ii) To increase housing opportunities for people in the	Effect a major shift in travel towards	- contribution to energy efficiency
Changes to the Regional Spatial	region.	public transport, walking and cycling	- contribution to use of renewable / low
Strategy for the East of England		and away from car use.	carbon energy
(Dec 2006)	(iii) To realise the economic potential of the region and		- risks of flooding
Para 2.2	its people.	Maximise the energy efficiency of	- contribution to housing provision
	(iv) To improve the excellent of life for the region?	development and promoting the use of	- contribution to affordable housing
	(iv) To improve the quality of life for the region's	renewable and low carbon energy	- contribution to economic provision - sustainability of development
	people.	sources.	locations
	(v) To improve and conserve the region's environment	Reduce the risk of damage from	- contribution to strategic infrastructure
	(v) To improve and conserve the region's environment	flooding.	- contribution to sustainable transport
		nooding.	infrastructure
		Secure the delivery of additional	- contribution to social infrastructure
		housing (particularly in the Key Centres	- protection of and contribution to
		for Development and Change).	green infrastructure
		3.7	- contribution to accessibility for all
		Give priority to the provision of	- contribution to cultural diversity
		affordable housing to meet identified	- contribution to regeneration and
		needs.	renewal
			- contribution to community
		Faciliate the development needed to	involvement
		support business, improving skills and	- impact on environmental assets
		widening opportunities.	- impact on / enhancement of
			countryside and the environment
		Provide job growth, broadly matching	
		housing provision, and improve the	
		alignment between the locations of	
		workplaces and homes.	
		Maintain and strengthen inter-regional	
		connections.	
		connections.	
		Ensure adequate and sustainable	
		transport infrastructure.	
		,	
		Ensure new development fulfils the	
		principles of sustainable communities,	
		providing a well designed living	
		environment adequately supported by	
		social and green infrastructure.	
		Promote social cohesion by improving	
		access to work, services and other	

		Le mar	
		facilities, especially for those who are disadvantaged.	
		uisauvaniageu.	
		Maintain cultural diversity and address	
		the distinctive needs of different areas.	
		Promote regeneration and renewal of	
		disadvantaged areas.	
		Increase community involvement in	
		implementation.	
		Ensure the protection and	
		enhancement of environmental assets,	
		including the built and historic	
		environment, landscape and water.	
		Re-use previously developed land, and	
		seek environmental as well as	
		development gains from the use of undeveloped land.	
		undeveloped land.	
		Protect, and where appropriate,	
		enhance biodiversity through the	
		protection of habitats and species and	
		through creating new habitats through	
		development.	
		Provide a network of multi-function	
		accessible greenspace.	
		accessible greenspace.	
		Reduce the demand for and use of	
		water and other natural resources, and	
		reduce waste and increase the	
		sustainable management of waste.	
Water resources for the future: a	Abstraction of water that is environmentally and	Assallability of contant and assalts	- impact on water resource (supply
strategy for the Anglian Region	economically sustainable, providing the right amount of	Availability of water supply.	and environment)
Vision	water for people, agriculture, commerce and industry, and an improved water-related environment.	Limit impacts on the water resource.	- contribution to water efficiency
Norfolk, Suffolk and Cambridgeshire	Vision-	Consider the issue of promoting	- contribution to healthy lifestyles and
Strategic Health Authority Health	People choosing healthier lifestyles	healthier lifestyles and provision of	provision of facilities
Strategy 2005 – 2010	People fully involved in decisions about their	facilities	
	healthcare		
(review by successor authority, East	Better quality care, with safe, more effective		

of England SHA, proposed)	treatment tailored to the individual Services delivered locally with more support at home and in the community and less time in hospital Improved health outcomes for vulnerable groups and reduced inequalities Efficient and effective use of available resources to deliver sustainable services		
LOCAL			
Local Transport Plan for Norfolk 2006 - 2011 (inc. Transport Strategy to 2021)			
Delivering sustainable growth	Improve strategic accessibility to reduce the remoteness of Norfolk and improve economic performance - to reduce the need to travel by balancing jobs and housing growth, and reducing the need to travel to jobs outside the county.	Consider need for strategic transport improvements related to development	- accessibility of development / location and links to jobs and services
	 Improve connections by road and particularly public transport. Make house and jobs growth more sustainable, by locating it to minimise the need to travel, especially by car, and that this is supported by transport improvements. Take into account transport consequences, and the need to reduce travel demand. 	Consider accessibility for development, and need for local transport improvements	- accessibility of development / location and links to jobs and services
Improving accessibility	Improve local connections and promote better accessibility to jobs and services, especially by public transport, cycling and walking. Prioritise improvements in those more deprived areas of the county with low car ownership and poor public transport.	Focus development on accessible locations where need to travel is reduced, providing for transport improvements where necessary.	- accessibility of development / location and links to jobs and services
Reducing congestion	Reduce delays to people and traffic, and focus interventions on those areas where congestion is worst, and particularly where delays are affecting public transport most. This will be by improving the efficiency of the transport network and enabling people to reduce their car use, but in some cases will involve	Reduce need for travel Require road safety measures /	- accessibility of development / location and links to jobs and services - impact on road safety
Protecting and enhancing the environment	increasing road capacity. Reduce emissions from transport at source by enabling a shift to alternative fuels and low emission vehicles.	improvements where appropriate	impact on roud durity

Improving road safety	Protect the environment by integrating environmental considerations into plans and programmes, and decision making. Reduce casualties by targeting investment on locations or accident types where there is a disproportionate	Provide for / require necessary transport infrastructure improvements	- contribution to transport infrastructure
	accident involvement. An increasing focus on encouraging safer road user behaviour.		
	Reduce danger for vulnerable road users, such as cyclists and pedestrians, to improve accessibility for them.		
Anna Otrata sina	Recognises Norwich area as a focus for growth.		
Area Strategies Norwich sub-region	Recognises the importance of providing essential infrastructure including a Northern Distributor Road,	Provide for / require necessary	- contribution to transport infrastructure
	and improvements to the A11 and A47 trunk roads, needed to accommodate growth and support the development of the Norwich area as a sustainable community. Supports Norwich's role as a Regional Interchange Centre and the role of market towns; the links between Norwich and market towns being of particular importance. Within the built up area, the Norwich Area Transportation Strategy is carried forward, including extending the pedestrian dominated area of the city-centre, and promoting travel choice and	transport infrastructure improvements	- contribution to transport infrastructure
	accessibility into and within the area by all modes.		
Rural Norfolk Market Towns	Recognises the role of market towns as service centres. Will seek to: Improve their role as interchange centres, including between modes, and connections between towns and surrounding rural areas and other market towns / urban areas. Improve accessibility within towns, particularly improving the walking and cycling environments Remove traffic from town centres where possible, sometimes through providing traffic with new alternative roads, to promote vibrant public	Provide for strategic transport infrastructure	- contribution to strategic transport infrastructure

	rural hinterland.			
Major schemes	Proposed major schemes include the Norwich Northern Distributor Road.			
Shaping the Future - an economic strategy for Norfolk and Waveney, and a social cohesion strategy for Norfolk	Increase wealth creation by building a dynamic and supportive environment for business and enable our people to participate in the economy and maximise their potential whilst ensuring that we protect and enhance our physical environment.	Raise annual average rate of growth from projected 2.1 % to 2.5%	Encourage employment development in appropriate locations.	- contribution to economic provision
	5 Social cohesion themes - access, sustainable jobs, employment and personnel practices, community development, young people's needs.	Create by 2007 an additional 11,000 above the projected figure of 348,000		
		Reduce unemployment to 1% below UK national average		
Norfolk Biodiversity Action Plan 2004	Conservation of species and habitats in Norfolk, inc. action plans		Protect and enhance the natural environment (habitats and species)	- impact on wildlife
Norfolk Ambition	 To improve the quality of life for all the people of Norfolk. Key themes being: Individuals have the opportunity to achieve a good quality of life Healthy lifestyles and access to health and social care People feel safe Educational attainment and opportunities for learning throughout life All can play an active part in community life Environment is respected and enhanced, including renewable energies Culture, creativity and spirituality Distinctive economy Physical and virtual communications infrastructure 		Maintain and enhance the elements that contribute to the quality of life of residents	- contribution to or impact on quality of life elements : health, safety, educational attainment, community life, environment, culture, economy, communications infrastructure
Gypsies and Travellers Strategy for Norfolk (2005-2008) Vision	A Norfolk where Gypsies and Travellers have equality of opportunity with other members of the community to enable them to access services provided by agencies working together in an inclusive, cohesive and transparent manner.		Address the identified need of Gypsy and Traveller communities	- reduction of social exclusion and contribution to quality of life for all
Learning Disability Employment Plan for Norfolk (2007)	people with learning difficulties should have the same access to employment as others people with learning difficulties should be supported		Address the identified needs of people with learning difficulties, and their support networks.	reduction of social exclusion and contribution to quality of life for all contribution to economic provision

Joint Municipal Waste Management Strategy for Norfolk 2006 – 2020.	 to have a job and a career there should be the services to support people with learning difficulties to gain a job or job related activities as they want people, their carers, families, friends and people who support people with learning difficulties should have the right information about different ways of getting a job, benefits and who can help employers and services should be given support and good information so that they can work together to get more people into real jobs employment should be seen as a key issue for growing up amongst people with learning difficulties To reduce the growth in municipal waste by promoting waste reduction and reuse initiatives; To promote waste awareness through public education and awareness campaigns; To increase recycling and composting of waste to achieve statutory performance standards and national recycling and recovery standards; To progressively increase the recovery and diversion of biodegradable waste from landfill in accordance with the Landfill Allowance Trading Scheme; To deliver an efficient, effective and affordable waste management service that promotes the implementation of the most practical, social, environmental and economically acceptable solutions; To procure appropriate technologies to manage and treat residual municipal waste; To ensure that the way residual waste is treated will support practices higher up the waste hierarchy; To minimise as far as possible the residual waste requiring treatment and final disposal; 	Improve the rates of waste recovery and recycling and re-use. To reduce the amount of waste produced at the beginning of the waste chain. To ensure that waste collections and treatment processes are sustainable and able to cater for the new growth from housing and employment. To utilise the waste treatment process as an important opportunity for employment generation.	To improve environmental amenity, including air quality; To make the best use of resources, including land and energy and to minimise waste production; To offer more opportunities for rewarding and satisfying employment for all; To improve the quality of where people live; To improve the social and environmental performance of the economy.
Broadland Rivers Catchment Flood	The Norfolk Authorities will work together to achieve the Objectives and Actions within the waste management strategy. Reduce flood risk to people, especially vulnerable	Consider the implications of flood risk	- risks of flooding
Management Plan (Draft – June 2006)	Reduce flood fisk to people, especially vulnerable groups, property and infrastructure. Reduce risk to life from flooding. Reduce disruption to major transport links, essential infrastructure and urban and village communities.	for development, avoiding risks where possible and enabling improvements	- contribution to reducing risks and impacts of flooding

			,
Broadland Rivers Catchment Abstraction Management Strategy The Broads Plan 2004 Guiding principles (Broads Area is outside Greater Norwich joint Core Strategy area but it is of relevance due to its location and status).	 Restore, protect and where possible improve nature conservation sites of international importance. Protect and where possible improve recreation and fisheries resources. Extend navigation where appropriate. Protect and improve sustainable water abstraction schemes. Maintain and increase the connectivity of the river and floodplain. Restore new areas of functional flood plain and improve in-stream features. Meet river quality objectives and standards. Protect designated cultural heritage features from flooding, where possible. Protect and where possible improve the Broads Executive Area 'national park' & Norfolk Coast AONB. Manage water to ensure that it is available for abstraction whilst protecting the needs of the natural environment The Broads will be promoted as a national park, accessible to people of all abilities and social backgrounds to enjoy in quiet and environmentally sustainable ways that are in keeping with its distinctive natural and cultural beauty and that are appropriate to a nationally and internationally protected area. Tranquillity and wildness of the area protected and enhanced. Information will be readily accessible. Tourism will be of a high standard, contributing to local communities etc. Water resources will be managed sustainably to ensure the proper functioning of the wetland system. 	Consider the implications for the water resource. Consider the implications of potential effects on the Broads Area, and contributions to the achievement of the Broads Plan.	- impacts on water resource (supply and environment) - impacts on the Broads Area and its management

Waterways will be maintained and enhanced. Land-based access will be protected and enhanced.	
Land-based access will be protected and enhanced	
Edita based decess will be proceeded and crimanical.	
Precautionary measures will be taken to prevent environmental designation.	
Management will be informed by scientific knowledge.	
Economic and social development will focus on sustaining thriving rural communities through key sectors, such as tourism, marine industry and agriculture.	
The impacts of climate change will be managed sustainably over the longer term.	
The flood plain will be managed sustainably to alleviate flooding in the Broads.	
The Broads Authority will work with relevant organisations and communities.	
The Broads Authority The Vision for the Broads: Enhancing the tourism offer for the - impacts on water	resource (supply
Local Development Framework Core Strategy (Adopted 2007) - Maintaining the Norfolk and Suffolk Broads and where Greater Norwich and the Broads area. - Maintaining the Norfolk and Suffolk Broads and where - risks of flooding	
appropriate enhancing as a unique wildlife, leisure and Protecting and enhancing the recontribution to reconstruction and enhancing the recontribution to reconstruction and enhancing the reconstruction to reconstruction.	lucing risks and
The Vision and Strategic Objectives educational resource within a special landscape with its environmental resources and cultural impacts of flooding	
own sense of place. heritage of the area reduction of socia	
contribution to qual	
- A planning policy framework for economically, socially Increasing accessibility and use of - contribution to ho	
and environmentally sensitive development will public transport. (market and social) underpin a thriving community. The framework will - impact on / enhan	
support innovation and diversification, and promote Enhancing the business opportunities environment	cement of the
sustainable infrastructures, which will include the offered by the area, particularly for rural - contribution to her	althy environment
maintenance and enhancement of the Navigation, for diversification. and provision of factors and enhancement of the Navigation, for diversification.	
promoting enjoyment of the Broads.	
- Only allowing development on the floodplain that has Building sustainable communities and increasing access to affordable	
regard to the social and economic well-being of the housing, especially for key workers.	
area, the character of the landscape, natural	
resources, risks from flooding and respect the natural	
functioning of the flood plain.	
	I
The 12 Strategic Objectives for the Core Strategy are	I

	Respecting the environment and cultural assets; The use and enjoyment of water and land; Fostering communities.		
Greater Norwich Housing Strategy (2005 – 2010)	Balancing the housing market Increasing the supply of affordable housing Tackling homelessness more effectively Making best use of existing housing stock Supporting independent living	Provide for housing requirements (for all sectors of the population)	- contribution to housing provision (market and social)
Broadland Community Plan	The people in Broadland will : Feel safer in their communities	Promote a safe environment	- contribution to a safe environment
	Have access to facilities and services they need	Improve access to jobs, facilities and services for all	- contribution to accessibility
	Live in a place where the special character of the countryside, natural and built environment is valued	Protect and enhance the natural and built environment	- impact on / enhancement of the environment
	Be able to make informed choices about their own health	Consider issue of health and the promotion of a healthy environment and provision of facilities	- contribution to healthy environment and provision of facilities
	Have choices about their homes appropriate to their needs	Provide for housing requirements (for all sectors of the population)	- contribution to housing provision
	Benefit from a thriving economy	Encourage economic development	- contribution to economic provision
	Be able to develop to their full potential	Provide for educational requirements	- contribution to educational provision
	Be living a more sustainable lifestyle	Promote sustainable development	- contribution to sustainability
	Be proud of where they live and have more opportunities to be involved in shaping decisions and taking action to improve quality of life	Promote local character and diversity	- contribution to local character and diversity
Broadland Culture and Leisure Strategy	Ensure that people know the benefits of culture and leisure, are aware of culture and leisure, and are able to access them.	Provide for and retain culture and leisure facilities in appropriate locations	- contribution to culture and leisure provision
Broadland Economic Development and Tourism Strategy 2004	A steady and gradual growth in the local economy, sympathetic to Broadland's mixed rural and suburban communities and the type of businesses which typify the district.	Provide for economic development and employment growth requirements (inc. tourism)	- contribution to economic provision
	5 strategic objectives - Quality of life - through successful businesses Support for small and medium sized businesses Tourism promotion		

	Tarinia and alim		
1	Training and skills		
1	Inward investment - by supporting the		
B # 10:	development of suitable sites etc.		
Broadland Crime and Disorder and	Reduce the incidence of crime and disorder in	Consider issue of crime and disorder,	- contribution to a safe environment
Drugs Misuse Strategy 2005	Broadland and to reduce the number of people who	and the promotion of a safe	
	live in fear of crime	environment through design and	
		layouts of developments	
South Norfolk Local Agenda 21	Promote Economic Success	Various issues to be reflected in LDD	
Strategy	Create a vibrant local economy that gives	policy	- contribution to local economy
	access to satisfying and rewarding work without		
	damaging the local, national or global		- contribution to maintenance and
	environment		improvement of the health of the
	Value unpaid work		population
			- contribution to Improving education
	Meet Social Needs		and skills of the population
	 Protect human health and amenity through 		
	safe, clean, pleasant environments 1998/99		- encouragement of local community
	 Emphasis health service prevention action 		identity, good behaviour and co-
	as well as care 65%		operative attitudes
	Maximise everyone's access to the skills and		and the discount of the second
	knowledge £146 needed to play a full part in		- contribution to opportunities for all
	society		sections of the population to have
	Ensure access to good food, water, housing		rewarding and satisfying employment
	and fuel at a reasonable cost		contribution to the quality of where
			- contribution to the quality of where
	Encourage necessary access to facilities,		people live
	services, goods and other people in ways which		- accessibility to essential services
	make less use of the car and minimise impacts on		and facilities
	the environment		and facilities
	Make opportunities for culture, leisure and		- reduction of effect of traffic on the
	recreation readily available to all		environment
	recreation readily available to all		enviioninent
	Meet local needs locally wherever possible		- contribution to maintaining and
	Create or enhance places, spaces and		enhancing biodiversity, geodiversity,
	buildings that work well, wear well and look well		flora and fauna
	Make settlements 'human' in scale and form		- contribution to maintaining and
			enhancing the distinctiveness and
	Value and protect diversity and local		quality of landscapes and townscapes
	distinctiveness and strengthen local community		'
	and cultural identity		- provision for sustainable use and
			sources of water supply
	Protect and Enhance the Environment		

	Use energy, water and other natural resources efficiently and with care Minimise waste, then re-use or recover it through recycling, composting or energy recovery and finally dispose of what is left Limit pollution to levels which do not damage natural systems Value and protect the diversity of nature		- contribution to minimising the production of waste
South Norfolk Economic Development Strategy (2004)	The Vision for 2009 for South Norfolk's Economy is: "To be an area where economic opportunity and development is diverse, sustainable and accessible to all the community." Stimulate the creation and retention of all employment in South Norfolk Raise learning expectations and achievements, meeting the needs of the economy Break down the barriers to economic success in rural areas	Address economic development, allowing for new developments Consider accessibility issues. Consider effects on rural communities.	- contribution to sustained economic growth - contribution to encouraging and accommodating both indigenous and inward investment - opportunities for all sections of the population to have rewarding and satisfying employment - contribution to improving the education and skills of the population - contribution to improving economic performance in rural areas
South Norfolk Empty Homes Strategy (2003)	Empty Homes Strategy objectives and targets Bringing empty homes back into productive use for the benefit of South Norfolk's residents will assist in Contributing to a reduction in the number of unfit dwellings Contributing to the revitalisation of market towns Increasing the supply of affordable housing Increasing the provision of rented properties for those without homes	Contribution to housing provision	- contribution to providing everybody with the opportunity of a decent home
South Norfolk Tourism Strategy (2004)	Plan to achieve: 1. Income from tourism will be further increased. 2. We will encourage more accommodation providers and attractions to meet quality standards with a series of initiatives 3. The South Norfolk tourism profile will be improved to increase the number of visitors to the district 4. Responding to the industry's requests, partners	Reflect locations of tourist activities. Built and unbuilt environment is key factor.	- contribution to sustained economic growth - contribution to maintaining and enhancing the distinctiveness and quality of landscapes and townscapes - contribution to conserving and

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	will promote schemes to extend the season, retain skills and encourage investment in the industry 5. We will seek to involve all tourism partnerships and local communities in the marketing of destinations, events and themes in South Norfolk 6. We will seek to help local tourism businesses to promote and identify themselves to the general public Development of tourism in South Norfolk will enhance the natural and built environment.		enhancing the historic environment
South Norfolk Corporate Equality Plan (2003)	AIMING FOR EQUALITY OF OPPORTUNITY "Putting People First" means ensuring that the views and priorities of all citizens are reflected in South Norfolk Council policies. We aim to ensure that equality is included in the day-to-day work we carry out in delivering services and in our role as an employer. To achieve that, the Council will: Make our services and information about them accessible to all Ensure, where appropriate, that we work in partnership with others to deliver equality Meet our statutory requirements Ensure that employees are treated fairly Ensure that our policy development and planning processes recognise the vital importance of	Reflect equalities issues	- contribution to equality
South Norfolk Crime Reduction Strategy (2003)	equalities Strategic Priorities Burglary Vehicle-related crime Crimes of violence: Public and Domestic Partnerships give strategic importance to violent crime and disorder. As the issues surrounding domestic violence differ from violent crime in general these were given distinct priority status.	Consider the issue of crime and the links with promoting reduced crime through good design, and the need for early liaison with Police.	- contribution to Improving the quality of where people live - contribution to reducing anti-social activity - contribution to encouraging local community identity, good behaviour and co-operative attitudes
South Norfolk Alliance Sustainable Community Strategy (2004)	Vision: Working together, local people, local businesses, the voluntary sector and public bodies will strive to make South Norfolk: • A place where a wide diversity of local people take the central role in making decisions about their community and its development and where the public services they receive are excellent and	Provide for housing requirements -for all sectors of the community, in suitable locations. Encourage economic development. Promote accessibility.	- contribution to housing provision - contribution to economic development - contribution to accessibility

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- A healthier and even safer place to live, where the crime levels and 'fear of crime' are low
- A place where suitable accommodation, support and care are available for all whatever their needs
- An area of high learning expectations and achievement, meeting the needs of individuals and the economy
- A place where the environment is protected and respected, quality housing is available to all and it is possible to travel around using varied forms of transport
- An area where economic opportunity and development is diverse, sustainable, accessible and appropriate to the needs of all the community
- An area that provides quality value for money, culture and leisure opportunities that improve the life and well being of residents and visitors

Homes and Housing:

- Increase, year on year, the number of affordable properties, including shared ownership homes built in South Norfolk, in order to eliminate homelessness and reduce the number of people in housing need.
- Locate as many new homes as possible, whether in villages or towns or on large or small sites, in communities where people can reach a range of basic services, jobs and community support without being forced to use a car
- Improve the quality of people's living environment by achieving a high standard of design and efficient use of resources, including using products from sustainable sources in all housing developments.

Development of the economy:

- Improve the availability of good quality jobs and the ability of local people to get them. Develop the economy in our rural villages and town centres.
- Assist economic regeneration through the promotion of adult and community learning and

Promote sustainable development, address the causes and implications of climate change, protect natural environments and the countryside, minimise waste and encourage recycling.

Promote safe environments.

Promote healthy environments and the provision of health and social facilities.

- contribution to sustainable development
- impact on climate change
- impact on natural environment and countryside
- contribution to a safe environment
- contribution to a healthy environment
- contribution provision of health and social facilities

vocational learning, to enhance the skills of the workforce in South Norfolk.

Transport and getting about:

- Increase the use of and to improve the provision of transport, providing an integrated public transport service.
- Improve rural accessibility to jobs, services and facilities whilst reducing the adverse environmental impact of the car, giving residents greater opportunities to increase their local wealth and access to health care, cultural and learning opportunities.
- Focus on increasing the number of people using community transport schemes (including schemes such as Diss and District Borderhoppa, Wymondham Flexi-bus and Car Link).

The environment:

- Make South Norfolk a place where carbon dioxide emissions are reduced and alternative methods of energy production are supported.
- Implement our Local Agenda 21 action plan, which aims to improve quality of life using sustainable development to maintain the quality of our natural environment whilst delivering social progress and economic growth.
- Protect South Norfolk's countryside landscape and the species and habitats that make it up.
- Minimise waste and where waste is produced, ensure it is recycled to an increasing degree each year.

Community life:

- Improve access to jobs and services by locating most new development in locations which give people easy access to their essential needs, a choice of means of transport and the ability to reduce their need to travel.
- Promote social inclusion and income maximisation amongst residents and to encourage the take up of benefits which people are entitled to.
- Local people should have clear and meaningful

opportunities to influence the development of their communities by working with development partnerships, tourist forums and other service providers and by producing a parish plan or village appraisal, to contribute to the planning Local Development Framework. Crime and community safety: Work through the South Norfolk Crime and Disorder Reduction Partnership and its working groups, to reduce crime, disorder, anti social behaviour and fear of crime. Eliminate anti-social behaviour in South Norfolk, knowing the effect it can have on peoples' lives. We will encourage reports and respond to them. Improve safety and security in all construction developments, adhering to the secure by design guidelines. Work with the Norfolk Casualty Reduction Partnership to improve road and fire safety to reduce accidents. Health: • Encourage user involvement in the provision of health and social care services. Help people to take responsibility for their lifestyles and health, with good access to all healthcare requirements. • Encourage walking and cycling through the provision of safe and convenient routes and pedestrian / car-free areas, to help to reduce the need for car access and to improve individual's safety, fitness and health. Work with the Norfolk and Waveney Mental Health Partnership to improve life for people suffering from mental health problems. Develop initiatives to tackle health inequalities in South Norfolk, which are concerned with responding to the housing, poverty and access to educational needs of disadvantaged populations, in order to improve their quality of life and life expectancy. Young people:

	 In partnership with others, to work on tackling the key issues for young people living in South Norfolk. These include lack of transport and leisure facilities, which result in rural isolation, boredom and difficulty in accessing training. To listen to young people and to provide young people with opportunities to engage positively in the democratic process. To tackle rural isolation to help young people access the services they require. 		
Towards Stronger Communities: South Norfolk's Strategy for Community Cohesion (Oct 2006)	 Everyone has a sense of belonging and shares some common values Those from different backgrounds have similar life opportunities The diversity of people's backgrounds and circumstances is appreciated and positively valued. There is mutual respect for differing opinions and views Strong and positive relationships are being developed from different backgrounds in all areas of community life, including workplaces, schools and within neighbourhoods. 	Consider the issue of community cohesion and social inclusion	- contribution to local community identity, good behaviour and co-operative attitudes
South Norfolk Cycling Strategy (2005)	 The Main aims: To encourage cycling in support of the Government's aims To maximise the use of cycling as a convenient, attractive, safe, healthy and secure means of transport and ensures its integration with other modes of transport To ensure that policies to encourage cycling and to provide for cyclists 'needs are integrated with the Community Strategy and Local Development Framework Objectives: To maximise the provision of convenient, safe and attractive cycle routes To provide for convenient, safe and secure cycle parking To integrate provisions for cycles with other forms of transport To raise public awareness and to encourage and publicise cycling 	Encourage cycling and provision for cyclists needs	- contribution to accessibility and sustainable transport

	To improve cyclists' safety To reduce cycle theft		
South Norfolk Corporate Environment Strategy	7 key policy areas: Managing the Council's environmental impact Reducing the use of natural resources and energy consumption Transport Air, land and water quality Bio- and Geo-diversity The built and urban environment Waste management	Consider the means for reducing environmental impacts	- contribution to reducing traffic - impact on air quality - contribution to maintaining and enhancing biodiversity, geodiversity, flora and fauna - contribution to maintaining and enhancing the distinctiveness and quality of landscapes and townscapes - contribution to the use of renewable energy sources and energy efficiency - contribution to reducing vulnerability to climate change - impact on water resources - contribution to minimising production of waste
South Norfolk Leisure/Culture & Countryside Strategy (2006-2016)	The achievement and improvement of health and wellbeing, and creating a sense of place and community.	Ensure adequate provision of facilities and the protection and enhancement of the environment. Links to community development.	- contribution to maintaining distinctiveness of the environment contribution to reduction in social exclusion contribution to accessibility to essential services.
South Norfolk Council's Strategy for Health and Well-Being (2006 – 2016)	This strategy sets out how South Norfolk Council will strive to: Improve the health and well-being of everyone who lives or works in South Norfolk Reduce the health inequalities of those who are most in need	- Promote regular exercise -To protect local air quality - To reduce the health impact of land contamination - To reduce the effects of noise - To protect public health - To reduce the risk of road traffic accidents - To improve partnership working and supporting community development - To Integrate communities - To help people access transport services - To reduce financial hardship aprove the standard of the private housing stock within the district - To increase the availability of affordable housing - To help the most vulnerable	- contribution to maintaining and improving health - contribution to reduction in social exclusion contribution to accessibility to essential services.
Norwich: City Destination Strategy	Enhance facilities for residents and develop pride in city	Ensure adequate provision of facilities.	- contribution to leisure and tourism

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(2004)	Build on strengths – heritage, retail, culture, events, night time economy, sports and leisure,			
Priorities for Strategy	 business tourism. Attract new visitors from UK and Europe: promote high value tourism, business tourism and increase overnight stays Promote Image and co-ordination between bodies in partnerships. Need to promote Norwich as a 	Maintain and enhance cultural, leisure, retail and tourism assets.		
	"living city" rather than a "show city" + develop "sense of place". • Address constraints: labour availability and levels of investment			
Norwich's Environment Strategy				
2003- 2008 Vision and Guiding Principles	Norwich will become a city where the natural and built environment is protected and enhanced and where	Ensure the protection and enhancement of the environment,	- impact on environment, natural resources, and health	
	residents and businesses will use resources in a sustainable manner to minimise the city's negative	reduction of waste and pollution, promotion of sustainable transport, improvement of health and well-being	- contribution to sustainable transport	
	impact on the environment in the rest of the world and ensure that future generations can meet their needs.	_		
	Principles: Sustainable Development and Spatial Impact			
Strategic Objectives and Priorities	Considerably reduce city's contribution to climate change through: Energy efficiency Renewable energy Alternative fuels			
	To protect and enhance natural, historic and built environment through: Sustainable design policy Preserving and enhancing open space + biodiversity Developing a better understanding of all above assets and their use			
	Work toward sustainable resource use by: Reducing waste production + promoting recycling Reducing water pollution + consumption			

Norwich City Council Economic Strategy 2003 - 2008 Vision	Encouraging local sustainable provision of goods + purchasing To develop sustainable transport by: Encouraging walking, cycling + public transport use; Measures to mitigate impact of motorised transport. To protect and improve health and well being by: Improving air quality Reducing noise + light pollution Reducing road casualties Keeping street and other public places well maintained Improving access to green spaces Encouraging increased physical activity Norwich will be recognised in Europe as the capital city of the region with a thriving, diverse and sustainable economy, providing all its citizens with opportunities and a great quality of life		Promote economic development, focussing on key strengths and tackling	- contribution to economic development
Norwich Community Safety Strategy and Audit Report 2005-8	To reduce crime and anti-social behaviour.	To reduce crime in Norwich by 21% by 2007/8 To reduce common assault by 5% by 2007/8	key challenges Consider crime and safety issues	- contribution to a safe environment
Norwich Homelessness Strategy	Changed government policy objectives to focus on prevention of homelessness at an early stage	To prevent homelessness To ensure that sufficient and suitable accommodation is available for people who are or may become homeless.	Consider how provision of housing and hostels can address homelessness issues	- contribution to a healthy environment

Norwich Sustainable Community Strategy 2007 -2020 (draft)					
Strategy 2007 2020 (drait)	To make Norwich the best city in the world to live,	Ensure that the objectives of the draft	Contribution to the need to develop		
Vision:	work, learn and visit.	Sustainable Communities Plan are	sustainable communities		
Guiding principles:	To work together to enable Norwich to be recognized as a model city of:	addressed. Ensure the plan takes account of all environmental, economic, social and cultural factors.			
	- Economic growth				
	- Environmental excellence				
	- Culture and creativity				
	- Safe and strong communities				
	- Health and well-being				
	- Learning and personal development				
Principal objectives:	 To help enterprise flourish To raise aspirations, skills and achievement To develop the right infrastructure for business To raise Norwich's profile To become a low-carbon city To minimize our use of global resources To become a model city for the management of the natural and historic environments To inspire people To create an environment where things can happen To improve quality of life To promote Norwich as a city of culture To reduce crime and anti-social behaviour To support families in crisis To reduce the harm caused by alcohol To improve neighbourhood engagement To reduce the incidence of mental health problems To reduce health inequalities 				

	To boost aspirations of, and opportunities for, people of all ages		
Norwich Area Transport Strategy			
Vision	To provide the highest possible level of access to and within the strategy area to benefit people's individual needs and enhance the economic health of the strategy area. To ensure that journeys minimise any adverse impact on people and the built and natural environment.	Consider transport issues	Contribution to enhancing accessibility Contribution to a safe environment Contribution to mitigate pollution and improve air quality
Overall objectives	 Promote a vibrant city centre, and other commercial centres, by improving accessibility for people and goods Cater for the travel consequences arising from growth aspirations, including the airport 		
	 Maximise transport choice for all travellers To reduce social exclusion To enhance access for non-car modes To minimise congestion and delays To implement transport solutions that protect open space, wildlife habitats and water resources 		
Other relevant objectives	 To maximise safety and security for everyone To protect and enhance residential amenity and minimise community severance 		
Norwich River Valleys Strategy	Long term vision to create a network of green links,	Provide for adequate and accessible	- contribution to green infrastructure / environmental assets
	including riverside walks within the city and out to the open countryside.	Green Infrastructure	- a need to encourage the provision of linkages between the valleys and other green spaces and wildlife corridors.

Appendix 2 – Baseline Information

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
Environmental Baseline								
ENV 1: % 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 from home. Source: 2001 Census	2001: a) 72.0 b) 7.8 c) 9.8 d) 9.8	2001: a) 72.2 b) 5.3 c) 9.8 d) 12.0	2001: a) 51.5 b) 9.9 c) 31.5 d) 6.7	2001: a) 65.4 b) 7.7 c) 16.9 d) 9.5	No data available at present.	East of England 2001: a) 65.8 b) 11.3 c) 12.9 d) 9.4	(a) decrease; (b) increase; (c) increase; (d) increase.	There is more public transport use in the City, which is expected, but more walking / cycling overall than regionally.
ENV 2: % of river length assessed as: a) good biological quality; b) good chemical quality. Source: Environment Agency Development permissions granted contrary to Environment Agency advice on water quality grounds. Source: Local Authority AMR.	No data available at present. 2004/05: None 2005/06: None	No data available at present. 2004/05: None 2005/06: None	No data available at present. 2004/05: unknown 2005/06: None	Average biological: 93% of river length 'good'. 2004/05: Unknown 2005/06: None	There were no approvals against EA advice in 2004/05 in the area either.	The national average for biological quality is 54%.	National standards of 95% at 'good' level To have no applications permitted contrary to EA advice.	Recent new developments have not had a significant impact on water quality.
ENV 3: Number of designated Air Quality Management Areas (AQMAs). Source: Defra - www.airquality.co.uk Concentrations of selected air pollutants (μg/m3): a) annual average concentration of Nitrogen Dioxide (NO2); b) annual average particulate matter levels (PM10). Source: Defra - www.airquality.co.uk	None 2001: a) 19.7 b) 19.3 2004: a) 12.1 b) 20.1	None 2001: a: 17.8 b: 19.2 2004: a: 11.3 b: 20.2	3. 2001: a: 28.9 b: 22.7 2004: a: 21.5 b: 25.4	3 (all in Norwich): 1-Grapes Hill 2-Castle Meadow 3-St. Augustine's Street 2001: a: 22.1 b: 20.4 2004: a: 15.0 b: 21.9	AQMAs have been identified since 1997. Overall air quality seems to be varied, with good reductions in NO2 levels, but slight increases in particulate levels.	There are 5 Air Quality Management Areas in Norfolk.	To remove the need for Air Quality Management Areas in the long-term. To reduce levels of air pollution overall.	The 3 Air Quality Management Areas in Norwich are all designated due to their Nitrogen Dioxide Levels being of concern. Forecasts actually show that pollutant levels should improve, particularly for Nitrogen Dioxide.

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
## Source: Natural England (English Nature).	May 2007: 47.0 a - 20.1 b - 26.9 c - 49.6 d - 3.4 e - 0	May 2007: 35.5 a – 11.9 b – 23.6 c – 40.5 d – 24 e - 0	May 2007: 27.4 a - 27.4 b - 0 c - 72.6 d - 0 e - 0	May 2007: 44.3 a – 18.2 b – 26.1 c - 47.6 d - 8.1 e - 0	PSA Targets 2005/06: South Norfolk: 70% Broadland: 45.9% Norwich: No data Greater Norwich: No complete data	Norfolk County SSSIs: May 2007: 87.9 Whole of England, 2006: 72%	PSA Target: 95% of SSSIs in 'favourable' or 'unfavourable recovering' condition.	Norfolk Wildlife Trust will soon expand this data source to include a similar County Wildlife Site survey. A disappointing status of the site conditions, particularly compared to Norfolk figures.

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
ENV5:								
Heritage at risk – Number of:	2006:	2006:	2006:	2006:	South Norfolk	Nationally,	To show an	Buildings at Risk
a) Listed Buildings; and,	a – 54	a – 58	a – 40	a – 152	contained	2006: 8% of	overall	in 2006 formed
b) Scheduled Ancient Monuments	b – 2	b - 0	b – 2	b – 4	most	Grade I and II*	decrease in	2.4% of the Listed
on the Buildings at Risk register.					vulnerable	buildings on	buildings and	Buildings stock in
	2007:	2007:	2007:	2007:	Listed	the 'at risk'	monuments on	Greater Norwich.
Source: Local Authority reports:	a – 51	Data not	Data not	Data not	Buildings in	register.	the 'at risk'	
Norfolk Buildings at Risk Register.	b – 0	readily	readily	readily	2006,		register.	
		available at	available at	available at	although it	East of		
		present.	present.	present.	contains more	England		
					Listed	buildings at		
					Buildings	risk average is		
					overall.	between 2		
						and 3%.		TPOs indicate the
Number of Tree Preservation Orders	2007: 415	2007: 500	2007: 411	2007: 1,326	To emerge at		No TPO trees	extent of
(TPOS).					a later date.	None	to be lost as a	development
						available at	result of	pressures on the
Source: Local Authority reports.				1999-2003:		present	development.	heritage of each
				Character	In the first		•	District.
				Maintained in	assessment,			
Relative changes in the different	See Greater	See Greater	See Greater	following	between 1990		To enhance	
characters of the landscape as part of	Norwich area	Norwich area	Norwich area	landscape	and 1998, all	Nationally,	the quality of	Nationally,
the Countryside Quality Counts				areas:	areas showed	between 1999	landscapes as	'Woodland and
assessment				Central North	"Some or no	and 2003,	much as	trees', 'Semi-
				Norfolk Area;	change largely	existing	possible.	natural habitats'
Source: Countryside Quality Counts				North East	consistent	landscape		and River and
project <u>www.cqc.org.uk</u>				Norfolk and	with	character was		coastal features'
				Flegg Area;	landscape	maintained in		were generally
				South	character",	51% of		stable across the
				Norfolk and	except Mid	England's		majority of
				High Suffolk	Norfolk which	landscapes		character areas,
				Claylands;	had shown	and enhanced		whereas
				Mid-Norfolk	"Marked	in a further		'Boundary
				Area.	change	10%. Loss of		features' and
					inconsistent	character was		'Historic features'
				Character	with	shown in 20%		generally showed
				Enhanced in	countryside	of landscapes.		signs of being
				The Broads.	character".			neglected.

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
ENV6: Total CO2 emissions per capita (tonnes carbon equivalent). Source: Local Authority / DTI Renewable energy generating capacity installed by type. Source: Local Authority AMRs	2003: 10.2 tonnes per capita 16 solar water heaters and 2 ground source heat pumps were funded in 2005/06.	2003: 10.2 tonnes per capita 2005/06: 36.5MW, of which: Solar tubes: 25.6MW; Wind turbines: 9.5kW; Ground source heat pumps:	2003: 6.8 tonnes per capita 2005/06: None	2003 average: 9.1 tonnes per capita Capacity installed in 2005/06 was approx 41MW.	No previous data available. South Norfolk included 61.1MW from 47 solar water heating systems in 2004/05.	National average: 10.6 tonnes/capita East of England 2006: generated 4.5% of electricity from renewables. Global average: 2.2 gha / capita.	To reduce the overall carbon emissions. Regionally, 14% of electricity to come from renewable sources by 2010.	The area has no major renewable sites at present, although biomass may prove influential in the future. The REAP tool used to assess the ecological footprints of an
CO2 Carbon Footprint of area (global hectares per capita). Source: Local Authority REAP tool	5.76	10.9MW 5.80	5.49	2006: 5.68 gha/capita.	No prior data available.	Sustainable footprint: 1.8.	To reduce the overall size of the footprint.	area was developed in 2006.
ENV7: Development permissions granted contrary to Environment Agency advice on flood risk. Source: Local Authority AMR.	2005/06: None	2005/06: One	2005/06: None	2005/06: One	There were no permissions granted contrary to advice in the previous year, 2004/05.	N/a	To have no development that is permitted without being to the satisfaction of the EA.	Every effort is made to minimise the reasons for EA objection and to amend proposals where possible.
ENV8: Daily domestic water use (per capita consumption). Source: Regional water authority	No data available at present.	No data available at present.	No data available at present.	140 litres per person per day.	No data available.	National average: 154 litres per person / day.	Overall decrease per person.	Greater Norwich water use is below the national rate of water use per day.

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
ENV9:					2004/05:	East of	60 of all	
Dwellings built on previously	2005/06:	2005/06:	2005/06:	2005/06	Broadland:	England ave,	development	There has been
developed land or as conversions.	54%.	38.5%	71%	average:	39%	2005/06: 71%	to be on	an improvement in
				54.5%	South Norfolk:		Previously	both the
Source: Local Authority AMR.					27%		Developed	proportion of
							Land	dwellings built on
% new dwellings completed at:	2005/06:	2005/06:	2005/06:	2005/06:	An overall	East of		previously
 a) less than 30 per hectare; 	No data	a) 47.4%.	a) 2%	Data set	increase in the	England ave,	Indicative	developed land as
b) 30 – 50 per hectare; and,	available.	b) 34.7%	b) 35.9%	incomplete.	density at	2005/06:	national target:	well as a general
c) more than 50 per hectare.		c) 17.9%	c) 61.9%		which housing	a) 48%	100% above	increase in the
					developments	b) 22%	30/ha.	density of homes
Source: Local Authority AMR.					are being	c) 30%		being built.
					built.		Overall	
Waste arisings:	2005/06:	2005/06:	2005/06:	2005/06:			reduction in	Broadland
a) Kilograms of waste produced per	a) 407 kg	a) 329 kg	a) 403 kg	a) 380 kg	An overall		waste	secured 12 th place
head of population; and,	b) + 2%	b) - 11.6%	b) - 7.8%	b) - 5.8%	decrease in		produced and	nationally in
b) % change on previous year.					waste		sent to landfill	2005/06 for its
					collected per		sites.	recycling success.
Source: Local Authority BVPI 84a,b					capita of			
					population,	Norfolk waste	Overall	Composting in
Recycling - % of household waste:	2005/06:	2005/06:	2005/06:	2005/06:	despite	averages,	increase in	Greater Norwich is
a) recycled; and,	a) 31.0%	a) 29.9%	a) 15.5%	a) 23.8%	Broadland	2005/06:	waste recycled	in its infancy but
b) composted.	b) 12.5%	b) 0.8%	b) 0%	b) 11.1%	increasing its	a) 23.8%	as a % of total.	needs to be
					amount.	recycled;		developed more,
Source: Local Authority BVPI 82a,b						b) 11.1%		particularly in City.
						composted		

SA Objective Indicator	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
(and Source)		NOTIOIK		Norwich		value		
Social Baseline	T	T			1	1	T	
SOC1: Child poverty - % of children living in low-income households. Source: Audit Commission (2004).	2004: 9.5%	2004: 9.3%	2004: 30.3%	Average: 2004: 16.4%		No data available.	To improve the performance	As the Index of Multiple Deprivation covers all 354 Local
Index of Income Deprivation (IMD) – Ranking for scores in the IMD. Source: Audit Commission (2004).	2004: 239 out of 354 (1 st = most deprived)	2004: 236 out of 354	2004: 92 out of 354	2004 Average ranking: 189			by minimising the instances of child poverty and unemployment	Authority areas, with 1 st being the most deprived, it can be seen that Norwich is classed
Index of Multiple Deprivation (IMD) – Ranking for overall score in the IMD. Source: Audit Commission (2004).	2004: 302 out of 354	2004: 291 out of 354	2004: 61 out of 354	2004 Average ranking: 218		Norfolk	and improving the ranking in the Indices of Multiple	as far more deprived than its more rural neighbours, with
Population of working age (16-74 yrs old) who are long-term unemployed. Source: Audit Commission (2004)	0.58%	0.56%	1.30%	Average: 1.11%		county: 0.89%	Deprivation.	higher levels of unemployment and child poverty.
SOC2: % of population receiving incapacity benefits (August 2004)	5%	5%	8%	Average figure: 6%		East of England: 5%	To reduce the number of people	There are more people receiving incapacity benefit
Source: Audit Commission	2002/02	2002/02	2002/03:	Average	No previous data available.	England: 7%	receiving incapacity	in Norwich than the national and
Life expectancy (yrs) at birth, of: a) males; b) females.	2002/03: a) 78.6 b) 81.7	2002/03: a) 79.7 b) 82.5	a) 76.9 b) 82	figure: a) 78.4 b) 82.1		East of England 2002/03:	benefit through improved	regional average. Life expectancy is
Source: Audit Commission	-, 0	-, 32.3	-, 0-	2, 52.1		a) 77.6 b) 81.6	healthy lifestyles.	similar in all three authority areas.

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
SOC3:						2001:	_	
Workforce qualifications - % of	0004	0004	0004	0004		East of	To encourage	Norwich has a
working age population with	2001: 14.89%	2001: 17.63%	2001:	2001:		England:	the spread of	higher level of residents with
qualifications at NVQ Level 4 or above.	14.89%	17.63%	20.57%	17.70%		18.14%	higher- qualified	qualifications at
above.					2005:	England:	residents	Level 4/5 due to
Source: 2001 Census					Broadland:	19.90%	around all the	the high
(National statistics online)					60.3%	13.3070	three districts.	proportion of
(rvational statistics crimis)					South Norfolk:		tilloo diotiloto.	students living
				Average	66.1%	2005:	To increase	within the city.
School leaver qualifications - % of	2006:	2006:	2006:	figure (2006):	Norwich:	East of	proportion of	
school leavers with 5 or more GCSEs	62.3%	66.2%	48.8%	59.1%	40.3%	England:	school leavers	
at A*-C grades.					Greater	56.7%	with 5 or more	
					Norwich ave:		GCSEs at A*-	
Source: Audit Commission					55.6%	England: 56%	C grades.	
SOC4:					Affordable		To increase	Affordable
Affordable Housing stock provision:				2004/05	Housing units,		the overall	housing provision
a) % of total housing stock that is	2005/06:	2005/06:	2005/06:	Affordable	2004/05:		provision of	actually slowed in
affordable housing;	a) 9%	a) 11%	a) 36%	housing			affordable	the last two years,
b) Total affordable housing unit	b) 32 units	b) 32 units	b) 209 units	provision:	Broadland:		housing and	although it still
completions in past year;	c) 23%	c) 9.4%	c) 19%	343 units	b) 82 units		its proportion	accounted for
c) % of past years' dwellings				2005/06:	c) unknown	Totalafit	amongst the	almost a fifth of
completions that are affordable.				b) 275 units	South Norfolk:	Total unfit dwellings,	total housing	the total housing
Source: a) national statistics online;				c) 19%	b) 6 units	April 2005:	stock.	stock completed in the last year.
b) and c) Local Authority AMRs.				C) 19 /6	c) 1.2%	April 2005.	To reduce the	ine iasi year.
					0) 1.270	East of	proportion of	There are
Total unfit dwellings in housing stock.				Average	Norwich:	England: 3.2%	unfit dwellings	generally more
Total arm awomings in neutring stock.	Apr 2005:	Apr 2005:	Apr 2005:	figure:	b) 255 units	Lingiana. 0.270	in the total	unfit dwellings
Source: Audit Commission	0.0%	6.4%	7.4%	4.6%	c) 37%	England: 4.4%	housing stock.	than nationally.
SOC5:				2004/05	,		J. J	
Incidences of crime committed per	2004/05:	2004/05:	2004/05:	Average	Unknown.	No data	To reduce the	There are more
1,000 households:	a) 3.64;	a) 5.33;	a) 12.05;	figure:		available at	incidences of	crime
a) Domestic burglaries;	b) 7.79;	b) 9.65;	b) 32.92;			present.	crime overall.	occurrences, as
b) Violent offences;	c) 1.2	c) 1.46	c) 4.1	a) 7.01;				may be expected,
c) Theft of a vehicle.				b) 16.79;				in the city area.
Source: Audit Commission.				c) 2.25				

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
SOC6: % of the economically active population (16-74yrs) who are unemployed. Source: National Statistics online % of unemployed people of working age (16-74yrs) who are long-term unemployed.	2001 Census: 1.97 % 2001 Census: 29.64%	2001 Census: 2.07% 2001 Census: 27.2%	2001 Census: 4.12% 2001 Census: 31.49%	Average figure: 2001 Census: 2.72%	No data available at present.	East of England: 2.6% England: 3.35% East of England: 27.13%	To reduce the proportion of unemployed people amongst the working age population.	Although Norwich has more unemployment overall, there is a fairly similar balance between the proportion of long-term unemployed in Greater Norwich.
Source: National Statistics online	20.0 170	/0	0111070	2011170		England: 30.26%		Both are below national figures.
SOC7: Unfit housing - % of homes from overall housing stock not meeting the 'Decent Homes Standard'. Source: Local Authority Report % of public housing stock built to the standard of the Code for Sustainable Homes (indicator pending). Source: Local Authority Report.	2005/06: 27.6% No data available at present.	2005/06: 31.2% No data available at present.	2005/06: 30.5% No data available at present.	2005/06: 29.7% No data available at present.	No data available at present.	2005/06 England: 30.1% No data available at present.	To reduce the proportion of homes not meeting the decent homes standards. To improve the overall sustainability of housing.	Most non-decent homes appear to be in older housing, and as private rented tenure, such as terrace housing areas adjacent to the City centre.
SOC8: % 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 from home. Source: 2001 Census Other indicators for access to services and access deprivation to be developed in the future.	2001: a) 72.0 b) 7.8 c) 9.8 d) 9.8	2001: a - 72.2 b - 5.3 c - 9.8 d - 12.0	2001: a - 51.5 b - 9.9 c - 31.5 d - 6.7	2001: a - 65.4 b - 7.7 c - 16.9 d - 9.5		East of England 2001: a - 65.8 b - 11.3 c - 12.9 d - 9.4	(a) decrease; (b) increase; (c) increase; (d) increase.	There is more public transport use in the City, which is expected, but more walking / cycling overall than regionally.

SA Objective Indicator (and Source)	Broadland	South Norfolk	Norwich	Greater Norwich	Trends	Comparison Value	Target	Comments
Economic Baseline								
 C1: change in the total number of VAT registered businesses Source: NOMIS Average weekly pay by residence, full time workers. 	Data not yet available – but Total VAT registered businesses at end 2004: 3,645	Data not yet available – but Total VAT registered businesses at end 2004: 4,270	Data not yet available – but Total VAT registered businesses at end 2004: 3,335 2006:	Data not yet available – but Total VAT registered businesses at end 2004: 11,270	No data available at present.	No data available. East of England	To increase the number of VAT registered businesses overall. To improve weekly	Norwich seems to be relatively more reliant on larger businesses, with South Norfolk having a large proportion of smaller, local businesses.
Source: NOMIS	£411.80	£435.80	£409.00	£418.90		average: 2006: £470.00	earnings.	
EC2: Number of small businesses (not including farm-based agriculture) Source: NOMIS	2005: 3,662	2005: 4,184	2005: 4,181	2005: 12,027	No data available at present.	No data available at present.	To increase small businesses and local entrepreneurs.	There are similar levels of smaller, local businesses across Greater Norwich.
**Record Records Source: National Statistics online*	2001: a) 72.0 b) 7.8 c) 9.8 d) 9.8 Census 2001: 14.43 km	2001: a) 72.2 b) 5.3 c) 9.8 d) 12.0 Census 2001: 16.00 km	2001: a) 51.5 b) 9.9 c) 31.5 d) 6.7 Census 2001: 10.83 km	Average figures, 2001: a) 65.4 b) 7.7 c) 16.9 d) 9.5 Census 2001: 13.75 km	No data available at present.	Travel to Work trends, 2001: East England: a) 65.8 b) 11.3 c) 12.9 d) 9.4 England: a) 62.1 b) 15.4 c) 12.8 d) 9.2 East England: 15.88 km England: 13.31 km	To increase number of jobs per resident a) to decrease b) to increase c) to increase d) to increase To provide more employment opportunities closer to home to reduce the distance to work overall.	There is more public transport and far higher cycling/walking use in Norwich where access to the workplace may be easier and the need to work from home is less. Employment in Norwich attracts longer journeys from residents in adjacent districts.

EC4:		I	I	1		I	I	Т
% of various employment development types on previously developed land or as conversions: a – B1 uses (Business) b – B2 uses (General industrial) c – B1 and B2 uses combined d – use undefined e – use unknown Source: Local Authority AMRs.	2005/06: Overall figure of 76%.	2005/06: a - 100% b - 0% c - 0% d - 0% e - 100%	2005/06: a - 0% b - 100% c - 0% d - 0% e - 0%	2005/06: Overall assessment is not possible to make.	In 2004/05, South Norfolk could not provide any B1 uses on brownfield sites, so 2005/06 was a 100% improvement.	East of England average figure, 2005/06: 64%	National target of 60% of all development to be on brownfield land.	There is a need to provide as much employment land as possible on brownfield sites, although that is harder to achieve in the more rural parts of Greater Norwich.
Number or growth in flights to and from Norwich Airport. Source: Norwich Airport. Ecological footprint – Global Hectares	No data available	No data available	No data available	Airport use has grown to some 21,350 flights in 2006.	"Aircraft movements" in and out of the airport rose by 24 percent in 2006 to some 21,350.	No data available at present.	To minimise the number of flights necessary from the airport.	Norwich airport has had the fourth-highest year-on-year rise in passengers outside London.
(gha) required per capita to support current production & consumption of resident lifestyles. Source: Local Authority REAP assessment report.	2006: 5.76 gha per capita	2006: 5.80 gha per capita	2006: 5.49 gha per capita	Average figure, 2006: 5.68 gha per capita	No previous data available.	Global average: 2.2 gha per capita East of	Sustainable world footprint: 1.8 gha per capita	Although there is more unemployment in Norwich, Greater Norwich overall has lower unemployment than regionally or
Unemployment benefit receipt: a) % of population in receipt of Job Seekers Allowance (JSA); b) Claimants of JSA by age range: A – 16-24 yrs old B – 25-49 yrs old C – 50+ yrs old Source: National Statistics online.	August 2004: a) 1% b) A – 29% B – 47% C – 23%	August 2004: a) 1% b) A – 30% B – 45% C – 25%	August 2004: a) 3% b) A – 31% B – 53% C – 15%	figure, August 2004: a) 1.7% b) A - 30% B - 48% C - 21%	available at present.	England August 2004: a) 2% b) A – 30% B – 51% C – 18%	To reduce unemployment overall, and increase the ability of young people to find work.	nationally (2%). More people are unemployed from the 25-49yrs age group, and there is far less unemployment amongst people over 50 years old.

Appendix 3 – Compatibility between sustainability appraisal objectives. i.e. $\sqrt{}$ = positive compatibility • = no significant conflict × = potential conflict

	SOC 1	SOC 2	SOC 3	SOC 4	SOC 5	SOC 6	SOC 7	SOC 8	ENV 1	ENV 2	ENV 3	ENV 4	ENV 5	ENV 6	ENV 7	ENV 8	ENV 9	EC 1	EC 2	EC 3	EC 4
Social																					
SOC1		1	1	1	1 $\sqrt{}$	T $\sqrt{}$		T $\sqrt{}$	×		T•	T.	•	×	T •	•	•	TV	1 1	T \	
SOC2			•	•	•	•	V	V		V	1	•	•	√	•	1	1	•	•	•	
SOC3				•	1	1	•	Ì	•	•	•	•	•	•	•	•	•	1	1	•	•
SOC4					1	•	1	•	×	×	×	×	×	×	×	×	×	1	1	1	1
SOC5						•	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SOC6							•	1	•	•	•	•	•	•	•	•	•	1		1	
SOC7								1	V	V	1	1	1	1	1	1	1	•	•	•	1
SOC8									×	•	×	•	•	×	•	•	•	•	•	1	1
Environn	nental																				
ENV1		Τ		T			Π			√	1	•	T \	1	•	•	•	×	×	T \	√
ENV2											•	V	V	•	$\sqrt{}$	V	•	•	•	•	$\sqrt{}$
ENV3												•	•		•	•	•	•	•	•	
ENV4													V	•	•	•	•	×	×	•	
ENV5														•	•	•	•	×	×	•	$\sqrt{}$
ENV6																•	V	×	×	1	$\sqrt{}$
ENV7																1	•	×	×	•	$\sqrt{}$
ENV8																	•	×	×	•	$\sqrt{}$
ENV9																		×	×	•	
Economi	С				,						,					,		_			
EC1																				V	×
EC2														_							×
EC3																					
EC4																				1	

Appendix 4: The Sustainability Appraisal Framework

Option Appraised:

SCORING SYSTEM PROPOSED:

 \odot = positive effects \odot = negative effects \bullet = neutral effects \bullet = mixed effects \bullet = uncertain effects \bullet = no effects

SA Objective	Decision making criteria	Indicators and targets	Short- Term 0-5 yrs	Medium Term 5-20 yrs	Long- Term 20+ yrs	Comments / Justification Inc. cumulative effects
ENVIRONMENTAL						
ENV 1 - To reduce the effect of traffic on the environment.	Will it reduce traffic volumes, ease the flow of traffic and reduce congestion? Will it increase the proportion of journeys using modes other than the car? Will it reduce the effect of HGV traffic on people and the environment? Will more benign modes of travel be encouraged? Will new development be in the best locations to	% of residents who travel to work: a) by private motor vehicle; b) by public transport; c) by foot or cycle; d) to work at or mainly from home. Source: Census 2001 Target: (a) to decrease (b), (c) and (d) to increase				
	reduce the need for people to travel?					
ENV 2 - To improve the quality of the water environment	Will it improve the quality of the water environment (streams, rivers, lakes etc)? Will it help to support wetland habitats and species?	% of river length assessed as: c) good biological quality; and, d) good chemical quality. Source: Environment Agency. Target: National standards of 95% Development permissions granted contrary to Environment Agency				
		advice on water quality grounds. Source: Local Authority AMR. Target: None				

ENV 3 - To improve	Will it improve air quality?	Number of designated Air Quality		
·	Trim it improve an quanty r	Management Areas.		
environmental amenity,	Will it reduce the emission of atmospheric	Source: Defra www.airquality.co.uk		
including air quality.	pollutants?	Target: Decrease		
		Concentrations of selected air		
		pollutants (μg/m3):		
		- annual average concentration of		
		Nitrogen Dioxide (NO2);		
		- annual average particulate matter levels (PM10).		
		Source: Defra www.airquality.co.uk		
		Target: Decrease		
ENV 4 - To maintain and	Will it conserve / enhance natural or semi-natural	Net change in condition of SSSIs –		
enhance biodiversity and	habitats, and promote habitat connections?	% of SSSIs in favourable or		
,		unfavourable recovering condition.		
geodiversity.	Is it likely to have a significant effect on sites	Source: Natural England.		
	designated for international, national or local	Target: 95%.		
	importance?			
		Norfolk Biodiversity Action Plan		
	Will it conserve / enhance species diversity, and	Progress:		
	in particular avoid harm to protected species?	a) Habitat Actions in progress / completed;		
		b) Species Actions in progress /		
		completed.		
		Source: Norfolk Biodiversity Action		
		Plan 3-yearly Progress Reports.		
		Target: To increase.		
ENV 5 - To maintain and	Will it protect and enhance the quality of	Heritage at risk – Number and %	 _	 _
enhance the quality of	landscapes, townscapes and countryside	of:		
landscapes, townscapes	character, including the character of the Broads	a - Listed Buildings; and,		
and the historic	and its setting where relevant?	b - Scheduled Ancient Monuments		
environment.	Will it maintain and enhance the distinctiveness	on the Buildings at Risk register Source: Local Authority reports.		
environment.	of the landscapes/townscapes and heritage?	Target: Decrease.		
	or the landscapes/townscapes and hentage:	Target. Decrease.		
	Will it reduce the amount of derelict, underused	Net change in number of Tree		
	land?	Preservation Orders.		
		Source: Local Authority reports.		

	Will it protect and enhance features of historical, archaeological and cultural value?	Target - none to be lost as a result of development.		
ENV 6 - To adapt to and mitigate against the impacts of climate change.	Will it reduce emissions of greenhouse gases by reducing energy consumption? Will it lead to an increased proportion of energy needs being met from renewable sources? Will it increase the capacity of the area to withstand the effects of climate change? Will it ensure that risks to lives, land and property are minimised?	Total CO2 emissions per capita (million tonnes carbon equivalent). Source: Local Authority / DTI Target: Decrease Renewable energy generating capacity installed by type. Source: Local Authority AMRs Target: Increase overall CO2 Carbon Footprint of area. Source: Local Authority REAP tool. Target: Decrease		
ENV 7 - To avoid, reduce and manage flood risk.	Will it minimise the risk of flooding to people and property?	Development permissions granted contrary to Environment Agency advice on flood risk. Source: Local Authority AMR. Target: None Number of dwellings permitted within the high risk flood-risk areas (Env. Agency Flood Zones 2&3). Source: Local Authority Reports Target: None		
ENV 8 - To provide for sustainable use and sources of water supply.	Will it conserve groundwater resources? Will it minimise water consumption?	Daily domestic water use (per capita consumption). Source: Regional water authority Target: Decrease		
ENV 9 - To make the best use of resources, including land and energy, and to minimise waste production.	Will it minimise consumption of materials and resources? Will it promote the use of land in sustainable locations that has been previously developed?	% of dwellings built on previously developed land. Source: Local Authority AMR. Target: 60% of all development % new dwellings completed at:		

	Will it use land efficiently? Will it minimise the loss of "greenfield" land? Will it avoid the loss of good quality agricultural land and preserve soil resources? Will it minimise energy consumption and promote energy efficiency? Will it promote the use of renewable energy sources? Will it lead to less waste being produced? Will it lead to less waste being disposed, by promoting more recycling and composting? Will it increase waste recovery for other means eg. energy generation?	A - less than 30 per hectare; B - 30 – 50 per hectare; and, C - more than 50 per hectare. Source: Local Authority AMR. Indicative Target: 100% above 30/ha Waste arisings: A - Kilograms of waste produced per head of population; and, B - % change on previous year. Source: Local Authority BVPI 84a,b Target: Decrease Recycling - % of household waste: A - recycled; and, B - composted. Source: Local Authority BVPI 82a,b Target: Increase		
SOCIAL				
SOC 1 - To reduce poverty and social exclusion.	Will it reduce poverty and social exclusion in those areas most affected? Will it help to reduce deprivation levels? Will the needs of residents best be met?	Child poverty - % of children living in low-income households. Source: Audit Commission Target: Decrease Index of Income Deprivation — Average ward scores in the IMD. Source: Audit Commission (2004). Target: To decrease deprivation Index of Multiple Deprivation — Average ward scores in the IMD. Source: Audit Commission (2004). Target: To decrease deprivation Key benefit claimants — % of working age popn claiming benefits		

		Source: Local Authority.		
		Target: Decrease		
SOC 2 - To maintain and improve the health of the	Will it improve access to high quality health facilities?	% of population receiving incapacity benefits. Source: Audit Commission		
whole population and promote healthy lifestyles.	Will it encourage healthy lifestyles? How?	Target: Decrease.		
	Will adequate health infrastructure be provided for existing and new communities?	Life expectancy of residents. Source: Audit Commission. Target: Increase		
	Will the links between poorer health and deprivation be addressed?			
	Will links to the countryside be maintained and enhanced?			
SOC 3 - To improve	Will it improve qualifications and skills for both	Workforce qualifications - % of		
education and skills.	young people and amongst the workforce?	working age population with qualifications at NVQ Level 4 or		
	Will it help to retain key workers and provide	above.		
	more skilled workers from school leavers?	Source: National Statistics online Target: Increase		
	Will adequate education infrastructure be provided for existing and new communities?			
		School leaver qualifications - % of		
	Will lifelong learning and skills training be promoted?	school leavers with 5 or more GCSEs at A*-C grades.		
		Source: National Statistics		
	Will links between lower levels of education and deprivation be addressed?	Target: Increase.		
SOC 4 - To provide the	Will it increase the range of types, sizes and			
opportunity to live in a decent, suitable and	affordability of housing for all social groups?	Affordable Housing stock provision: A - % of housing stock that is		
1	Will it reduce the housing need and ensure that	affordable housing		
affordable home.	housing provision addresses the needs of all?	B – Total affordable housing unit completions in past year		
	Will housing requirements best be	C - % of past year's dwellings that		
	accommodated to provide for sustainable	are affordable.		
	communities?	Source: Local Authority AMRs.		
		Target: Increase		

	Will best use be made of existing housing stock?	Total unfit dwellings in housing stock. Source: Audit Commission Target: Decrease		
SOC 5 - To build community identity, improve social welfare, and reduce crime and anti-social activity.	Will it encourage engagement in community activities? Will it contribute to the achievement of a mixed and balanced community? Will it reduce actual levels of crime? Will it reduce the fear of crime?	Incidences of crime committed per 1,000 households: A – Domestic burglaries B – Violent offences C – Theft of a vehicle Source: Audit Commission (2004). Target: Decrease		
SOC 6 - To offer more opportunities for rewarding and satisfying employment for all.	Will it reduce unemployment overall? Will it help to improve earnings?	% of the economically active population who are unemployed. Source: National Statistics Target: Decrease % of unemployed people who are long-term unemployed. Source: National Statistics Target: Decrease		
SOC 7 - To improve the quality of where people live.	Will it improve the quality of dwellings? Will it improve the quality of local open space? Will it improve the satisfaction of people with their neighbourhoods?	Unfit housing - % of overall housing stock not meeting the 'Decent Homes Standard'. Source: Local Authority Report. Target: Decrease % of public housing stock built to the standard of the Code for Sustainable Homes (pending). Source: Local Authority Report. Target: Increase		
SOC 8 - To improve accessibility to essential services, facilities and	Will it improve accessibility to key local services and facilities (including health, education, leisure, open space, the countryside and community	% of residents who travel to work: - by private motor vehicle; - by public transport;		

jobs.	facilities)? Will it improve accessibility for all whilst reducing dependency on the private car? Will access to jobs and services be improved for all? What transport infrastructure is required for the existing situation and for proposed future development?	- by foot or cycle; - to work at or mainly from home. Source: Census 2001 Target: (a) to decrease (b), (c) and (d) to increase		
ECONOMIC				
EC 1 - To encourage sustained economic growth.	Will it assist in strengthening the local economy? Will it improve business development and enhance competitiveness? Will it reduce vulnerability to economic shocks? Will it promote growth in key sectors? Will it increase vitality & viability of town centres and improve economic diversity?	% change in the total number of VAT registered businesses. Source: NOMIS Target: Increase number of businesses Average weekly pay for full-time employees. Source: NOMIS Target: Increase average wage		
EC 2 - To encourage and accommodate both indigenous and inward investment.	Will it encourage indigenous businesses? Will it encourage inward investment? Will it make land and property available for business? Will it improve economic performance across the Greater Norwich area? Will it support / encourage rural diversification? Will it support / encourage small city businesses?	Number of small businesses (not including farm-based agriculture). Source: Census, 2001 Target: Increase		

efficient patterns of movement in support of economic growth.	Will it improve provision of local jobs? Will it improve accessibility to work, particularly by public transport, walking and cycling? Will it reduce journey times between key employment areas and key transport interchanges? Will it improve efficiency and sustainability of freight distribution? Will it support provision of key communications infrastructure? How can access to jobs be improved?	% of residents who travel to work by: A - private motor vehicle B - public transport, C - foot or cycle D - work at or mainly from home Source: Census, 2001 Target - (a) decrease (b), (c), (d) increase Average distance ravelled to the workplace by residents. Source: National Statistics online Target: Decrease		
EC 4 - To improve the social and environmental performance of the economy.	Will it reduce the impact on the environment from businesses? Will it reduce the impact on residents from businesses? Will it attract new investment and skilled workers to the area? Will existing business and employment provision be maintained? Where would employment provision best be located to serve urban and rural residents?	Amount of various employment development on previously developed land or conversions Source: Local Authority AMRs Target: 60% of all development Ecological footprint – Hectares required per capita to support current production & consumption. Source: Local Authority REAP assessment report. Target: Decrease Unemployment benefit receipt: b) % of population in receipt of Job Seekers Allowance (JSA); b) Claimants of JSA by age range: A – 16-24 yrs old B – 25-49 yrs old C – 50+ yrs old Source: National Statistics online. Target: Decrease unemployment		

Overall Conclusions		
Summary of		
Environmental Impacts		
identified through		
Sustainability Appraisal		
Summary of Social		
Impacts		
Summary of Economic		
Impacts		
Overall summary on the	e merits, benefits or impacts of this	
_	olicy or option.	
PC	hicy of option.	
Including:		
_	mitigation measures for future policy.	
	further research into the impacts.	
	ulative impacts of the various policies.	
	,	

Appendix 5: Feedback and actions arising from the Joint Core Strategy Sustainability Appraisal Scoping Report consultation

A: Review of Policies, Plans and Programmes

Observation A1 – Local policy [Representation made by: The Broads Authority]

• The literature review does not include any local spatial plans, and there are relevant spatial planning policies from cross-boundary authorities that should be considered in the Sustainability Appraisal.

Response: This is a valid consideration, and the possibilities of conflicting policies should not be taken lightly. The Joint Core Strategy will aspire to be as sustainable as possible through its own policies, and will note the importance of identifying strategic conflicts with policies elsewhere. The Broads Authority Core Strategy affects some areas covered by the Local Authority boundaries of the Greater Norwich Development Partnership districts, so the spatial objectives of that plan will have to be considered specifically.

Action: The literature review includes the following caveat within para. 2.2: "Emerging policies in the JCS will have to pay regard to the concerns and possible conflicts of neighbouring authority development plans."

The strategic objectives of the Broads Authority Core Strategy have subsequently also been reviewed within Appendix 1.

Observation A2 – Transport strategy [The Broads Authority]

 The Broads Area Transportation Strategy should be included to inform the Core Strategy, particularly as this is a cross-boundary issue.

Response: This, and other local area transportation strategies, was produced in conformity with, the Norfolk-wide Local Transport Plan which itself has been reviewed comprehensively. These strategies will be important in improving access in local areas, but will themselves have to respond to the JCS.

Action: No further action is necessary.

Observation A3 - Waste strategy [Norfolk County Council]

• Reference should be made to the Joint Municipal Waste Management Strategy for Norfolk, as developed by the Norfolk Waste Partnership.

Response: This strategy will help to inform the way the Joint Core Strategy pays regard to waste management as an integral part of growth planning until 2020.

Action: The Joint Municipal Waste Management Strategy for Norfolk is added to the list of strategies reviewed within Appendix 1.

Observation A4 - Housing strategy [Norfolk County Council]

 Reference should be made to the Mental Health Housing Strategy for Norfolk, the Learning Difficulty Housing Plan and the Learning Disability Employment Plan.

Response: The Mental Health Housing Strategy and the Learning Difficulty Housing Plan are currently at the formative stages of strategic assessment, and have not yet been transferred into strategic plans, although their use will be valuable in the future when adopted. The Learning Disability Employment Plan will be important as part of social development and community welfare, and will be reviewed accordingly.

Action: The strategic objectives of the Learning Disability Employment Plan have been added for review within Appendix 1.

Observation A5 – PPS1 [English Heritage]

 The literature review in Appendix 1 seems comprehensive, and the issues column could reflect the message in PPS1 that new development should take account of the historic environment.

Response: The support is welcomed, and the PPS1 suggestion will be included.

Observation A6 – Further additions [Environment Agency]

- We consider the national, regional and local literature included within Appendix 1 to be suitable to the issues that require consultation within the joint authority area. We recommend the following are also included:
- Code for Sustainable Homes;
- Practice Guides and Annexes to national planning policy;
- East of England Capacity Delivery Study;
- Greater Norwich flood risk, water cycle and green infrastructure studies.
- Norwich City Council Flood Risk and Development SPG.

Response: The Code for Sustainable Homes will be an important plan for ensuring that all homes planned through the Joint Core Strategy strive towards the best sustainability standards and minimal environmental impact.

The review of national policy is taken to include the Annex and Practice Guides.

The East of England Capacity Delivery Study has been taken into account by the Regional Spatial Strategy for the East of England, with has already been reviewed and with which the Joint Core Strategy will be in conformity.

The Greater Norwich studies are all under preparation and will be taken into account when preparing the Preferred Options stage of the Joint Core Strategy. Their importance has been stressed within the Scoping Report, and the individual studies identified within Para. 3.3. The Norwich City Council Flood Risk SPG is more of a guide for submitting a planning application rather than a strategy that can play a role in the Core Strategy. The principles of accounting for flood risk in development will be established through the updated studies for Greater Norwich.

Action: Code for Sustainable Homes is reviewed; no other action necessary.

B: Baseline Information

Observation B1 – Housing affordability [The Broads Authority]

 In addition to the housing data provided, a key indicator of housing affordability is the current house price to income ratio. This is a more meaningful way of assessing housing affordability in general terms.

Response: This is a valuable addition to the baseline data and will help gauge the necessary response of housing policy.

Action: The following data has been added to Figure 25, and paragraph 7.22:

"Figure 25b - House price to income ratio December 2006. (Source: Norfolk Data

Observatory and Land Registry)

	Average House	Mean Household	House Price to
	Price (Dec. 2006)	Income (Dec 2006)	Income Ratio
		(Approximate)	(Approximate)
Broadland	£201,918	£32,500	6.21
Norwich	£170,678	£27,500	6.21
South Norfolk	£209,420	£32,000	6.54
Greater Norwich	£194,005	£30,666	6.33

(Para 7.22): ... although by 2006 it seems to have reduced slightly to over 6 times average household income (Figure 25b). This still remains a very high figure for those people who wish to secure mortgages without encountering financial difficulty."

Observation B2 – Air quality [The Broads Authority]

 The health information could be complemented by more explicit data on the pollutant concentrations in the Air Quality Management Areas, to help the SA team to assess their effects linked to health issues.

Response: Although an important issue to include, this data is extremely technical and could confuse readers. If people wish to find out more, they can do so via the AQMA strategies listed with the indicators (Appendix 4). The connection to health issues is raised within para 9.7 through the addition of the following text:

Action: Include within para 9.7:

"Air pollution does have an impact on the health of those people working and living in the areas of concentrated pollutants, so minimising pollutants' impacts is essential."

Observation B3 - Accessibility [The Broads Authority]

 Inaccessible at risk populations should be included as a measure of the accessibility across Greater Norwich.

Response: Inaccessibility is considered throughout the scoping exercise, and reducing it is a key factor in building sustainable communities. No action necessary.

Observation B4 - Travel to work [The Broads Authority]

 Consider alternatives to the 2001 Census information for modes of travel to work. **Response:** This indicator is rather dated, but it does provide a good baseline of the situation across the area. Efforts will be made to find a more up-to-date indicator for use in subsequent SA reports.

Observation B5 - Additional indicators [The Broads Authority]

Additional indicators proposed for use:

ENV 1 - "The number of Air Quality Management Areas declared from traffic sources and pollutant concentrations in each AQMA." (See below)

SOC 8 – "Inaccessible at risk population equivalent" or "Geographical Barriers Deprivation" (These indicators do not appear readily available)

EC 3 – Include different indicators for modes of commuting, including a measure of the increased flow of traffic into the city, for example. (New indicators are sought.)

ENV 9 – Consider indicators for household waste converted into energy. (See below)

SOC 2 – Include health deprivation indicators for super output areas in the worst 20% nationally (see below). Include numbers of road traffic accidents (unnecessary).

SOC 3 – Add more up to date information, rather than just census data. (See below)

Response:

ENV 1 - AQMA pollution monitoring will help to assess the impacts of traffic in these key areas. A suitable indicator will be added for use in subsequent SA reports. ENV 9 – Best use of energy resources would include incorporating household waste into heat, power and energy generation.

SOC 3 – The Learning and Skills Council produces annual reports for adults with fewer qualifications, and % of working age population with no qualifications.

Action: The following indicators will be included in subsequent SA reports:

ENV 1 - Include the above indicator for ENV1, for use when options are more definitive. All three AQMAs in Norwich (St. Augustines, Grapes Hill and Castle) are designated due to Nitrogen Dioxide, a pollutant arising from transport emissions. ENV 9 – Inclusion of Best Value Performance Indicator 82c - % of household waste used in heat, power and energy recovery.

SOC 2 – Include % or # of SOAs in worst 20% nationally for health deprivation.

SOC 3 – To include indicators on % of working age population with no Level 2 qualifications or no qualifications, broken down by district, from the LSC.

Observation B6 – SEA Directive [The Broads Authority]

 The SA will need to show how the environment will evolve without the implementation of the plan in order to comply with the SEA Directive.

Response: This is noted and will be included within the SA Report for the JCS.

Observation B7 - Background information [The Broads Authority]

 Maps would be helpful to show the distribution of environmental assets and their relation to the Broads Authority area boundary.

Response: This recommendation is noted for future reports. No action taken.

Observation B8 - Carbon emissions [The Broads Authority]

• We were pleased to see the inclusion of a carbon dioxide indicator, but could this be broken down into emissions by sector, e.g. transport and industrial?

Response: Although the DEFRA website contains a national figure for this information, there doesn't appear to be any local level figures available. Without local information a national value wouldn't reflect the progress or otherwise of the Greater Norwich area. No action taken.

Observation B9 - Heritage [The Broads Authority]

Cultural heritage is an important feature of the Broads, and little mention was
given in the text as to its importance for tourism. Visitors to the Broads are
also likely to visit the Greater Norwich area and historic assets are one of the
greatest draws to this part of Norfolk. We think this subject warrants more
explicit mention in the baseline.

Response: This concern is noted, and will prove a valuable addition to the scoping exercise. In the absence of definitive visitor numbers to such attractions, this will be added in the baseline and identification of issues.

Action: This is raised in para 6.1, and the following text is added to para 8.8: "The important heritage of the area is invaluable in terms of both the local character and also for the local economy and tourism industry. The continued preservation of these assets will have many far-reaching benefits."

Observation B10 - Support [The Broads Authority]

 We are pleased to see recognition that the Broads LDF will require support from neighbouring Local Planning Authorities, and recommend an inclusion that the Broads area could be affected by the Joint Core Strategy, and vice versa.

Response: Support welcomed. The inclusion of the Broads within the datasets and sustainability issues is recognition of the interrelationships between the two development plans.

Observation B11 – The Broads [The Broads Authority]

 Whilst we appreciate the explicit reference that Norwich is the gateway to the Broads, its importance was not adequately drawn out in the identification of issues, objectives and indicators.

Response: The importance of tourism and the role of the plan in supporting that aspect of the economy is considered throughout, and supported by the SA objectives relating to economic development.

Action: Add under para 10.4:

"The Greater Norwich area is the principle access to the Broads national park, and has a critical role in promoting tourism, preserving character and protecting the environment through its spatial policies."

Observation B12 - Flooding [The Broads Authority]

 Para 6.12 should mention that the Strategic Flood Risk Assessment will also cover the areas of North Norfolk, and the Broads authority.

Response: This has been amended accordingly.

Observation B13 - Employment [Norfolk County Council]

 Within the economy section the case for high quality engineering (not just automotive) is understated.

Response: This concern is noted, and will be a valuable amendment.

Action: Amend para. 8.8 to read:

"Other characteristic elements of the economy include high quality engineering (at such centres as the nationally-important Hethel Engineering Centre), including industry-leading automotive engineering, distribution services, and business park uses."

Observation B14 - Waste [Norfolk County Council]

 Norfolk is predominantly reliant on landfill as a means of disposal for its waste, although this approach will change as landfill use must decrease. Para 6.13 suggests that the County Council administers waste disposal facilities, although this is actually often the commercial sector's role.

Response / Action: This amendment is welcomed. Para 6.13 will now read: "Growth in Greater Norwich will also need to be supported by increased provision of minerals resources and waste management and disposal facilities. These are planned for by Norfolk County Council, although the commercial sector provides the facilities according to need and cost. Their provision will have significant implications for spatial planning of homes and employment in Greater Norwich. ..."

Observation B15 - Waste [Norfolk County Council]

 Para 6.14 suggests that 65% of Norfolk's entire waste is sent to landfill, and should clarify if this is household waste. Para 6.15 should also clarify if the statistical improvements in Figure 9 are also from household waste.

Response / Action: These references will be amended accordingly.

Observation B16 - Culture [Norfolk County Council]

• When mentioning Norwich as a regional cultural centre (para 8.7), acknowledgement should also be given to the Norfolk and Norwich Library.

Response / Action: Para 8.7 will be amended to read:

"For a city of its size, it [Norwich] is extremely well provided with a wide variety of cultural venues, including a range of theatres and museums, and the Norfolk and Norwich Millennium Library, one of the busiest libraries in the country."

Observation B17 - Landscape [Norfolk County Council]

- Within the baseline information, the only indicator which has been identified in respect of landscape is the number of Tree Preservation Orders. Whilst this indicator is easy to measure and could be included, it does not really give any indication of change in the overall landscape quality. It is suggested that the following two additional indicators could also be used:
- "The amount of brownfield land developed through use of private gardens;
- The countryside quality counts indicator of landscape character area quality is recorded on a national basis and should be used to assess the health or otherwise of the five landscape character areas which converge on Norwich."

Response: The loss of private gardens will be a difficult indicator to maintain a record for, but the Countryside Quality Counts (CQC) indicator will be valuable. The CQC provides a systematic assessment of how the countryside is changing and helps to understand where change is occurring and the way it affects the landscapes that people value. This information can inform policies for enhancing and maintaining the character and quality of our countryside and wider landscapes. Understanding the way landscapes will respond to climate change and other pressures will be essential in helping to develop strategies for the future sustainable management of countryside and natural resources.

Action: Indicators for SA Objective ENV5 (To maintain and enhance the quality of landscapes, townscapes and the historic environment) will include the following indicator relating to landscape change in the 5 character areas: "Relative changes in the different characters of the landscape as part of the Countryside Quality Counts assessment [Source: Countryside Quality Counts project www.cqc.org.uk]."

Para.6.4 will be amended to include the following information:

"...A systematic assessment of countryside character helps to identify where change is occurring and how it affects the landscapes that people value. This will inform policies for enhancing and maintaining the character and quality of our countryside and wider landscapes. Understanding how landscapes will respond to climate change and development pressures will help to develop strategies for sustainable management of countryside and natural resources. The Countryside Quality Counts project found that between 1999 and 2003, existing landscape character was maintained for all four of the character areas within Greater Norwich except the Broads character area, where the landscape character was actually enhanced."

Observation B18 - Transport [Norfolk County Council]

Schools need to be sited as close as possible to the homes they serve to
encourage alternatives to the car, and safe and pleasant pedestrian and cycle
paths to schools need to be designed into neighbourhoods. Frequent public
transport connections need to be available to all schools, especially with
connections to the more distant residential areas they serve.

Response / Action: Suggestion is welcomed, and will be included within Para. 9.6.

Observation B19 - Habitats [Natural England]

 Habitat re-creation should be included as part of wildlife promotion. Roadside verges and protected species should also be acknowledged for their wildlife value and importance for protection. **Response:** These are important wildlife reserves and will continue to be a valuable aspect of the Greater Norwich biodiversity qualities.

Action: Para. 6.8 has been amended to read:

"Along with protected species and habitats (such as the great crested newt in South Norfolk), non-designated habitats, including a variety of areas such as open spaces, parks, graveyards, allotments, field edges, hedgerows and gardens, are increasingly being recognised for their wildlife value. Roadside verges are often important wildlife reserves in rural areas and an extensive network of roadside nature reserves are being established to improve ecological connectivity."

Observation B20 - Minerals [Natural England]

 Clarification should be provided as to whether minerals extraction sites are to be restored for biodiversity and habitat uses or returned to agricultural land.

Response / Action: Para. 6.13 has been amended accordingly.

Observation B21 - Heritage [English Heritage]

 The report should have some commentary added about current pressures and trends relevant to the wider character of the historic environment.

Response: These pressures have been identified throughout (eg. Figure 37).

Observation B22 - Heritage [English Heritage]

The coverage of the area's cultural heritage seems rather sparse in the
overview in the baseline information. Norwich is a historic city, for example,
and should be recognised for it's built environment assets, as should the
contribution made by cultural heritage assets to high quality green
infrastructure in Para 6.6.

Response: These amendments will be made to reflect the importance of heritage.

Action: Para 6.2 is amended to read:

"Although the Broads Area is outside the area covered by the Joint Core Strategy, it and the historic core of Norwich city are some of the primary environmental assets within the area and, indeed, in Norfolk and the East of England."

Para 6.6 is amended to include the following addition:

"The historic environment and many heritage features also make a valuable contribution to high quality green infrastructure across the Greater Norwich area."

Observation B23 - Support [Environment Agency]

 We consider that the baseline date used is suitable for the purpose of a Core Strategy SA. In general we do not have any comments to make at this stage on the data. The target for ENV2 should be revised to read: "No developments are permitted contrary to Environment Agency advice".

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Response / Action: Support is welcomed, and the target will be revised as suggested.

C: Sustainability Issues

Observation C1 – The Broads [The Broads Authority]

• We would appreciate the inclusion of a more explicit commentary on how the plan could impact the Broads in sustainability terms.

Response:

This is a valid concern; though the Greater Norwich Joint Core Strategy does not cover the Broads Executive Area, it will inevitably have significant environmental, social and economic effects on the Broads.

The JCS SA Scoping Report has sought to consider the impacts of the JCS on the Broads area wherever possible. It is certainly agreed that the impacts of policy will need to be assessed against the vulnerability of the Broads, especially for nature conservation, historic assets, water quality and flood risk. Current environmental indicators have included assets within the Broads because the area still remains part of their surrounding authorities. The Scoping Report tries to take a holistic view to consider wider effects on ecosystems in general. Commentary will draw people's intentions to the possibility that activities promoted by the Joint Core Strategy could have an effect on assets in the Broads, such as water quality and biodiversity.

Action:

Paragraph 6.9. Added commentary:

"Water is a shared resource and is important for tourism in the area, so the pressures from development on water quality, biodiversity and flood risk are also likely to be significant across boundaries, such as within the Broads Authority area. If development can reduce risks of damage, it should do so."

Figure 37: Add under 'Natural Environment':

"Cross-boundary effects are also an important consideration. Activity promoted through the Joint Core Strategy is also likely to have an effect on areas outside its administrative boundary, such as the Broads Authority area. Water quality and biodiversity downstream will be particularly vulnerable to changes from new development."

Figure 37: Add under 'Climate Change':

"Flood risk in areas like the Broads can be exacerbated by developments upstream that cause change to natural watercourses and the water cycle."

Observation C2 - River quality [The Broads Authority]

 Given the decline in chemical river quality, we feel this should be included as an issue in its own right, as it is as low as 25% in the Broads area.
 Suggested use of chemical water quality data in the baseline information.

Response: This is an important consideration as the area relies on good chemical water quality to support freshwater ecosystem habitats and angling interests. The data is included in Appendix 2 under ENV 2 – 'To improve the quality of the water environment'. The issue will be raised in Figure 37, concerning natural environments.

Action:

To include the following sustainability issue in Figure 37, 'Natural Environment':

"Water quality is important for freshwater ecosystems and as a secondary effect the angling and tourism industry. Biological and chemical water quality will need to be enhanced through land use practices, such as installing SUDs and treatment works."

Observation C3 – Air quality [The Broads Authority]

 There is an implication within Figure 37 that biofuels can improve air quality. Biodiesel emits more nitrous dioxide than conventional fuels, which could exacerbate the problems already felt in the Air Quality Management Areas and is unlikely to improve overall air quality.

Response: This is an interesting point. The Scoping Report should be amended to avoid suggesting that biofuels will improve air quality, and instead be revised to emphasise the benefits in reducing carbon dioxide emissions.

Action: Figure 37 'Health' will be revised to remove reference to biofuels and promote improved traffic management systems. It will be amended to read: "Air Quality Management Areas should be mitigated and the impacts of congestion and localised emissions concentrations should be reduced through traffic management schemes. Projects such as the CIVITAS Initiative can help cities to achieve a more sustainable, clean and energy efficient urban transport system through integrated technology and policy based measures."

Observation C4 - Tourism [The Broads Authority]

• There is a lack of an explicit issues relating to tourism and the local economy, despite its importance to both Greater Norwich and the Broads area.

Response: This is a welcome suggestion, and clearly an important issue that shouldn't be missed.

Action: Amendment to para 10.4:

"Employment businesses, particularly in rural areas, need support to diversify. This will be particularly important to strengthening the tourism industry, although promoting the tourism product of the area will need to be done in a sustainable way."

Addition to Figure 37 'Growth':

- "Diversification and extension of the tourism base across the area.
- Promotion of tourism development whilst protecting the important landscapes, environment and cultural heritage of Greater Norwich and the Broads area."

Observation C5 – Heritage [Norfolk County Council]

- The special historic character of Norwich and to a lesser extent its hinterland should be highlighted more. It is the unusual number of churches in the city and the very highly graded listed buildings that make the city so special.
- There should be more recognition of the special character of the Broads are which features one of the largest groups of industrial monuments in the country, namely windmills, set in open isolated locations.
- Development on the scale of the Joint Core Strategy will have to be carefully sited and more protection offered to the city's historic character if it is to remain the main magnet for people visiting the city.

Response: This is a welcome suggestion, as the preservation of the city's heritage and unique character will be important for developing the tourism economy. The issue of preserving the city's heritage is described as an important issue within Figure 37, and this can be extended to include the recognition of the Broads assets.

Action: Amendment to 'Built Environment' within Figure 37 to read:

- "The special historic character of Norwich and its hinterland should be preserved and enhanced; the unusual number of churches in the city, the valued listed buildings and the largest groups of industrial monuments in the country, namely windmills, will be important in retaining the city's unique character and heritage"
- "Preserve the distinctive character of the historic built environment, protecting and enhancing these and using them to promote the Greater Norwich and Broads areas."

Observation C6 - Culture [Norfolk County Council]

- There is no mention of enabling access to cultural activity, whether this is
 access to libraries, museums or art. There is no mention of sustaining
 adequate library and museum provision especially in the context of growing
 populations, expanding housing, raising educational attainment and
 employability. Libraries and museums are facilities through which people
 grow and develop and are a source of information about opportunities.
- There is no mention about support for learning throughout life. This is important for service provision that supports community capacity building, neighbourhood renewal and promoting a sense of place and identity.

Response: Although lifelong learning has been identified as an important issue within para 10.4, these are important aspects that need to be given specific attention, and so will be included within the sustainability issues for Greater Norwich.

Action: Figure 37 will include the addition of the following text under 'Leisure, culture and recreation':

"Access to cultural activity is very important for recreation and personal development and community integration. Adequate cultural provision, such as libraries, will be integral to sustainable communities and need to be planned for from the outset.

Lifelong learning can also utilise cultural facilities and provision of community centres where community capacity and neighbourhood identity can be promoted."

Observation C7 - Deprivation [Norfolk County Council]

• Within 'Deprivation' in Figure 37, there should also be acknowledgement that the house price rise will also affect people in private rented accommodation.

Response: This is an important consideration, and will be given specific mention.

Action: 'Deprivation' in Figure 37 will be amended to read: "If the house price – income ratio continues to widen, home owners will have less disposable income as mortgages increase, and those people in private rented accommodation will be vulnerable to increased rents as the market is not regulated."

Observation C8 - Accessibility [Norfolk County Council]

• Within 'Access to Services' in Figure 37, there should also be mention that all services need to be accessible to an increasing proportion of disabled people.

Response: This is an important consideration, and will be given specific mention.

Action: 'Access to services' in Figure 37 will be amended to read: "Services must be provided for an increasingly aging population, and all services must take into account the rising levels of disability in the population. This includes building homes to lifetime homes standards as well as providing specialised accommodation."

Observation C9 - Heritage [English Heritage]

 We welcome inclusion of enhancement of heritage as part of the sustainability issues, although there could be more attention given to the indirect impacts on the historic environment, such as pressure from increased road traffic.

Response: Support is welcomed. Impacts such as increased car use could lead to pressures for road widening in the historic core, for example, and create issues for maintaining the quality of the built environment.

Action: These concerns are reflected in additions to Figure 37, to read: "Indirect impacts on the built environment could arise from the additional pressures of development and climate change. Measures should be taken to enhance the historic core and other distinctive heritage features, by making them able to withstand development pressures arising in the immediate future such as traffic growth."

Observation C10 – Historic landscapes [*English Heritage***]**

 Reference should be made to pressures on the historic core of Norwich and the importance of local Historic Landscape Characterisations providing assistance for integrating landscape distinctiveness into new developments.

Response: These are important concerns that can be included within Figure 37.

Action: Figure 37, 'Built environment' will be amended to read: "New developments will need to be integrated into the existing form and character of local areas in order to minimise the negative impacts that could be brought to the heritage of the area. Historic Landscape Characterisations can provide valuable assistance for integrating landscape distinctiveness into new developments.", and "....Measures should be taken to enhance the historic core of Norwich and other distinctive heritage features..."

Observation C11 - General [Environment Agency]

- Within Figure 37 'Climate Change', amendment to read: "The area at risk of flooding will increase with climate change."
- Water quality should be included as an aspect of 'Natural resources', which needs to be enhanced given the rising levels of phosphates in water courses.

Response / Action: These are welcome suggestions, and the suggested changes will be made accordingly.

D: The Sustainability Appraisal Framework

Observation D1 - Waste [The Broads Authority]

• SA Objective ENV9 – Suggest splitting this into two objectives; to make best use of resources including waste; and to minimise waste production.

Response: This is unnecessary because the priority must be to reduce waste production and then make the best use of the waste generated. No action taken.

Observation D2 - Transport [The Broads Authority]

• SA Objective EC3 – Suggest rephrasing the "efficient patterns of movement" into "encouraging sustainable transport".

Response: This is well intentioned, but in an economic sense to do so could also miss the possibility of the movement of information via electronic methods. No action.

Observation D3 - General [The Broads Authority]

 Questions phrased "How can it..." do not allow the effects to be considered sufficiently as these are open ended questions their assistance in assessment would be restricted.

Response: This is a good point. All the relevant decision making criteria have been changed to assist the assessment process.

Observation D4 - Support [English Heritage]

• We agree that the sustainability appraisal objectives are appropriate.

Response: This support is welcomed.

Observation D5 - Support [Environment Agency]

 We are satisfied that the objectives identified should be sufficient to enable the emerging policy options to be assessed.

Response: This support is welcomed.

Appendix 6: Structure for the forthcoming Sustainability Appraisal Report to accompany the Preferred Options consultation.

Structure of report Information to include:

Report to include a table sign-posting the components of the SA Report, which make up the Environmental Report of the SEA Directive

1	Summary and outcomes	1.1 1.2 1.3 1.4	Non-technical summary A statement of the likely significant effects of the plan Statement of differences process has made to date How to comment on the report
2	Appraisal methodology	2.1 2.2 2.3 2.4 2.5	Approach adopted to the SA When the SA was carried out Who conducted the SA Who was consulted, when and how Difficulties encountered in compiling information or carrying out the assessment
3	Background	3.1 3.2 3.3	Purpose of the SA and the SA Report Plan objectives and outline of contents Compliance with the SEA Directive / Regulations
3	Sustainability objectives, base	line ar 4.1	Links to other policies, plans and programmes and sustainability objectives and how these have been
		4.2	taken into account Description of the social, environmental and economic baseline characteristics and the predicted future baseline
		4.3	Main social, environmental and economic issues and problems identified
		4.4 4.5	Limitations of the information, assumptions made etc. The SA framework, inc objectives, targets, indicators
5	Plan issues and options	5.1 5.2	Main strategic options considered & how identified Comparison of the social, environmental and economic effects of the options
		5.3	How social, environmental and economic issues were considered in choosing the preferred options
		5.4 5.5	Other options considered and why these were rejected Any proposed mitigation measures
6	Plan policies	6.1	Significant social, environmental and economic effects of the preferred options
		6.2	How social, environmental and economic problems were considered in developing policies & proposals
		6.3 6.4	Proposed mitigation measures Uncertainties and risks
7	Implementation	7.1	Links to other tiers of plans and programmes and the project level (EIA, design guidance etc.)
		7.2	Proposals for monitoring

Source: Reproduced from Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (ODPM Guidance 2005)



If you require this document in another format or language, please contact:

Planning Services South Norfolk Council Long Stratton, Norfolk NR15 2AH t: 01508 533805 e: LDF@s-norfolk.gov.uk

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APPENDIX D - HOUSING DELIVERY IMPLICATIONS

Author: GNDP

Preface:

This appendix contains an explanation of why it is not possible to deliver 9,000 homes in an individual or combination sector within the Plan Period i.e. to 2026. There is an explanation of why 7,000 homes is the realistic maximum that could be delivered in any individual or combination sector. Finally, there is an explanation of why 10,000 homes are needed in any individual or combination large scale strategic growth sector overall, even if outside the plan period, in order to secure the long term viability of a new Secondary School.

1. Section on build rates and the "reasonableness" of locating all 9000 remitted dwellings in one location

- 1.1. The GNDP has undertaken some research into the rate of development achieved on large developments. This highlights two significant considerations.
- 1.2. The first is that there is inevitably a time lag between the concept of a large development and the first completions. This is often significant, but may be reduced where there has been preparatory work undertaken through the plan preparation process, or where developers have worked up a scheme they wish to promote. Several prospective developers have been active in undertaking preparatory work in some of the sectors identified for consideration.
- 1.3. Nonetheless, some allowance must be made for this factor.
- 1.4. The second consideration is that there is a practical limit to rate at which an individual developer will be able to sell dwellings from a given site. The rate of completions will be increased where affordable houses are constructed on behalf of a housing association. Similarly, in the case of larger developments, with a number of developers involved, the rate of sales can increase, though probably not pro rata. Furthermore in the case of very large developments where there will be opportunity for development to be planned in a number of distinct and separate localities, rates can be increased further, but again nearby local competition will have some effect.
- 1.5. Taking all these factors together, it is considered that a development of 7000 dwellings in one location could be delivered by 2026, subject to sufficiently buoyant market demand, but that it would not be practical for 9000 dwellings to be delivered in one location by that date.
- 1.6. In either case, a new secondary school would be required, but, as is explained below, a total of approximately 10,000 would be required to ensure the long-term sustainability of a secondary school of the size and type favoured by the education authority. Therefore, whilst a scheme of 7000 dwellings might be deliverable within the plan period, to be truly sustainable, such a scheme would need to be planned to continue to grow slightly beyond 2026.

2. Maximum delivery of housing in any one individual or combination sector

2.1. The GNDP has undertaken its own research into the rates of development achieved on large developments. This was included in a topic paper submitted to the previous public examination into the joint core strategy held in 2010.

http://www.gndp.org.uk/content/wp-content/uploads/downloads/2010/03/JCS%20Strategy%20to%20Accommodate%20Major%20Housing%20Growth%20in%20the%20NPA.pdf

- 2.2. The following is adapted from that paper
- 2.3. The basis of the research was an examination of projected and achieved development rates on large development sites elsewhere, and other published information. The research built on the report "Best practice in Urban Extensions and New Settlements" produced by the Town and Country Planning Association on behalf of the Department for Communities and Local Government. The new communities examined were:
 - Cambourne, Cambridgeshire
 - Newcastle Great Park
 - Hampton, Peterborough
 - Upton. Northamptonshire
 - · Northstowe, Cambridgeshire
 - The Wixams, Bedfordshire
 - Sherford, Plymouth
 - · Cranbrook, Exeter
 - · Dickens Heath, Solihull
- 2.4. These communities were examined as they provide a variety of scales and locations in relation to the established city or town to which they are linked. Some have commenced, though some are still in the planning stage.
- 2.5. The research highlights two significant factors: For new settlements, there is inevitably some time lag between concept and the first completions:

"The average time between initial proposals for a new settlement, and the start of construction, is typically just over six and a half years, with occupation of the first homes being a further year behind. However, the gap between initial outline planning permission and first completions averages a little under five years. In the case of extensions to existing settlements, and where the initial preparatory work identifying requirements for development has been undertaken, it may be possible to reduce this. Several prospective developers have been active in undertaking preparatory work in some of the sectors identified for consideration".

2.6. The second point is that average build rates on the developments in construction when the data was gathered are up to 240 dwellings per year, probably representing the combined efforts of up to six developers (The majority of the case studies had multiple house builders per site).

- 2.7. National research has indicated that a single house builder will seek to deliver between 30-40 market dwellings per year on any one site, in the majority of circumstances. Research carried out by the Home Builders Federation (HBF)for their submission to the Calcutt Review indicated that as an average over 1,500-2,500 sites surveyed between 1993-2007, 32 sales were made each year from a site¹. Homes built for a Registered Social Landlord as affordable dwellings are an important addition to these figures. Andrew Whitaker, of the Home Builders Federation, suggested that these are likely to be built at a higher rate if they are planned as blocks within a site or at the same rate as market housing if they are interspersed with the market housing².
- 2.8. Translating this to the local situation, if a developer is expected to deliver between 30 and 40 market houses per annum from a site, and assuming an additional 30% affordable homes, this would give a range of 39 to 52 in total. A mid point figure of 46 per annum per developer has been assumed, since a medium scale development will involve a number of developers operating in close proximity. Typically at Thorpe Marriott (about 2750 dwellings) there were 4 developers involved. This too, would be expected to apply to a group of developers working together within one part of a larger development.
- 2.9. In the case of very large scale development, it is likely that overall this rate can be achieved in the different parts provided the location selected offers the opportunity for distinct focuses for groups of developers. In the case of the research referred to above, the conclusion drawn was that if the north east growth triangle were selected for development (as was proposed at that time), a rate of 580 units per year might be achievable, given the characteristics of the locality, which appeared to offer the potential for three distinct focuses for development. Using the figure of 45 per developer would imply 540 units per year. Another locality offering the same potential might be expected to achieve similar rates. If assumptions at the optimistic end of the range were made about the completion rates of an individual developer, and no allowance for local competition, the overall completion rate might achieve 900. This however would make no allowance for uncertainty.
- 2.10. This indicates that the construction phase of a 7000 house development would take about 12 years based on cautious assumptions, although at the optimistic end of the scale it could come down to around 11 years. For a 9000 house development, the construction periods would be 16 and 14 years respectively.

Appendix D – Housing Delivery Implications Author: GNDP

¹ Calcutt Review of Housebuilding Delivery: Submission by Home Builders Federation, April 2007

² Andrew Whitaker, Housing- Can the Planning System deliver 200,000 dwellings per year?, Journal of Planning Law, December 2007

2.11. This suggests that 7000 houses represent a reasonable maximum which could be delivered in any one location, subject to the market supporting that rate of delivery. 9000 houses could not realistically be delivered and would not be a "reasonable" option.

3. Provision of a new secondary school and housing numbers

- 3.1. A new school, as a focal point for growth, provides one of the most significant opportunities for sustainable development by reducing the need to travel, enhancing community development, and delivering local jobs and leisure facilities.
- 3.2. Secondary schools have to be large enough to provide for a wide curriculum and attract senior staff. Norfolk County Council's preferred size for a new secondary school is in the range 900-1500 students in the 11-16 age range. For comparison purposes the existing high schools at Thorpe St Andrew or Sprowston accommodate 1400-1500 11-16 year olds. The high school at Taverham is a little smaller at about 1100 11-16 year olds.
- 3.3. Adopted County Council standards use a standard multiplier for the generation of 11-16 year olds from new housing of 0.14 children per dwelling. A 50% discount is applied to flats, apartments and maisonettes, and no children are assumed from 1-bed accommodation or sheltered housing. To take account of these reductions for strategic planning purposes, it is reasonable to apply a discount to a typical large greenfield development that equates to about 10% of planned dwellings.
- 3.4. Based on the accepted multipliers, 900 to 1500 11-16 year olds would be generated by 6,430 to 10,710 contributing dwellings. However, the total number of dwellings in any development would be higher to be consistent with the 10% assumption for non-contributing dwellings (flats etc) Therefore, between 7,140 and 11,900 dwellings would be needed to support a new high school.
- 3.5. These levels of growth should be viewed as minima. In most circumstances, there will be competing high schools with some degree of capacity. These are likely to absorb some of the students generated by a new development. As an example 100 spare places would support about 800 dwellings (i.e. 715 fully contributing dwellings with the 10% allowance). In addition, a large scale mixed use development will take a number of years to build out and the significant investment in a secondary school will need to be made during the early or middle phases. While local evidence demonstrates that child yields tend to remain relatively constant over time, there is at least the potential for a maturing development to result in a reduced child yield particularly if phases of the development are specifically aimed at an ageing demographic. Consequently, the total number of dwellings should be

significantly in excess of 7,000 dwellings to ensure the ongoing viability of a new school and to reduce risk to public investment.

4. Conclusion

4.1. A target of 10,000 dwellings provides the scope to deliver a secondary school towards the minimum end of the preferred scale. While this level of development provides some degree of contingency it is quite limited and it is possible that the new school could be a little smaller. Any significant reduction in dwellings would result in a school very much smaller than the preferred model.

APPENDIX E – NORWICH HOUSING ALLOCATIONS IN RELATION TO THE JOINT CORE STRATEGY HOUSING REQUIREMENT

Author: Norwich City Council

Preface:

Contains an explanation of why the Norwich City Area does not have the capacity to accommodate development in excess of the levels already specified within the adopted Joint Core Strategy.

1. Summary of key points

- 1.1. The purpose of this appendix is to set out why the Joint Core Strategy (JCS) requires sites allocations to be made in Norwich to ensure at least 3,000 dwellings can be delivered and to explain why there is no scope for the redistribution of further growth to Norwich.
- 1.2. The JCS requires sites allocations to be made in Norwich to ensure at least 3,000 dwellings can be delivered based upon:
 - RSS and JCS requirements to both prioritise brownfield land development for housing and to retain and increase land for retail, leisure, tourism and employment uses to ensure these uses are focused in the most accessible location in the area and that Norwich retains its role as a major regional centre. The strategies promote accommodating these uses in mixed use developments with housing where possible, particularly in the city centre. This approach therefore maximises housing potential in the city as far as possible whilst supporting Norwich's regional role.
 - The evidence base on housing land availability has recently been confirmed by the emerging Site Allocations Plan. The plan will allocate sites for approximately 3,433 dwellings (see annex 1) at a minimum density of 40 dwellings per hectare, with higher densities in the city centre. These new housing allocations are in addition to the 5,592 either allocated through the City of Norwich Replacement Local Plan (adopted 2004) or with planning permission at the base date of the JCS in April 2008.
 - The need to retain green infrastructure in Norwich and to control development in environmentally sensitive areas such as protected areas around chemical works and in areas at high risk of flood.
- 1.3. Evidence from the emerging Norwich City Council Site Allocations Plan shows that the JCS requirement to allocate sites to accommodate 3,000 additional dwellings in Norwich remains appropriate. It is good practice to incorporate a small reserve in order to reduce the risk of non-delivery as a result of fallout, lower than assumed average densities or other such uncertainties. The proposed reserve, of approximately 400 dwellings, represents about 5% of the total housing target for Norwich of 8,592 homes by 2026. This figure is consistent with the 5 year supply buffer proposed by the National Planning Policy Framework (NPPF).
- 1.4. Therefore there is robust and up-to-date evidence that demonstrates that the requirement to make site allocations in Norwich to ensure at least 8,592 dwellings can be met within the plan period. Taking into account the need to maintain some degree of flexibility to account for non-delivery, there is no scope for further redistribution of housing

growth formerly identified for the Broadland part of the Norwich Policy Area (NPA) to Norwich.

2. Purpose and Background

Purpose

2.1. The purpose of this paper is to investigate whether there is any scope to increase the housing targets for Norwich as set out within the Joint Core Strategy (JCS). This is supporting evidence in the identification of "Reasonable alternatives" for sustainability appraisal testing to address the outcome of the recent High Court Judgment.

Background

- 2.2. JCS policies 4 requires a minimum of 33,000 dwellings be delivered within the NPA by 2026. Policy 9 requires the identification of new allocations to deliver a minimum of 21,000 homes within the NPA to meet the target set out in Policy 4. Of this 21,000, a minimum of 3,000 dwellings are to be delivered through the identification of new housing allocations in Norwich.
- 2.3. These new housing allocations are in addition to the 5,592 already committed in Norwich at the base date of the JCS in April 2008. This commitment comprised those sites allocated under the City of Norwich Replacement Local Plan (adopted 2004) and those with planning permission at the base date of the JCS in April 2008.
- 2.4. The housing numbers proposed for Norwich within the JCS take account of:
- the need to promote office, cultural, tourism and retail development in the city centre as a major regional centre (JCS policy 11);
- the need to protect specific parts of the city allocated for other uses such as employment areas (JCS policy 12 and emerging Development Management policies) and green infrastructure (JCS policy 1 and emerging Development Management policies) from inappropriate housing development;
- the need to regenerate deprived parts of the city (JCS policy 12) and other areas with growth potential, providing for high quality sustainable access to local employment and services;
- the evidence base for housing capacity in Norwich;
- the need to supply a variety of housing types and sizes to meet all needs. Whilst the majority of housing in the city will continue to be high density, often as part of mixed use development, there is also a need for family housing (JCS policies 4 and 11 emerging Development Management policies).

3. Policy context

3.1. JCS policies are based on the need to comply with the RSS and on a robust local evidence base.

RSS policy

- 3.2. A number of policies in the RSS set the context for housing requirements for Norwich:
- Policy SS4 identifies Norwich as a "Key centre for development and change";
- Policy SS6 of the RSS requires a definition of the role and the provision of a strategy for city centres;
- Policy SS5 establishes Norwich as a priority area for regeneration;
- Policy NR1 identifies Norwich as a regional focus for housing, employment, retail, leisure, cultural and education development and requires employment growth in the city centre, particularly for media and creative industries, finance and insurance and information communication technologies.

JCS policies

3.3. The strategy for Norwich city centre is set out in policy 11 of the JCS and for the rest of the city is in policy 12.

Policy 11 Norwich City Centre

- 3.4. The independent inspector who examined the JCS concurred that the promotion of a wide range of uses, including housing, within Norwich to support its role as a regional centre is appropriate. This approach, which complies with the RSS, was favoured ahead of a purely housing led strategy.
- 3.5. Therefore policy 11 requires a substantial growth in employment in the city centre as the most sustainably accessible location in the area to support its role as a regional centre. It also promotes the use of land in the city centre for retail, leisure, tourism, cultural and educational uses. The policy requires comprehensive redevelopment of the northern city centre, St Stephens and Rose Lane areas through mixed use development, with a particular focus on providing for new offices in the Rose Lane area.

Policy 12 The remainder of the Norwich urban area

3.6. Since RSS policy SS5 identifies Norwich as a priority area for regeneration, JCS policy 12 promotes regeneration of deprived suburban areas, including providing for local jobs and retaining existing employment areas.

4. Evidence

- 4.1. This section of the appendix examines whether there is any scope for increasing the housing targets as proposed by the JCS. This is done through the following two questions:
 - A. Has any evidence has emerged since the production of the JCS that indicates that it would be reasonable, within the requirements of the overall strategy, to reduce the amount of land identified for employment, retail or other purposes in Norwich in favour of increasing housing delivery?
 - B. Has any evidence emerged since the production of the JCS that indicates the capacity for housing in Norwich exceeds the JCS housing allocation targets?

A. Non-residential Land Uses

4.2. Retailing and Leisure

- 4.2.1. Based on the findings of the Retail and Town Centres Study, the JCS provides for 20,000 m² of comparison retail development in the city centre to 2016 through intensification of uses in existing retail areas and, if, necessary, the expansion of the existing Primary Retail Area. Mixed use development is promoted through both the emerging Development Management and Site Allocations Plans. A further assessment of retail need beyond 2016 will be made. Regional policy and the evidence base have also identified that a substantial amount of space is required for other service related uses, such as leisure and tourism. The study's recommendation that new café, bar and restaurant development of approximately 3,000m² is required is incorporated in text supporting JCS policy 11.
- 4.2.2. No further evidence has emerged which has brought into question the justification for these policies.

4.3. Employment

- 4.3.1. JCS policy for employment reflects the RSS definition of Norwich as "Key centre for development and change" and as a focus for regeneration. Its detail, and policies in the emerging Site Allocation and Development Management policies plans, is informed by robust evidence in "The Employment Growth and Sites and Premises Study."
- 4.3.2. This study concludes that:

- Offices: at least 100, 000 m² of high quality new offices will be required in the city centre and the wider central area by 2026, equating to a land take of around ten hectares. Retention of long term capacity will depend on the protection of some sites for offices against competing retail and housing uses.
- Employment Areas:. All sites are in active use, are largely occupied and have with low vacancy levels and there are no better alternatives. Employment sites therefore deserve strong policy protection and there is no case for the wholesale dedesignation of any of the existing employment sites for other uses. The study undertook a marketability assessment of employment sites, giving each site a score out of 5. This assessment gave the great majority of Norwich employment sites a score 3 or 4. The two exceptions in Norwich which scored lower were the Deal Ground and Utilities Site, which both scored 2. All sites in Broadland and South Norfolk scored 3 or 4.
- The Knowledge economy: innovative and creative industries rely on agglomeration and collaborative working and are likely to thrive in city centres.
- 4.3.3. More recent evidence from the "East of England Forecasting Model" indicates that Greater Norwich has an even greater jobs growth forecast than is reflected in the JCS. The evidence supporting the JCS indicated that an appropriate target was 1,500 new jobs per year. The more recent forecast suggests a higher figure of 1,830 new jobs per year will required. This further confirms the conclusion that as Norwich is a key driver of growth in the Norfolk and beyond, it is particularly important to ensure that sufficient sites are retained for jobs growth.

4.4. Offices

- 4.4.1. The employment study indicates there is now little demand for these poor quality offices. This conclusion, and the resultant JCS policy, is supported by recent market trends.
- 4.4.2. In order to achieve the required increase in high quality offices and to retain the mix of uses in, and the vitality and viability of the city centre, it is important that there is not a significant loss of poorer quality offices to housing.
- 4.4.3. Therefore the Site Allocations plan intends to allocate these sites for comprehensive mixed use redevelopment to include intensification of uses with both A grade offices and housing in these highly sustainably accessible city centre locations close to the bus and railway stations.

- 4.4.4. It is considered that a comprehensive redevelopment that intensified uses would be likely to provide the same number of dwellings as would be provided by a single use residential redevelopment.
- 4.4.5. Therefore, in effect, any additional housing which might otherwise be delivered through the redevelopment of poor quality offices is already accounted for in the Site Allocation plan as a result of the proposals for intensive mixed use developments on these sites. There is consequently little if any scope to increase the supply of housing through the redevelopment of offices.

4.5. Employment areas

- 4.5.1. The employment study recommended that the great majority of employment areas in Norwich be retained.
- 4.5.2. Consequently, JCS policies 5 and 12 and the emerging Development Management Plan therefore promote the protection of employment areas for employment and business uses. This will ensure employment opportunities remain accessible by sustainable modes of transport and promote regeneration of deprived parts of the city.
- 4.5.3. Further investigation of whether any employment sites should be reallocated for housing was undertaken through the Norwich Site Allocations Plan. As a result, the Site Allocations Plan proposes that a small number of current employment sites should be allocated for housing and mixed use development. However, so as not to undermine the availability of employment land in Norwich, it also allocates an addition 7hectares of employment land, resulting in only the limited net loss of 4 hectares.
- 4.5.4. Where re-allocation is proposed there are specific reasons for these decisions:
 - the Deal Ground (8.1 hectares) is reallocated for housing development in accordance with policy 12 of the JCS to support the regeneration of this area;
 - small parts of larger employment areas at Raynham Street (1ha) and Havers Road (2.25 ha) neighbouring housing areas are planned to be transferred from employment to housing allocations to enable improvements to the Dolphin Path, a currently unattractive pedestrian cycle link which is a key part of the strategic cycle network linking north and south Norwich.
 - It is not considered that any other employment sites are suitable for reallocation and thus there are no further opportunities for

housing development on existing or proposed employment land in Norwich.

4.6. The Knowledge Economy

- 4.6.1. A priority of the JCS, set out policies 5 and 11, is the promotion of the high value Knowledge Economy. This is to be achieved through mixed use development in the city centre, particularly in historic quarters.
- 4.6.2. This achievement of this priority is therefore also dependent upon the retention of land for a range of different uses within Norwich, particularly in the city centre.

4.7. Other uses

- 4.7.1. In order to protect the quality of life for residents and promote biodiversity, JCS policies 1, 11 and 12 support the retention and enhancement of green infrastructure in Norwich. This limits options for further increasing housing delivery in Norwich.
- 4.7.2. Controls on development in environmentally sensitive areas, such as protected areas around chemical works and in areas at high risk of flood, further limit options for increasing housing delivery.
- 4.7.3. Thus no evidence has emerged since the production of the JCS that indicates that it would be reasonable to reduce the amount of land identified for employment, retail or other purposes in Norwich in favour of increasing housing delivery.

B. Additional Housing Capacity

4.8. Recent housing development and existing plan allocations

- 4.8.1. Norwich experienced unprecedented housing development in the last decade, rising annually from 2001 and peaking at over 1000 dwellings in 2007/8. Since the onset of the recession in 2008, delivery has reduced to below 400 dwellings annually in 2009/10 and in 2010/11. In total, 6,787 dwellings were built in Norwich from 2001 to 2011, more than half of the dwellings built in the Norwich Policy Area (NPA).
- 4.8.2. Efficient use of land was made, average densities rising steadily through the last decade, peaking at 88 dwellings per hectare in 2007/8. Whilst there has been some greenfield development, notably at Three Score, Bowthorpe, nearly 90% of housing development in Norwich since 2001 has been on brownfield sites.

- 4.8.3. There have also been high rates of "windfall" development in recent years on housing sites not identified through plans. An average of 236 dwellings per year were developed, largely on small scale windfall sites, from 2001 to 2011, using up a significant proportion of the non allocated brownfield land in the city. The high rates can be attributed to strong market conditions up to 2008 and to the large number of social housing schemes developed on council owned land in recent years.
- 4.8.4. As a result of the rapid development in Norwich up to 2008 and continued, albeit significantly reduced housing delivery since the recession, there is a diminishing supply of land available for further housing development within the tightly bounded Norwich City Council area.

4.9. Evidence for future capacity

SHLAA and the Site Allocations Plan

- 4.9.1. The Strategic Housing Land Availability Assessment (SHLAA), undertaken in 2009, assessed housing capacity in Norwich. Its findings informed the JCS.
- 4.9.2. The study concluded that new sites could be allocated to provide for in the region of 3,242 additional dwellings in the city council area from 2008 to 2026. A slightly discounted figure of sites to accommodate 3,000 dwellings was used in the 2010 submission version of the JCS as it is considered unlikely that all sites identified in the SHLAA will come forward for housing development.
- 4.9.3. Current work for the Site Allocations Plan (which is due to be subject to pre-submission consultation August to October 2012) has broadly confirmed the findings of the SHLAA, identifying that sites could be allocated for approximately 3,400 dwellings in Norwich, slightly more than in the SHLAA. The Site Allocations figure is considered robust and credible as it is based on landowner's intentions, assessments of individual site capacities and sustainability and viability assessment.
- 4.9.4. The emerging Site Allocations plan housing sites thus meet the JCS requirement with a small reserve in order to reduce the risk of non-delivery as a result of fallout, lower than assumed average densities or other such uncertainties. The proposed reserve, of approximately 400 dwellings, represents about 5% of the total housing target for Norwich of 8,592 homes by 2026. This figure is consistent with the 5 year supply buffer proposed by the NPPF.
- 4.9.5. See annex 1 for more detail on these figures.

4.9.6. To meet the total housing requirement for Norwich, the JCS annual target for is 477 dwellings. Since the start of the JCS in April 2008, 1,303 dwellings have been delivered in the city, slightly below the target of 1431 for 2008-11.

4.10. Windfall housing

4.10.1. The National Planning Policy Framework (NPPF) states that:

"Local planning authorities may make an allowance for windfall sites in the five-year supply if they have compelling evidence that such sites have consistently become available in the local area and will continue to provide a reliable source of supply. Any allowance should be realistic having regard to the Strategic Housing Land Availability Assessment, historic windfall delivery rates and expected future trends, and should not include residential gardens".

- 4.10.2. It is anticipated that "windfall" delivery of housing on sites not allocated in plans is likely to continue in Norwich. However, delivery rates for such sites remain difficult to predict into the future and therefore to rely upon. Tentative analysis of the evidence suggests that the former high rate of windfall delivery is likely to reduce during the plan period due to:
- 4.10.3. a reduction in the number of windfall sites coming forward in the longer term as the supply of brownfield sites is increasingly used up both on council and privately owned land:.:
- 4.10.4. reduced average density resulting from a reduction in the development of flats and an increased emphasis on family housing;
- 4.10.5. recent changes in government policy reclassifying garden land as "green field" thereby reducing the amount of garden land likely to be considered suitable for redevelopment for housing.
- 4.10.6. It is not appropriate to increase the housing targets for Norwich to make an allowance for windfall development as:
- 4.10.7. The adopted JCS policy requirement is for new allocations to meet all of the 3,000 new housing requirement for Norwich:
- 4.10.8. There is no compelling evidence that windfall sites will continue to provide a reliable source of supply. It is not possible to

accurately predict likely future delivery rates beyond suggesting they are likely to diminish;

- 4.10.9. The requirement of 3,000 dwellings in Norwich in the JCS itself is a minimum and will assist in meeting any shortfall on targets from allocated sites throughout the area. Any additional development in Norwich, the most sustainable location in the GNDP area, would be beneficial as Norwich is the principal source of brownfield land in the area. Any windfall delivery in the city should therefore be seen in a GNDP wide context.
- 4.10.10. Thus no evidence has emerged since the production of the JCS that indicates the capacity for housing in Norwich exceeds the JCS housing allocation targets.

5. Conclusion

- 5.1. The strategy for Norwich is evidence based and represents the most sustainable approach to support housing development and to promote the regional function of the city centre and regeneration of deprived areas of the city.
- 5.2. Evidence from the emerging Site Allocations Plan demonstrates that the JCS requirement to allocate sites to accommodate 3,000 additional dwellings in Norwich is suitable. The Site Allocations plan is likely to provide a small reserve to provide for fallout and uncertainty of about 400, approximately 5% of total housing numbers for Norwich of 8,592.
- 5.3. Therefore there is a robust, current evidence base to demonstrate that the requirement to make site allocations in Norwich to ensure at least 3,000 dwellings can be delivered is reasonable. Thus there is no scope for the redistribution of further growth to Norwich.

Annex 1 Figures for Norwich housing allocations in relation to the Joint Core Strategy housing requirement

Introduction

The purpose of this annex and the associated tables is to show that the housing allocations in the emerging Norwich Site Allocations Plan meet the requirement for Norwich set out in the Joint Core Strategy (JCS) to allocate sites to accommodate a minimum of 3,000 dwellings and there is no scope for the redistribution of further growth to Norwich.

The 3,000 dwellings new allocations requirement for Norwich must provide additional dwellings to the 5,592 dwellings "current commitment" set out in the Housing Allocations table on page 37 of the JCS.

The current commitment figure consists of sites allocated in the City of Norwich Replacement Local Plan (RLP) adopted in 2004 and sites which had been granted planning permission prior to the base date for the Joint Core Strategy, April 1st 2008.

This appendix concludes that 3,443 dwellings will be new allocations through the emerging Site Allocations Plan, thus meeting the JCS 3,000 dwellings requirement with a small reserve to provide for fallout and uncertainty rounded down to 400, about 5% in relation to the total housing numbers for Norwich of 8,592.

Housing tables

Tables A to D (attached) list all the emerging Site Allocation Plan allocated housing sites (including undeveloped RLP allocations) in Norwich in different categories:

Table A: Newly allocated sites

Table A contains all sites to be newly allocated through the Site Allocations Plan. These sites accommodate a total of 2,328 dwellings, 2,279 of which contribute to the 3,000 requirement. There is a difference in the two figures of 49 dwellings (2,328 – 2,279) because a few sites involve demolishing of existing dwellings which are offset against the new allocation numbers.

Tables B & C: Sites with planning permission

Tables B and C contain all allocation sites with planning permissions.

The sites in table B do not contribute to the 3,000 additional dwellings as these represent existing commitment in 2008 for which planning permission was granted before the base date of the JCS of 1 April 2008.

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The sites in table C have planning permissions granted after 2008 and count towards the final 3,000 dwellings.

Some of the density assumptions for sites in the Site Allocations plan are different to those already granted planning permission, largely reflecting changed economic circumstances and according changes in the intentions of landowners for sites. It is therefore the emerging Site Allocation Plan housing allocation figures, rather than the number of dwellings that would be constructed if existing planning permissions were implemented, that contribute toward the JCS requirement.

Table D: Replacement Local Plan sites without planning permission

Table D shows the remaining sites allocated in the RLP and the Site Allocations plan that do not currently have planning permission. In general, these previous allocations do not contribute to the 3,000 requirement because they were counted among the current commitment 2008 sites in the JCS. However, since some of the density assumptions have been changed from the RLP, the differences in these assumptions affect the 3,000 requirement. As shown in the table, 280 dwellings in addition to the RLP allocations contribute towards the 3,000 requirement.

Conclusion

Adding the net contributions altogether, the sites currently reserve land for a total of 3,443 dwellings, rounded down to 3,400. This meets the JCS requirement to allocate sites for a minimum of 3,000 dwellings with a small reserve to provide for fallout and uncertainty.

Table A. Newly allocated sites

Site Ref: Reg.27	Site Ref: (Reg 25-2)	Site Name	Proposed use	LP Allocated dwellings	Permitted Units	Site allocation plan dwellings	Housing number contributing to 3000 requirement
CC09	H006	King Street Stores and adjacent land/buildings, King Street	Mixed use development - housing and leisure provision			25	25
CC11	M042	Land at Garden Street	Mixed use development - housing-led with small scale office and business units, and replacement public car parking			100	100
CC12	H052	Argyle Street	Housing development			12	-7
CC13	NOR0004	Land at Wherry Road	Housing development, however other uses may also be acceptable including office, leisure or hotel			65	65
CC15	NOR0031	Busseys Garage Site, Thorpe Road/Lower Clarence Road	Housing development			25	25
CC16	H054	Norwich Mail Centre, 13-17 Thorpe Road	Mixed use development - housing, office and on-site open space and play space			150	150
CC18	NOR0082	Former Hunters Squash Club, Edward Street	Housing development			20	20
CC20	H043	140-154 Oak Street	Housing development			10	10

CC22	NOR0065	Oak Street / Sussex Street commercial sites, 160-162 Oak Street	Housing development	15	15
CC24	M036	Barn Road Car Park	Mixed use development - retail use at ground floor level, housing, office and short stay car park	40	40
CC25	M061	Norfolk House, Exchange Street	Mixed use development - retail/ leisure/ office uses on ground floor and a mix of residential and offices on upper floors	20	20
CC27	M044	Land to rear of City Hall	Mixed use development - residential, office, leisure and/or limited retail provision	20	20
CC31	M012	St Stephens Towers, St Stephens Street	Comprehensive mixed use development - primarily retail development with office and residential uses on upper floors.	250	250
CC33	M023	Westlegate Tower	Mixed use development - primarily retail uses at ground floor level with residential units and offices on upper floors	30	30

CC34	M057	Land at Queens Road and Surrey Street	Mixed use development - office-led with element of residential development	40	40
CC35	H042	Westwick Street Car Park	Housing development	30	30
R02	H005	Norfolk Learning Difficulties Centre, Ipswich Road, Norwich	Housing with care scheme and/or community facilities; or housing development	30	0
R04	NOR0137	Hewitt Yard, Hall Road	Housing development	20	20
R06	M007	Former Lakenham Sports & Leisure Centre, Cricket Ground Road	Housing development with public open space or allotment provision.	65	65
R08	H009	John Youngs Ltd, 24 City Road, Norwich	Housing development	45	45
R09	NOR0026	Aviva Car Park, Brazen Gate/Southwell Road	Housing development	70	70
R10	M006	Deal Ground and May Gurney Sites	Mixed use development - residential-led	 600	600
R11	M014	Utilities Site, Norwich	Mixed use development - housing, employment and power regeneration from renewable sources	100	100

R13	M039	Aylsham Road District Centre	Mixed use development - housing and starter employment units	75	75
R14	NOR0099	Chalk Hill Works, Rosary Road	Housing development	25	25
R15	H029b	Gas Holder at Gas Hill	Housing development	15	15
R19	NOR0093	Van Dal Shoes and garage courts	Housing development	25	25
R24	NOR0043	165-187 Aylsham Road	Mixed use development - housing and starter/small employment units	20	20
R25	H007	Former Pupil Referal Unit, Aylsham Road	Housing development	11	11
R28	E003	Site north of Raynham Street	Housing development	40	40
R33	E005	Heigham Water Treatment Works, Waterworks Road	Mixed use development - housing with small industrial/ business units	150	150
R38	NOR0045	Industrial Sites, Havers Road	Housing development	100	100
R39	M049	Mile Cross Depot	Mixed use development - housing and small business workshop units	75	75
R46	H047	Land at Pointers Field	Housing development	10	10
				2328	2279

Table B. Sites (or part of site) with Planning permissions granted before 1 April 2008

Site ref Reg 27	Site Ref (Reg 25-2)	Site Name	Proposed use	LP Allocated dwellings	Permitted Units	Site allocation plan dwellings	Housing number contributing to 3000 requirement
CC07	M015	St Annes Wharf Site, King Street	Comprehensive mixed use development - residential and offices with culture, leisure and/or food and drink, hotel and tourist uses	155	437	300	-100
CC10	NOR0016	144-162 King Street	Mixed use development - housing with small scale ground floor retail uses		34	15	-7
CC17	M020	Land adjoining Norwich City Football Club, Kerrison Road	Mixed use development - residential, leisure, community, office and ancillary small retail uses	120	280	400	120
CC19a	n/a	Barrack Street	Comprehensive mixed use development - office (with ancillary retail), housing, hotel and public open space and playspace provision	25	200	200	0
R16	H029	Land east Bishop Bridge Road	Housing development	45	24	50	5
R26	H027	Land adjoining Lime Kiln Mews, Drayton Road	Housing development	25	33	15	-18
R36	NOR0124	Site of former Earl of Leicester PH, 238a Dereham Rd	Housing development		12	12	0
							0

Table C. Sites (or part of site) with Planning permissions granted after 1 April 2008

Site ref Reg 27	Site Ref (Reg 25-2)	Site Name	Proposed use	LP Allocated dwellings	Permitted Units	Site allocation plan dwellings	Housing number contributing to 3000 requirement
CC02	H034	84-110 Ber Street	Housing development with possible ancillary office provision	25	151	120	95
CC03	H034a	147-153 Ber Street	Housing development; However, commercial, offices and/or educational use may also be acceptable			20	20
CC04	M034	10-24 Ber Street	Mixed use development with ground floor retail/office and residential uses on upper floors	30	14	30	0
CC06	M026	Greyfriars Road/ Rose Lane	Mixed use development - housing with small scale office/retail uses	24	24	20	-4
CC08	M017	Land at Hobrough Lane	Mixed use development - residential with small scale retail and/or offices, food and drink, and tourist uses.	inc. M015	25	20	20
CC21	NOR0067	Furniture store, 70-72 Sussex Street	Housing development		17	15	15

CC23	M018	Dukes Court (former EEB Offices), Duke Street	Mixed use development - offices and potentially residential units, small scale retail, food/drink uses and professional services. Hotel use may also be acceptable.	70	16	30	-40
CC28	M035	Fire Station, Bethel Street	Mixed use development through conversion - housing and town centre/other commercial uses.		14	15	15
R03	M038	Hall Road District Centre	Comprehensive mixed use development - a new district centre with an anchor food store and a minimum of 6 other units in A1, A2, A3 or A5 uses; employment uses and community uses.		231	0	0
R07	H039	Rear of 138A Hall Road	Housing development	10	8	10	0
R12	E015	Kerrison Road / Hardy Road Gothic Works	Mixed use development - housing-led with potential to include provision of small- scale employment and river- related leisure uses.		52	400	400
R18	NOR0092	124-128 Barrack Street	Housing development and possible community uses		15	15	0

R22	NOR0062	Industrial sites, Starling Road	Housing development		33	45	45
R23	M039	Aylsham Road District Centre & adjacent land	Mixed use development - housing with retail provision on the street frontage		88	100	100
R37	NOR0143	Land adjacent to and including 349a and 349b Dereham Road	Housing development		24	24	18
R41	M041	Three Score Bowthorpe (site with resolution to grant)	Housing development with associated community facilities, recreational and informal open space.	1000	1200	1200	200
							884

Table D. Remaining Replacement Local Plan allocations (without planning permissions)

Site ref Reg 27	Site Ref (Reg 25-2)	Site Name	Proposed use	LP Allocated Units	Permitted Units	Site allocation plan dwellings	Housing number contributing to 3000 requirement
CC01	H013(M)	60-70 Ber Street	Mixed use development with ground floor retail and/or office	15		20	5
CC05	M022	Land at Rose Lane and Mountergate	Mixed use development - office-led with residential, include small scale retail/leisure and some replacement car parking	100		300	200
CC14	H035	Land at Lower Clarence Road	Housing development	45		45	0
CC26	M047	Pottergate car park	Mixed use development - mainly housing, small scale office or retail uses at ground level fronting Pottergate	0		20	20
R17	H029a	Land at Ketts Hill / Bishop Bridge Road	Housing development	30		30	0
R20	H031	Start Rite Factory, Mousehold Lane	Housing development	35		40	5
R21	M019	Land at Anthony Drive / Sprowston Road	Mixed use development - retail food store and housing	40		25	-15
R27	H037	81-93 Drayton Road	Housing development	25		30	5
R29	H032	Land at Goldsmith Street	Housing development	45		100	55
R30	H041	231-243 Heigham	Housing development	25		25	0

Appendix E – Norwich Housing Allocations in Relation to the Joint Core Strategy Housing requirement Author: Norwich City Council

		Street					
R35	H040	120-130 Northumberland Street	Housing development	30		30	0
R40	H033	Norwich Community Hospital site, Bowthorpe Road	Housing development	75		80	5
				1	•		280

Contributing to 3000
3243

APPENDIX F -THE POTENTIAL ALLOCATION OF LAND IN THE SOUTH NORWICH DISTRICT PART OF THE NORWICH POLICY AREA (NPA) TO ACCOMMODATE THE 1800 DWELLINGS SMALLER SITES ALLOWANCE

Author: South Norfolk District Council

Preface:

This appendix contains an explanation of how South Norfolk expects to deliver the 1,800 homes Small Sites Allowance as set out within the adopted Joint Core Strategy. It also explains why there is no scope to increase the Small Sites Allowance within South Norfolk beyond the 1,800 set out within the adopted Joint Core Strategy.

1. Introduction

- 1.1. JCS Policy 9 provides for the allocation of smaller sites to accommodate an allowance for 1800 homes in the NPA within South Norfolk district. This allowance is to be made in accordance with the JCS defined Settlement Hierarchy and environmental considerations, and can be provided for as smaller sites and possible additions to named growth locations.
- 1.2. South Norfolk Council has designated its preferred options for development sites in the South Norfolk Site Specific Allocations and Policies Development Plan Document. The section of the plan proposing preferred site options within the NPA was approved by the South Norfolk Cabinet on 11 June 2012 as a basis for public consultation between 3 September and 26 October 2012.

2. Potential site locations

- 2.1. The named major growth locations are Easton/Costessey, Cringleford, Hethersett, Long Stratton and Wymondham, but the choice of named growth locations for the potential addition of a small sites allowance has been reduced to Easton/Costessey and Hethersett. This is because Cringleford is the subject of the production of a neighbourhood development plan by Cringleford Parish Council, which has indicated that it will provide for the minimum JCS total housing provision of 1200 dwellings; Long Stratton is to provide for 1800 dwellings through a separate Area Action Plan, but further growth is limited by waste water disposal constraints, while Wymondham is to provide for 2200 dwellings through a separate Area Action Plan too. Further growth in Wymondham is constrained by limitations on the expansion of high school places which could only be resolved by providing overall for a significantly higher level of large scale strategic housing growth.
- 2.2. The remaining places in the South Norfolk NPA settlement hierarchy that provide potential locations for smaller sites (excluding places that also fall within the named growth locations) are:
 - Norwich Fringe parishes (2): Colney, Trowse
 - Key Service Centres (1): Poringland/Framingham Earl
 - Service Villages (9): Bramerton, Mulbarton/Bracon Ash, Newton Flotman, Stoke Holy Cross, Surlingham, Spooner Row, Swardeston, Tacolneston/Forncett End and Tasburgh.
 - Other Villages (9): Bawburgh, Caistor St Edmund, Colton, Flordon, Great Melton, Keswick, Ketteringham, Marlingford and Swainsthorpe.
- 2.3. Evidence available after the adoption of the JCS showed that the provision of services in Caistor St Edmund and Great Melton were not

to the standard required at the time of their designation as "Other Villages". Those villages were therefore discounted as potential locations for the smaller sites allowance as provided for by JCS Policy 16.

2.4. The result has been 21 locations for the potential accommodation of the smaller sites allowance.

3. The assessment of sites

3.1. The preferred development allocation options have been based on the assessment of development sites suggested by landowners, developers and agents using a set of 38 assessment criteria that have been subjected to sustainability appraisal. The assessment starting point was the JCS settlement hierarchy supplemented by criteria covering existing land use policy impacts, brownfield/ greenfield status, agricultural land quality, landscape, townscape and historic environment designations, current land use, ecology and biodiversity designations, the presence of contamination or pollution, flood risk, hazardous zones, public transport access, utilities availability, services accessibility, and other material considerations. The latter included the degree to which sites had been promoted by landowners, plus potential constraints and the local highways authority's views. The protection of employment land was also considered in accordance with JCS Policy 5.

4. The Results

- 4.1. The assessment of suggested sites has provided for some 1810 dwellings on smaller sites in 15 of the 21 potential locations as shown in Appendix 1. Of the total allowance, some 10% had received planning permission since the JCS base date of 1/4/08, 35% is proposed as additions to the named growth locations, and 55% proposed in a Norwich Fringe location, Key Service Centre and a variety of other villages.
- 4.2. While a sites assessment would be expected to produce preferred site options for allocation plus reasonable alternatives, the assessment has resulted in the proposed allocation of all of the best performing potential smaller sites. This reflects the need to meet the additional development requirements above that of the average JCS housing provisions for each category of settlement and the limited number of NPA locations shown in Appendix 1.
- 4.3. The preferred options for the proposed allocations are indicative at this stage. The preferred options public consultation will also require the owners of the proposed development allocations to confirm the viability of their sites' development. Some sites may prove to be

Appendix F– The Potential Allocation of Land in the South Norfolk District Part of the Norwich Policy Area (NPA) to Accommodate the 1800 Dwellings Smaller Sites Allowance. Author: South Norfolk District Council

undeliverable for a variety of reasons despite their favourable assessment to date.

5. Conclusion

5.1. All available reasonable sites have been proposed for housing development to meet the additional provisions of the smaller sites allowance in the South Norfolk share of the NPA. The proposals reflect the environmental, services and infrastructure capacities of the limited number of selected settlements to accommodate that growth. If some of the proposed sites are shown to be undeliverable following public consultation, other solutions may require consideration such as increasing development densities to accommodate the overall requirement. Overall the evidence to date suggests that there is no potential to accommodate an increased smaller sites allowance within the South Norfolk part of the NPA.

South Norfolk NPA: Preferred Options for the 1800 dwellings "smaller sites" housing development allowance

Locations of the 1800 homes smaller sites allowance		JCS total housing
Settlements	Proposed Allocation (Total dwellings)	provisions
GROWTH LOCATIONS (additional provision)		
Costessey/Easton	400	Minimum 1000 dwellings
Hethersett	226	Minimum 1000 dwellings
NORWICH FRINGE		
Trowse	250	No stated provisions
Colney	0	No stated provisions
KEY SERVICE CENTRE		
Poringland/Framingham Earl	320	100 – 200 dwellings
SERVICE VILLAGES		10 – 20 dwellings each
Bramerton	20	
Little Melton	50	
Mulbarton & Bracon Ash	170	
Newton Flotman	30	
Spooner Row	15	
Stoke Holy Cross	75	
Surlingham	10	
Swardeston	30	
Tasburgh	20	
OTHER VILLAGES		Infill or small groups
Bawburgh	5	
Colton	0	
Flordon	0	
Keswick	10	
Ketteringham	0	
Marlingford	0	
Swainsthorpe	0	
Permitted since base		
date in above locations	179	

Appendix F– The Potential Allocation of Land in the South Norfolk District Part of the Norwich Policy Area (NPA) to Accommodate the 1800 Dwellings Smaller Sites Allowance. Author: South Norfolk District Council

TOTAL	1810	
IUIAL	1010	

APPENDIX G: ASSESSMENT OF DISPERSAL OPTIONS

Author: URS based on GNDP information. Schools data supplied by GNDP

Preface:

Contains an explanation of the impact of possible dispersal options within the Broadland Norwich Policy Area.

1.1 Even dispersal

1.1.1 This approach would not represent a sustainable approach to accommodating the scale of development needed. In particular, it would make it extremely difficult to provide jobs and services in locations where people can access these and, as a consequence is likely to lead to a large amount of additional travel. The dispersed nature of the approach would make it extremely difficult to focus investment on much needed infrastructure. In particular, without public transport improvements, a high proportion of journeys would likely be made by car adding to congestion and pressure for road improvements. The approach is not therefore supported

1.2 Dispersal based on a minimum of 1000 dwellings

1.2.1 This approach would avoid some of the worst effects of extreme dispersal in that a higher proportion of new residents are likely to be within easy reach of a range of services. Importantly, 1000 new homes would support the provision of a new primary school and overcome one of the earliest infrastructure capacity thresholds generally encountered with new housing developments. principal difficulty with this approach lies in providing for high order services such as secondary education and health care facilities. Similarly, traffic would be likely to be dispersed among a number of radial routes into Norwich, limiting the potential for focusing investment to bring about major improvements in public transport. In reality, this approach represents locating small-scale strategic growth in nine of the 17 settlements within the Broadland NPA, which would, in all probability, mean development in the majority of the potential sectors assessed later in this document. It was apparent from the examination that strategic-scale growth presents problems in many of them. The approach is therefore not supported.

1.3 Distributing growth in proportion to current population of parish

- 1.3.1 This approach again avoids the worst effects of dispersal, but would focus growth where it has taken place in the past, without regard to comparative levels of services. It would be likely to lead to extreme difficulties in providing for secondary education. Furthermore, not all development in the past has been accompanied by employment opportunities, and it would be likely to lead to many residents not being located where there is a choice of strategic employment locations. Since the parishes with large populations are located in a number of areas, it would also make it more difficult to focus public transport investment and, equally critically, is likely to promote pressure for widespread road improvements where finance is unlikely to be available.
- In many ways the scenario represents something of a halfway house between dispersal and the strategic direction which the JCS adopted in March 2011 sought to achieve, but with the growth directed according to past decisions rather than a rational judgement based on current understanding. It is important to note that, under this scenario, the NEGT parishes of Thorpe, Sprowston, Old Catton, Great and Little Plumstead, Rackheath, Salhouse and Beeston St Andrew would accommodate 4539 new dwellings, or 64% of the 7000 which were located there in the remitted part of the JCS.

1.4 Dispersal based on analysis of local infrastructure capacity and constraints

1.4.1 This approach involves an analysis of local infrastructure capacity and constraints on a settlement-by-settlement basis. This would assist in identifying those settlements with the capacity to accommodate new development and indicate how much could reasonably be supported.

- Because this is a practical, rather than a theoretical approach to dispersing development, it is difficult to analyse against the JCS objectives, because the approach is predicated on identifying physical capacity for new development irrespective of all other objectives (e.g. climate change or landscape objectives). Therefore this approach involves an assessment of existing spare capacity available to accommodate some or the entire 9000 dwelling requirement.
- 1.4.3 The lack of infrastructure capacities at locations can impose limitations on the scale of new development that could be reasonably accommodated without over burdening existing infrastructure and impacting on the quality of life for existing communities. Infrastructure constraints can relate to social infrastructure (e.g. primary and secondary education or local GP capacity), physical infrastructure (e.g. transport, water supply and waste water disposal) and green infrastructure (e.g. public open space).
- 1.4.4 This approach to distributing development is based on there being sufficient existing capacity across all these types of infrastructure (on the assumption that small scale dispersal is unlikely to deliver significant additional infrastructure capacity). For the purposes of this assessment, it is assumed that places can accommodate development until a first critical threshold is breached.
- 1.4.5 Many of these thresholds are difficult to establish in clear quantifiable terms. However, data is available in relation to school capacity which allows us to consider different places capacity to accommodate development. If we take school places as the starting point for our analysis, should this indicate available capacity to absorb a significant proportion of the 9000 dwelling requirement, it would support analysis of other infrastructure capacities.
- Norfolk County Council has provided information on existing school capacity for the assessment. Spare capacity has been calculated from the current capacity of buildings, and the numbers enrolled at each school with catchments within or including the Broadland part of the NPA. The County Council does prepare forecasts, but these are based on the assumed distribution and timing of future development; however for this assessment this could be seen to prejudge the outcome. Therefore the current position has been used. It is acknowledged that this represents only a snapshot in time, and future demographics and already committed developments will alter the picture to some degree. Furthermore, spare capacity measured in this way is a crude estimate only; it can be influenced, for example, by abnormally large or small cohorts in a particular year group. However, as a broad assessment of potential it is considered to be the most reliable approach.
- 1.4.7 The results of the analysis of school capacities are set out in Appendix B. This indicates, firstly, that there is insufficient capacity to justify a policy of dispersal of the entire 9000 requirement based on utilisation of existing capacity. Secondly, the analysis indicates there is existing spare capacity for about 1600 dwellings indicating that there is scope for some dispersal at a non-strategic scale to take advantage of existing spare capacity.
- 1.4.8 It should be noted that the factors used for converting school capacity to dwelling equivalent are based on the provision of family housing, and it is reasonable to expect that this capacity could accommodate a greater number of dwellings (perhaps 10% more) depending on the amount of flatted development, or development designed specifically for older people included in the overall housing provision figure.
- 1.4.9 The above analysis focused on infrastructure capacity specifically in relation to the availability of school places. In order to provide further validation of the findings, we could also, in theory, examine the existence of other quantifiable

capacities within the Broadland part of the NPA. In practice, however, since development cannot reasonably be accommodated once a first critical threshold is breached, in this case school places, any additional quantitative analysis of capacities with respect to other services could not logically increase the overall figure of 1600 (plus the allowance for non-family housing, see above). For this reason, further investigation of quantitative capacities for other services has been judged disproportionate.

- 1.4.10 Although further investigation of quantitative capacities is not justified, an analysis of existing service provision within the 17 parishes of the Broadland part of the NPA indicates that the majority of parishes have a reasonable level of service provision. For example, of the 15 parishes with a primary school, 12 also have a food shop, village hall, public house, outdoor recreation facilities, GP provision and a 'journey to work' public transport service. This leads to the conclusion that a modest level of non-strategic, small-scale growth forms a legitimate part of a distribution strategy for the 9,000 dwellings to be accommodated.
- 1.4.11 In summary, the analysis set out above demonstrates that there is insufficient existing schools capacity for 9,000 new homes; new schools would therefore need to be built and school building requires a certain scale of development (1,000 for a primary school and at least 7,000 for a secondary school). The option of dispersing a total of 9,000 new homes based on the analysis of local infrastructure capacity and constraints is not therefore considered a reasonable alternative for testing through the SA process. However, the analysis does indicate that a more limited number of new homes (1760 i.e. 1600 plus 10%) could be dispersed without overburdening the existing schools network; this provides a justification for setting aside a portion of the 9,000 new homes for dispersal within the Broadland part of the NPA and this is further explored below.

Assessment Tables

Green	No significant constraint and/or positive opportunity for development					
Amber	Uncertainty or some constraint to development and/or limited potential negative impacts					
Red	Significant constraint to development and/or negative impact					
Grey	Applies equally to all locations					

Even dispersal of 9000 dwellings across the Broadland part of the Norwich policy area

Traditionally, the Broadland NPA has had 16 parishes, although in the JCS as adopted in March 2011, this was increased to 17 by the addition

	ribution of 9000 dwellings in each would therefore result in between 530 to 560 dwellings in each parish.
Objective 1 Climate change	This scale of development in each parish would be likely to increase average distances to strategic employment locations most of which are located in the urban fringe, or city centre. it would be unlikely to lead to any significant public transport improvements, meaning that a higher proportion of journeys would have to be made by the private car.
	 Much of the area is served by Whitlingham sewage treatment works, and subject to very local sewer capacity issues, sewage treatment will not be an issue in most cases. There may be some local capacity issues in the sewerage network, and there will be some areas served by small local treatment works where this scale of development may prove problematic (for example Rackheath sewage treatment works would be unlikely to cope with such flows)
	At this scale, there would be very limited scope for other than small scale sustainable energy generation although any concentrated development of the scale would need to demonstrate that it had maximized the opportunities available, to comply with policy three of the JCS.
Objective 2 Housing land in sustainable location	This approach would locate equal amounts of development in places without regard to their sustainability credentials.

Objective 3 Economic growth	This scale of development in each parish would be likely to increase average distances to strategic employment locations most of which are located in the urban fringe, or city centre. it would be unlikely to lead to any significant public transport improvements, meaning that a higher proportion of journeys would have to be made by the private car. Some local employment would be supported by the local population growth, but this would be less effective than if new growth were directed to locations where employment opportunities were in close proximity.
Objective 4 Regeneration	Much development would take place on green fields. This approach would enable some opportunities to be taken where they arise in such locations.
Objective 5 Education	This would cause great difficulties for primary schools. Typically, a new 210 place primary school would require 800 dwellings to support it. This level of growth would not justify a new school in any individual location, although it is apparent that it would have a major impact on many schools. In practice, in larger settlements, particularly the urban fringe individual parishes may have more than one primary school, where the impact may be less dramatic. However, even where there are for example three schools, an additional 180 or so dwellings to be served by each would be likely to have a major impact (typically 45 pupils aged 5 – 11). The pupil impact of 530 dwellings on a single village school would be typically about 132 pupils (about 25 pupil's per 100 dwellings). This is larger than the school capacity of smaller schools such as Saint Faiths or Hemblington (119 and 127 respectively). Overall in the Broadland part of the Norwich policy area there are about 21 primary schools (counting infants and juniors as one) and on average each would be expected to serve another 400+ houses. It is thus inconceivable that a strategy of spreading growth evenly would not cause problems in a number of locations, but would lack the critical mass to resolve them. As this dispersed approach would not support improvements to sustainable transport, it would not facilitate access to tertiary education within Norwich for many of the residents.
Objective 6 Access to services	 This approach would locate equal amounts of development in places without regard to their sustainability credentials, in particular the availability of local services. It would not differentiate, for example between those places with primary health facilities or a village shop, and those without. A significant proportion of new development would therefore likely to be located in places with only a limited range of services.

Objective 7 Transport and need to travel	The best public transport services tend to focus on the urban area, with some on major radial roads. Where development is in one of these localities, residents would benefit from such services, but the quantum of development on any one corridor would be unlikely to justify improvements. Equally a number of future residents it would find themselves in areas with very limited public transport connections. A widely dispersed pattern of growth would be likely to give rise to pressure for many local road improvements, with many residents served by minor rural roads.
Objective 8 Character	The scale of growth implied would be very small in relation to some localities, but typically 530 houses might give rise to the local population growth of just over 1150 residents per parish (at an average household size of 2.2 per dwelling). This would represent more than a 25% increase for 9 out of the Norwich policy area parishes. This would clearly have a major impact on the form and character of these villages
Objective 9 Environmental protection	It is impossible to be precise about the impact of this scale of development spread across the Broadland NPA, but it may be possible to avoid most environmental constraints. Conversely, such a dispersed approach would be unlikely to assist in the delivery of strategic green infrastructure.
Objective 10 Community safety	This is likely to be largely a matter of detailed design.
Objective 11 Healthy lifestyles	 This approach would not have regard to the presence of primary health care facilities when locating development, and would therefore mean such facilities were less assessible on foot or by cycle. There would be good access to countryside, but not necessarily to the specific recreational facilities such as country parks etc

Minimum allocation of 1000 in any one location

This number has been chosen because it is likely to support the creation of a new primary school. This would therefore presuppose finding at least eight locations for this scale of growth on average, if up to 1000 dwellings were left as a "small sites allowance". Note that this scale of the development has otherwise been regarded as small scale strategic. Because the sectors used for judging strategic scale growth are five in number, each is likely to contain an average of three or four parishes. Thus this approach is similar to medium scale strategic growth in each location. The suitability of each sector for this scale of growth has been assessed and is reported later in this sustainability appraisal report

Objective 1 Climate change	This approach would see approximately half the parishes in the Broadland part of the NPA having to accommodate a scale of growth which as otherwise been regarded as small scale strategic. It remains unlikely that there would be a sufficient concentration of development on any specific corridor to promote significant public transport priority, and therefore it is unlikely that many of the new dwellings would benefit from sustainable transport to a choice of strategic employment locations. It is also unlikely that, at this scale, any individual location would be able to support the creation of new higher order facilities such as primary health care, and incremental expansion of existing facilities would be needed wherever this is feasible. While not as extreme as even dispersal, for the reasons mentioned under the "economic growth" heading, this approach would be likely to result in longer journeys to work than a more focused distribution of housing. Depending on locations, it would be likely to lead to local pressure on existing utilities, such as sewer capacities.
Objective 2 Housing land in sustainable location	The potential to create primary schools would add to sustainability, compared with extreme dispersal, but the limited abilities to support significant public transport improvements or hierarchy facilities would limit the ability to dramatically change the sustainability credentials of the chosen locations. Undoubtedly, some locations already with a strong claim to sustainability would accommodate new dwellings, but a lower proportion would be in such places compared with a positive strategy is to direct growth to them.
Objective 3 Economic growth	Some local employment would be supported by the local population growth, but this would be less effective than if new growth were directed to locations where employment opportunities were in close proximity. It is very difficult to bring about the creation of new employment areas (experience at Thorpe Marriott – about 2700 dwellings) confirms this when an allocation made as part of a local plan remained undeveloped and was eventually successfully challenged. This suggests that at the scale under consideration, new employment would be unlikely to follow the distribution of housing, leaving more people with a longer journey-to-work, compared to the strategy of directing

	housing to locations close to strategic employment opportunities.
Objective 4 Regeneration	Much development would take place on green fields. This approach would enable some opportunities to be taken where they arise in such locations.
Objective 5 Education	If a primary school were provided by the development at each location, it would mean convenient access could be arranged to it. however, this approach would be likely to impact in a fairly even way on the existing high schools, with an average of 1286 dwellings (9000 including the potential small sites allowance / 7 (Taverham, Hellesdon, Sewell Park College, Open Academy, Sprowston, Thorpe St Andrew, Broadland High in Hoveton all potentially serve parts of the Broadland NPA, even though some are in neighbouring areas). At an assumed rate of 14 students aged 12 – 16 per 100 dwellings, this would imply an average for each school of 180 new students, excluding sixth form. While some may be able to cope with this level of growth, not all would, with the likely consequence being overcrowding or lengthy journeys to school. No single location would be able to justify a new secondary school, and even if it were possible to pool developer contributions, no location for the new secondary school would adequately serve such dispersed population. As this dispersed approach would not support improvements to sustainable transport, it would not facilitate access to
Objective 6 Access to	tertiary education within Norwich for many of the residents. The ability to provide new primary schools would assist, and on the assumption that the reduced number of locations to be identified (compared with the even dispersal option) this would be likely to result in a better pattern of access to
services	services.
Objective 7 Transport and need to travel	It remains unlikely that there would be a sufficient concentration of development on any specific corridor to promote significant public transport priority, and therefore it is unlikely that many of the new dwellings would benefit from sustainable transport to a choice of strategic employment locations. A relatively dispersed pattern would be likely to give rise to pressure for many local road improvements
Objective 8 Character	Compared with the even dispersal option, many villages would see less impact on form and character. Equally, however those which did need to accommodate the high level of growth at any given locality in this option would notice a significant impact on the character 1000 houses would be likely to give rise to about 2200 additional people in the locality on average. Assuming that

	development where accommodated in the largest parishes in the Broadland NPA, out of the eight largest, four would experience a growth in population more than 25%.
Objective 9 Environmental protection	 It is impossible to be precise about the impact of this scale of development spread across the larger parishes of the NPA, but it may be possible to avoid most environmental constraints. However, at the level of an individual location, this might become more difficult given the larger scale to be accommodated, compared with extreme dispersal unless locations were selected according to environmental criteria rather than the economic and social aspects of sustainability. Conversely, such a dispersed approach would be unlikely to assist in the delivery of strategic green infrastructure in particular, because this would still be a relatively fragmented approach.
Objective 10 Community safety	This is likely to be largely a matter of detailed design.
Objective 11 Healthy lifestyles	This approach would not have regard to the presence of primary health care facilities when locating development if locations were selected largely on environmental grounds to avoid infringing environmental constraints, and would therefore mean such facilities were less assessible on foot or by cycle. This could be modified if the social aspect of sustainability was given greater weight, but potentially at the cost of environmental considerations There would be good access to countryside, but not necessarily to the specific recreational facilities such as country parks etc

New housing distributed in proportion to existing parish population

This option is not true dispersal, but reflects the existing concentrations of population as reflected by parish size. The table below the assessment shows the Norfolk County Council 2008 population estimate (controlled to ONS totals) for each parish in the Broadland NPA, and the share of the total population. The right hand column shows the 9000 dwellings to be accommodated in the Broadland NPA distributed according to the population proportions Objective 1 This distribution is more likely to facilitate public transport priorities in that the larger places are likely to be better Climate change served by buses, and a higher proportion of the new population will be able to access this. Similarly, the range of services and facilities already present is likely to be greater. This pattern would involve significant development in urban fringe parishes, and would necessitate significant sewerage improvements, probably in the form of an extensive intercept sewer extending around the urban fringe to deal with current limitations in parts of the north west. Objective 2 If past growth has been located sustainably, this would imply that such a distribution has a better chance of resulting Housing land in in sustainable outcomes than a more widely dispersed approach. However it is apparent that 7 locations would need sustainable to accommodate in excess of between 250 and 800 dwellings which would imply significant pressure on local location primary schools without the critical mass to support a new one. No individual parish would support levels of growth likely to support higher order facilities such as primary health care (although in two instances. Sprowston and Thorpe St Andrew and Taverham/Drayton/Hellesdon, groups of adjacent parishes would be supporting 3000 new dwellings, which may help the prospect of significant new facilities. Given the size of urban fringe parishes, the proportion to be accommodated here would be likely to promote relatively sustainable access to a choice of strategic employment locations Objective 3 Given the size of urban fringe parishes, the proportion to be accommodated here would be likely to promote Economic growth relatively sustainable access to a choice of strategic employment locations. there would nevertheless be significant levels of development in some places which do not have major concentrations of employment (Blofield, Spixworth for example) Objective 4 Much development would take place on green fields. This approach would enable some opportunities to be taken Regeneration where they arise in such locations

Objective 5 Education	The difficulty inherent in this approach with primary schools has been touched on under the heading of "housing land in sustainable location". The problem is more acute with high schools, where the distribution has no regard to existing capacities, but there is no sufficient concentration to justify a new school, nor a location where such a School could serve a significant proportion of the new population. A comparison of the high school capacities serving the Broadland part of the NPA and the implied number of dwellings in each from the following tables demonstrates that non of the high schools serving the area has current capacity to accommodate the implied numbers of houses in their respective catchments.
Objective 6 Access to services	The difficulty of access to secondary schools has been touched on above. A similar, but lesser problem applies to primary schools, as discussed under the heading "education". It is likely that larger settlements currently enjoy a better range of services, although some villages have grown in the past without enjoying commensurate growth in services (for example Horsford or Spixworth) This could mean that future growth is assigned according to where past growth has occurred, rather than where services are available, or could be made available.
Objective 7 Transport and need to travel	It is probable that large places, such as the urban fringe is already reasonably well provided for by public transport, but the additional traffic would be spread around a large number of corridors which may dissipate investment improvements. significant amounts of new development would nevertheless focus on places with a lower level of service such as Horsford, Brundall and Blofield and "the these places is unlikely to lead to significant improvements. Furthermore, the last two would be likely to add significant local traffic to the trunk road A 47, an outcome not likely to be favored by the Highways Agency. If this approach did not result in significant public transport improvements it may well lead to significant increases in car based commuting.
Objective 8 Character	Implicitly, all places would experience a similar proportionate level of growth of around 24%. While this could be seen as eqitable, it would also mean that the character of all localities was changed to a degree. the approach outlined is essentially theoretical, and it is quite likely that in the case of some parishes (Old Catton, Thorpe St Andrew for example) the area available is so constraints that it may not be possible to find sufficient sites in the parish in question which do not affect the character, or environmental assets.
Objective 9 Environmental protection	It is impossible to be precise about the impact of this scale of development spread across the parishes of the NPA, but it may be possible to avoid most environmental constraints. However, at the level of some individual locations, this might become more difficult given the larger scale to be accommodated. Because of the relatively fragmented approach, in many instances, the discontinuity might make it more difficult to contribute towards the achievement of

	strategic green infrastructure priorities
Objective 10 Community safety	This is likely to be largely a matter of detailed design, although it would be more likely under this scenario that Development would take place in areas already accessible to emergency services.
Objective 11 Healthy lifestyles	Given the likelihood of facilities in larger communities, and shorter distances to walk, this approach is more likely to promote healthy lifestyles than a more dispersed approach. It remains uncertain however whether there would be sufficient concentration of development in many locations to justify higher order new facilities. No individual parish would support levels of growth likely to support higher order facilities such as primary health care (although in two instances, Sprowston and Thorpe St Andrew and Taverham/Drayton/Hellesdon, groups of adjacent parishes would be supporting 3000 new dwellings, which may help the prospect of significant new facilities. Given the size of urban fringe parishes, the proportion to be accommodated here would be likely to promote relatively sustainable access to a choice of strategic employment locations. Nevertheless less, there would be significant numbers of new residents in places where this would not apply.

Parish	2009 population	Percentage of NPA population	Implied number of dwellings (rounded)
Beeston St Andrew	30	0.03	3
Blofield	3280	3.82	344
Brundall	3870	4.51	406
Drayton	5570	6.49	584
Great and Little Plumstead	3150	3.67	330
Hellesdon	10,930	12.73	1146
Hemblington	370	0.43	39
Horsford	4190	4.93	444
Horsham and Newton St Faith	1710	1.99	179
Old Catton	6130	7.14	643
Postwick with Witton	370	0.43	39
Rackheath	1980	2.31	208
Salhouse	1480	1.72	155
Spixworth	3770	4.39	395
Sprowston	14,340	16.70	1503
Taverham	10,240	11.92	1073
Thorpe St Andrew	14,470	16.85	1517
Total	85,880	100.06	9008

SCHOOLS CAPACITY INFORMATION

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
Hellesdon High	1160 (161)	1080	80	14 Students per 100 dwellings	571		Planning permission for 62 dwellings in Horsford granted in 2010 will take some capacity but post dates the base date, so could contribute towards the 9000 requirement. The planning permission for 14 dwellings on Drayton High Road will take up some capacity but cannot they included in the 9000 dwelling requirement
Heather Avenue Infant	120	107	13	25.4 children per 100 dwellings		51	
Arden Grove Infant and Nursery	189	168	21	25.4 children per 100 dwellings		82	
Kinsale Infant	149	128	21	25.4 children per 100 dwellings		82	Planning permission for 14 dwellings exists on county council depot site on Drayton High Road. This predates the JCS base date and cannot count towards of the 9000 dwellings requirement, but will take up some capacity
Kinsale	240	195	55	25.4		216	Impact of planning permission is included in above,

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
Junior				children per 100 dwellings			as dwelling factor applies to whole of primary sector
Firside Junior	320	280	40	25.4 children per 100 dwellings		157	
Horsford All Saints V. C. junior	240	204	36	25.4 children per100 dwellings		141	Planning permission for 62 dwellings in Horsford granted in 2010 will take some capacity but post dates the base date, so could contribute towards the 9000 requirement.
Horsford V. C. Infants	180	128	52	25.4 children per100 dwellings		204	Impact of planning permission is included in above, as dwelling factor applies to whole of primary sector
St Faiths CE. VC. Primary	119	99	20	25.4 children per100 dwellings		78	
Total dwelling equivalent primary						1011	Capacity in high school catchment likely to be limited to 571 by high school capacity, 557 of which could contribute towards 9000 requirement
Sprowston Community High	1550 (248)	1393	157	14 Students per 100	1121		Current planning permission for 1233 dwellings at Blue Boar Lane, and uncompleted development at Home Farm likely to absorb spare capacity, and

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
				dwellings			current commitment remaining uncompleted totals 1377. However allocations made before 2008 base date equate to 1240, so 137 of these contribute towards the 9000 requirement for the JCS. The planning permission for 40 dwellings- at Spixworth road Old Catton post dates the base date and therefore can contribute towards the 9000 requirement for the JCS.
Woodland View Junior	231	165	66	25.4 children per100 dwellings		260	
Old Catton C. E. junior	180	146	34	25.4 children per100 dwellings		134	
White Woman Lane Junior	300	272	28	25.4 children per100 dwellings		110	Planning permission was granted in 2009 for 40 dwellings off Spixworth Road. These post date the JCS base date and therefore can be included within the 9000 dwelling requirement.
Falcon Junior	344	299	45	25.4 children per100 dwellings		177	
Sprowston Junior	240	218	22	25.4 children		86	

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
				per100 dwellings			
Hainford Primary	87	72	15	25.4 children per100 dwellings		59	
Frettenham Primary	70	64	6	25.4 children per100 dwellings		23	
Garrick Green Infant	157	148	9	25.4 children per100 dwellings		35	
Lodge Lane Infant	219	205	14	25.4 children per100 dwellings		55	Impact of planning permission is included in above, as dwelling factor applies to whole of primary sector (40 dwellings)
Sparhawk Infant	90	84	6	25.4 children per100 dwellings		23	
Cecil Gowing Infant	180	168	12	25.4 children per100 dwellings		47	

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
Spixworth Infant	120	111	9	25.4 children per100 dwellings		35	
Sprowston Infant	176	163	13	25.4 children per100 dwellings		51	
New junior school to be provided as part of Blue Boar Lane Development	315	N./A.				Unknown, but will have a negative effect on capacity at Sprowston high school by adding approximately 45 children to each year group	
Total dwelling equivalent primary						1095	Currently identified capacity will be increased by the provision of the new primary school planned for white house farm. Taking this into account, overall catchment capacity is likely to be limited by the capacity of the high school.Current planning permission at Blue

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
							Boar Lane/Home Farm likely to absorb any High school capacity, irrespective of capacity in primary sector. This will however include 137 to be set against the 9000 requirement – see above. The planning permission for 40 dwellings at Spixworth Road, Old Catton will also require high school capacity, but can be included in the 9000 requirement as it post dates the JCS base date.
Thorpe St Andrew High	1500 (327)	1427	73	14 Students per 100 dwellings	521		The existing resolution to grant permission for 600 dwellings at Brook Farm, the net addition of 75 at Little Plumstead Hospital, and 30 at Brundall would be likely to absorb spare capacity, but all are post base date and could count towards the 9000 requirement.
Dussindale Primary	315	257	58	25.4 children per100 dwellings		228	The existing resolution to grant permission for 600 dwellings at Brook Farm would be likely to absorb spare capacity, but is post base date and therefore could count towards the 9000 requirement
Little Plumstead C. E. V. A. Primary	168	177	A new school to be built	25.4 children per100 dwellings		Not applicable	New primary school due to be built as part of Little Plumstead Hospital redevelopment, but some existing commitment as part of that development. 2010 planning permission on part of that site adding 75 dwellings would count towards the 9000 requirement. Previous commitment on the site is

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
							pre base date
Brundall	293	243	50	25.4 children per100 dwellings		196	2009 permission for 30 dwellings would take up some capacity, but is post base date and could therefore contribute towards the 9000 requirement
St Williams Primary	420	422	-2	25.4 children per100 dwellings		0	
Hillside Avenue Primary	420	435	-15	25.4 children per100 dwellings		-59	
Hemblington Primary	127	142	-15	25.4 children per100 dwellings		-59	
Blofield Primary	202	220	-18	25.4 children per100 dwellings		-70	
Total dwelling equivalent primary				_		236	There is extremely limited net capacity in the primary sector, as a result of a number of schools being overcrowded. If these overcrowded schools are disregarded, there would be 428 dwelling equivalent capacity in

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	•	Notes including significant c commitment on sites of 10 dwellings and above
							the primary sector. This is slightly less than spare capacity in the secondary school The existing resolution to grant permission for 600 dwellings at Brook Farm, the net addition of 75 at Little Plumstead Hospital, and 30 at Brundall would however be likely to fully absorb spare secondary school capacity, but all are post base date and could count towards the 9000 requirement. There is no obvious capacity beyond this commitment.
Taverham High	1113 (69)	1089	24	14 Students per 100 dwellings	171		2009 permission for 27 dwellings in Drayton will take up some capacity, but post dates the base date and could therefore contribute towards the 9000 requirement
Drayton CE VC Junior	353	320	33	25.4 children per100 dwellings		130	2009 permission for 27 dwellings in Drayton will take up some capacity, but post dates the base date and could therefore contribute towards the 9000 requirement. 5dwellings- remain to be completed on a site at Littlewood House, where the commitment predates the JCS base date. These cannot contribute towards the 9000 requirement
Taverham VC Junior	480	437	43	25.4 children per100 dwellings		169	damot contribute towards the 3000 requirement
Drayton	240	254	- 14	25.4		- 55	Impact of planning permission is included in above,

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
Community Infant				children per100 dwellings			as dwelling factor applies to whole of primary sector
Ghost Hill Infant	180	143	37	25.4 children per100 dwellings		145	
Nightingale First	180	181	-1	25.4 children per100 dwellings		0	
Total dwelling equivalent primary						389	Capacity in catchment limited to 171 by high school capacity. Some of this will be taken up by a permission for 27 dwellings in Drayton which post dates the base date and can therefore count towards the 9000 requirement. A further 5dwellings pre date the JCS base date and therefore cannot be included, reducing the net capacity to 166.
Open Academy	750 (200)	N./A.		14 Students per 100 dwellings			Academy, so details not readily available, but principal catchment in Norwich and capacity likely to be principally taken up through growth within Norwich
Sewell Park College (primarily	1082 (115)	774	308	14 Students per 100	2200		Principal catchment is Norwich, and any capacity likely to be principally taken up through growth within Norwich

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
Norwich City Council catchment)				dwellings			
Broadland High Hoveton (primarily North Norfolk catchment)	703	697	6	14 Students per 100 dwellings	42		Also serves Neatishead, St John's Hoveton Tunstead Horning in North Norfolk "Allocation" of approximately 150 in Hoveton in north Norfolk core strategy
Salhouse CE VC Primary	157	105	52			204	no.tar recirculations
Coltishall Primary	150	153	-3			0	
Rackheath Primary	140, becoming 210	148	52			204	Due to become 210 place from September, 2012
Total dwelling equivalent primary						408 (in Broadland)	Capacity in high school catchment likely to be limited to 42 dwelling equivalent by high school capacity limitation. Irrespective of Broadland primary sector capacity, the allocation in Hoveton is likely to fully absorb this. There is therefore no obvious additional capacity.
Total potential contribution							Taking the above into account, there appears to be about 1565 dwellings equivalent capacity in the existing school provision in Broadland

School	Capacity (funded sixth form places additional)	Numbers on roll 2011 (5-11 and 11- 16)	Spare	Dwelling factor	Dwelling equivalent Secondary	Dwelling equivalent primary	Notes including significant c commitment on sites of 10 dwellings and above
towards the 9000 requirement							NPA. This could be set against the 9000 requirement, but new capacity would need to be found for significant additional growth. There is further commitment to about 140 dwellings- on small sites throughout the Broadland NPA, some of which were granted before and some of which after the JCS base date.

APPENDIX H: ASSESSMENT OF SMALL SITES ALLOWANCE

Author: URS based on GNDP information.

Preface:

Contains an explanation of the relative merits and disadvantages of a strategy which includes larger or smaller amounts of development in the form of a "Small Sites Allowance" in the Broadland NPA. Specifically, consideration is given to three different scales for the "Small Sites Allowance" within the Broadland NPA: 1,000, 2,000 or 3,000 dwellings.

Green	No significant constraint and/or positive opportunity for development
Amber	Uncertainty or some constraint to development and/or limited potential negative impacts
Red	Significant constraint to development and/or negative impact
Grey	Applies equally to all locations

	Small sites allowance of 1000 leaving a provision of 8000 dwellings by 2026 to be assigned to named locations	Small size allowance of 2000 leaving a provision of 7000 dwellings by 2026 to be assigned to named locations	Small sites allowance of 3000 leaving a provision of 6000 dwellings by 2026 to be assigned to named locations
Objective 1			
Climate change	Potentially increases the scale of allocations in locations which have been identified according to the sustainability credentials including sustainable access to a choice of strategic employment locations. May increase the scale of larger allocations which are more likely to be served by new sustainable energy. Flooding and water related issues will be dealt with at the site allocations stage.	This approach still directs the majority of development to locations which have been identified according to sustainability credentials, including sustainable access to a choice of strategic employment locations. However it also permits a reasonable range of allocations to be determined by the availability of local employment opportunities Flooding and water related issues will be dealt with at the site allocations stage.	Potentially reduces the scale of allocations in locations which have been identified according to the sustainability credentials including sustainable access to a choice of strategic employment locations. May reduce the scale of larger allocations which are more likely to be served by new sustainable energy Flooding and water related issues will be dealt with at the site allocations stage.
Objective 2			
Housing land in sustainable location	Individual allocations should be in accordance with settlement hierarchy, taking account of services and employment. Delivery is less challenging than an approach relying on one location, and will permit the use of some smaller	Individual allocations should be in accordance with settlement hierarchy, taking account of services and employment. Delivery is less challenging than an approach relying on one location. A small sites allocation of 2000 will	Individual allocations should be in accordance with settlement hierarchy, taking account of services and employment, but large allowance may be more difficult to accommodate within the hierarchy, and may mean larger-scale growth in settlements with limited sustainability credentials.

	sites to achieve the early development Rigid adherence to an allowance of 1000 could mean suitable small-scale opportunities are missed and could have an adverse effect on deliverability by reducing flexibility	permit the use of some smaller sites to achieve the early development, to a greater extent than a a smaller allowance of 1000 An allowance of 2000 is likely to make better use of suitable small-scale opportunities and enhanced deliverability by increasing flexibility	
Objective 3 Economic growth	Ad allowance of 1000 for non strategic allocations should ensure the focus of development being positively directed towards strategic locations where it can support business. However the location(s) of the strategic growth will remain critical in determining the degree to which it can support existing strategic employment allocations It would allow some limited scope for growth to support business outside	An allowance of 2000 four non strategic allocations would still result in development being positively directed toward strategic locations where it can support business. However the location of the strategic growth will remain critical in determining the degree to which it can support existing strategic employment allocations. It would enable the degree of growth to support businesses outside	A larger allowance risks a higher proportion of new development being located where it does not support existing business and business growth effectively
Objective 4	strategic locations	strategic locations	
Regeneration	The reduced flexibility inherent in this approach may limit opportunities unless the overall scale of planned allocations is exceeded, but beyond the urban fringe opportunities are likely to be limited.	Offers more flexibility to exploit regeneration potential, but beyond the urban fringe, opportunities are likely to be limited, and there is no reason to believe that a lower figure would not achieve this objective just as effectively	Offers more flexibility to exploit regeneration potential, but beyond the urban fringe, opportunities are likely to be limited, and there is no reason to believe that a lower figure would not achieve this objective just as effectively
	Strategic allocations outside the urban fringe are unlikely to contribute significantly to regeneration, unless	Strategic allocations outside the urban fringe are unlikely to contribute	Strategic allocations outside the urban fringe are unlikely to contribute significantly to regeneration, unless large-

Objective 5	large-scale development offers employment opportunities accessible to residents of deprived areas	significantly to regeneration, unless large-scale development offers employment opportunities accessible to residents of deprived areas	scale development offers employment opportunities accessible to residents of deprived areas		
Education	The analysis of school capacity elsewhere in this document suggests that this scale of growth could be accommodated in non strategic locations. The implied strategic scale growth of 8000 dwellings could support a new secondary school if these were in one location, or adjacent locations which could be served by a single school. Longer term security of the school would be likely to depend on a degree of continued growth after the plan period. Access to tertiary and skills education would be dependent on location	The analysis of school capacity elsewhere in this document suggests that this scale of growth could be accommodated in nonstrategic locations. Moreover, it would make the best use of existing investment in the form of existing spare capacity. The implied strategic-scale growth of 7000 dwellings could support a new secondary school if these were in one location or adjacent locations which could be served by a single school. Longer term security of the school would be likely to depend on a degree of continued growth after the plan period. Access to tertiary and skills education will be dependent on location.	The analysis of school capacity elsewhere in this document suggests that such an approach would exceed the ability of current capacity to accommodate small-scale growth, and potentially without the critical mass to support additional investment in any one location. And the implied strategic scale growth of 6000 dwellings would be likely to support a new secondary school in the plan period, putting more strain on existing infrastructure.		
Objective 6 Access to services	Access to strategic convices and the	Access to atratagia consisce and the	Dood on site allegations work there is a		
Access to services	Access to strategic services and the city centre likely to be maximised by the higher proportion of overall growth directed to named locations.	Access to strategic services and the city centre likely to be maximised by the higher proportion of overall growth directed to named locations.	Based on site allocations work, there is a risk that this scale of allocation outside strategically selected areas would necessitate a distortion of the settlement hierarchy.		
	However, this approach would miss out on some potential to make full use	However, this may miss out on some potential to make full use of local	This could potentially have an adverse		

	of local services through the reduction in flexibility.	services through the reduction in flexibility	impact on some local services but without the critical mass to support new provision.		
Objective 7					
Transport and need to travel	Potential for sustainable transport opportunities likely to be maximised, although cycle access to the city centre and strategic employment locations, and walking access to the latter, will be dependent on location(s). Impact on the highway network, and	Potential for sustainable transport opportunities likely to be maximised, although cycle access to the city centre and strategic employment locations, and walking access to the latter, will be dependent on location(s). Impact on the highway network, and	A higher flexible allowance, with the consequent reduction in the share of development directed to named locations is likely to lead to a more dispersed pattern of growth limiting the potential to support sustainable transport opportunities		
	the ability to deliver necessary improvements, will be dependent on location(s).	the ability to deliver necessary improvements, will be dependent on location(s).			
	A small sites allowance would be likely to spread some transport impacts. Provided this does not exceed local capacities, or unduly dissipate investment, this should not have a negative effect.	A small sites allowance would be likely to spread some transport impacts. Provided this does not exceed local capacities, or unduly dissipate investment, this should not have a negative effect.			
Objective 8					
Character	Likely to be less sensitive to local character through reducing the opportunity for small-scale opportunities unless the overall scale of planned allocations is exceeded. Exceeding the overall scale of planned allocations would introduce its own effects on character.	Likely to be more sensitive to local character than options which have a lower or zero small sites allowance by allowing local opportunities to be exploited. Site allocations work suggests this could be accommodated without unduly distorting the settlement hierarchy. Nevertheless, it must be recognized that any large scale strategic	Based on site allocations work, there is a risk that this scale of provision at non strategic locations would necessitate a distortion of the settlement hierarchy potentially have an adverse impact on local character in some instances. While this approach may reduce the impact at the chosen strategic location(s), it is likely to have an impact on a wider number of locations		

		allocation will have a major impact on local character.			
Objective 9 Environmental protection	Local biodiversity, agricultural land and minerals issues are capable of being dealt with at site allocation level through the selection of sites as part of the small-scale allocation process, or through the design of larger scale strategic allocations.	Local biodiversity, agricultural land and minerals issues are capable of being dealt with at site allocation level through the selection of sites as part of the small-scale allocation process, or through the design of larger scale strategic allocations.	Local biodiversity, agricultural land and minerals issues are capable of being dealt with at site allocation level through the selection of sites as part of the small-scale allocation process, or through the design of larger scale strategic allocations.		
Objective 10					
Community safety	Essentially design issues and capable of being dealt with at site allocation level	Essentially design issues and capable of being dealt with at site allocation level	Essentially design issues and capable of being dealt with at site allocation level		
Objective 11					
Healthy lifestyles	Larger-scale strategic allocations implied by reduced floating allowance are likely to promote walking provision and opportunities and access to medical facilities for a higher proportion of future residents Opportunities to promote cycling will be dependent on location The implications for residents of the non strategic small sites allowance	Larger-scale strategic allocations implied by the floating allowance of 2000 unlikely to promote walking provision and opportunities and access to medical facilities for a higher proportion of future residents, compared with a more dispersed approach. Opportunities to promote cycling will be dependent on location	A more dispersed pattern of development likely to result from a larger floating allowance and the consequent reduction in the share of development delivered through strategically planned developments is likely to reduce the proportion of future residents able to access services and facilities by foot or cycle, and likely to increase distances to a higher order facilities.		

would depend on location are	'	
presence of existing facilities	non strategic small sites allowance would depend on location and the	
	presence of existing facilities	

APPENDIX I: EVALUATION OF ZERO SMALL SITES ALLOWANCE

Author: URS based on GNDP information.

Preface:

Contains an evaluation of the spatial planning implications of pursuing a strategy which allows for none of the 9,000 homes, which are subject to remittal, to be delivered as small scale sites

Green	No significant constraint and/or positive opportunity for development
Amber	Uncertainty or some constraint to development and/or limited potential negative impacts
Red	Significant constraint to development and/or negative impact

Objective 1						
Climate change	While strategic scale development could maximize the opportunity for the provision of high quality public transport and local services, sustainable access will depend on location and distance to the city centre and to a choice of other existing strategic employment locations. Strategic-scale development, particularly at larger scales increases the potential to be served by new sustainable energy.					
	Flooding and water related issues will be dealt with at the site allocations stage, though strategic scale development could maximize the opportunity for sustainable drainage systems.					
Objective 2						
Housing land in sustainable location	No allowance for small scale growth would mean suitable small-scale opportunities for allocations are missed and localised needs outside the growth location would not be met. Some allocations at a non-strategic scale would also enable a degree of choice of location and offer the potential for early delivery.					
Objective 3						
Economic growth	While strategic scale development is likely to support a range of local employment opportunities and, depending on its					
_concc g. c	scale, a new strategic employment allocation, its ability to support existing strategic employment allocations will depend on location(s)					
_conc.mo g. c.m.	scale, a new strategic employment allocation, its ability to support existing strategic employment allocations will depend					

Regeneration	The reduced flexibility inherent in this approach will limit opportunities to regenerate sites through positive allocations. Strategic locations outside the urban fringe are unlikely to contribute significantly to regeneration, unless located to offer employment opportunities accessible to residents of deprived areas
Objective 5	
Education	A large scale strategic development will be able to support a new secondary school. However medium scale or small-scale strategic locations would likely be dependent on existing capacity of the ability of existing secondary schools to expand. The ability of existing schools to support early growth will be dependent on location and the circumstances of particular schools. Access to tertiary and skills education will be dependent on location.
	There is some limited existing capacity within existing schools. An approach of no small sites allowance would be unlikely to make the best use of this investment, particularly at the primary level.
Objective 6	
Access to services	The scale of development will maximise the opportunity to provide accessible local services. The scale will also maximise the ability to support high quality public transport to strategic services in the city centre. However ease of cycle access to the city centre will be dependent on location(s).
	However this would miss the opportunity to support existing local services
Objective 7	
Transport and need to travel	Potential for sustainable transport opportunities likely to be maximised, although cycle access to the city centre and strategic employment locations, and walking access to the latter, will be dependent on location(s).
	Impact on the highway network, and the ability to deliver necessary improvements, will be dependent on location(s).
Objective 8	

Character	Likely to have a significant detrimental impact on local character. It would deny the opportunity for small-scale non-strategic allocations which could respect form and character of particular settlements unless such opportunities were additional to the overall scale of planned allocation. Exceeding the overall scale of planned allocation would introduce its own effects on character.					
Objective 9						
Environmental protection	Local biodiversity and minerals issues are capable of being dealt with at site allocation level through the selection of sites and design of development. Strategic scale development, particularly at medium or larger scale will provide the opportunity for large scale green infrastructure.					
	The locations for strategic scale development would need to avoid significant use of high quality agricultural land.					
Objective 10						
Community safety	Essentially design issues are capable of being dealt with at site allocation level					
Objective 11						
Healthy lifestyles	Large-scale strategic allocation is likely to promote walking provision, green infrastructure and opportunities and access to medical facilities for a higher proportion of future residents. Opportunities to promote cycling will be dependent on location.					
	At small and medium scale, such opportunities are more likely to depend on the presence of existing facilities, particularly for higher order facilities.					
	An approach of no small sites allowance is less likely to be able to support existing services and may therefore not be as beneficial to existing residents in maintaining healthy lifestyles.					

APPENDIX J: IDENTIFICATION OF SUITABLE COMBINATION SECTORS

Author: URS based on GNDP information.

Preface:

Contains an explanation of the rationale behind the consideration of combination of individual potential strategic growth sectors. It also explains the reasons for selecting and discounting potential combination sectors for evaluation.

Purpose

The purpose of this paper is to consider whether any combinations of the 11 individual NPA strategic growth sectors has a potentially good functional relationship to any other sector such that it has the potential to offer advantages in terms of planning for strategic scale growth.

Introduction

- 11 individual sectors within the Norwich Policy Area were defined and evaluated in order to establish their potential to accommodate Strategic Scale Growth, see Appendix K for an explanation of the different scales of strategic growth considered.
- Whilst this evaluation of individual sectors provides an important insight into the scope for strategic scale growth in different locations it is possible that combining individual sectors may improve their potential for Strategic Growth.
- 3. For example, a combination of sectors may offer advantages over an individual sector because a larger area of land will reduce pressure on particularly sensitive environmental features, because it will allow scope of better green infrastructure links or that spreading development over a wider area may facilitate a rate of development consistent with the JCS trajectory that might otherwise not be possible.
- 4. The performance of any combination sector will be evaluated against the objectives of the Joint Core Strategy. This is consistent with the evaluation of individual sectors.
- 5. Because of the geographical extent of sectors it is not considered that combinations of more than two individual sectors would be appropriate because development will be spread across to large to realistically be considered a single entity.
- 6. The determinant of whether a sector will be considered is whether there is a realistic prospect that there will be a good functional relationship between developments within the combination sector. As a consequence, non-adjacent sectors have automatically been screened out.

✓	Potentially Good Functional Relationship					
0	Not adjacent					
×	Poor Functional Relationship					

	West Sector	South-West Sector	Wymondham	South Sector	Long Stratton	South-East Sector	East Sector (Outside NNDR)	North-East Sector (Inside NNDR)	North-East Sector (Outside NNDR)	North Sector	North-West Sector
West Sector		×	0	0	0	0	0	0	0	0	×
South-West Sector			✓	×	0	0	0	0	0	0	0
Wymondham					0	0	0	0	0	0	0
South Sector					0	×	0	0	0	0	0
Long Stratton						0	0	0	0	0	0
South-East Sector							×	0	0	0	0
East Sector (Outside NNDR)								✓	✓	0	0
North-East Sector (Inside NNDR)									✓	✓	0
North-East Sector (Outside NNDR)										✓	0
North Sector								✓			
North-West Sector											

Appendix J – Identification of Suitable Combination Sectors Author: URS based on GNDP information

Reasons for Considering or Discounting Combination Sectors

South-West Sector & West Sector

Unsuitable as sectors are poorly related to each other in functional terms because the sensitive river valley's which separate them prevent the delivery of appropriate infrastructure links.

Wymondham & South-West Sector

Potentially Suitable as sectors are well related to one another because both lie along the A11 corridor etc.

South-West Sector & South Sector

Unsuitable as sectors are poorly related to each other as a result of the trunk road and railway line which isolates the sectors from one another, with limited opportunities for crossing.

South Sector & South-East Sector

Unsuitable as sectors are poorly related by virture of segregation resulting from railway line, trunk road and presence of Tas valley.

South-East Sector & East Sector (Outside NNDR)

Unsuitable as poorly related to each other in functional terms because the sensitive river valley's which separate them prevents the delivery of appropriate infrastructure links.

West Sector & North-West Sector

Unsuitable as sectors are poorly related to each other in functional terms because the sensitive river valley's which separate them prevent the delivery of appropriate infrastructure links.

North-East Sector (Inside NNDR) & East Sector (Outside NNDR)

Potentially Suitable as sectors have potentially good functional relationship due possible A47 / Yarmouth Road corridor, range of minor roads and strategic employment area at junction of sectors

North-East Sector (Outside NNDR) & East Sector (Outside NNDR)

Potentially Suitable as sectors have a potentially good functional relationship if sufficient permeability of the railway line can be achieved and connecting rail services to Norwich improved

North-East Sector (Inside NNDR) & North-East Sector (Outside NNDR)

Potentially Suitable as sectors have a potentially good functional relationship with each other because of the connections provided by Salhouse Road and Wroxham Road. Permeability across NNDR will need to be ensured.

North-East Sector (Inside NNDR) & North Sector

Unsuitable as sectors have a limited functional relationship, with only Spixworth road being a shared radial. The presence of Norwich International Airport also limits connectivity of sectors.

North-East Sector (Outside NNDR) & North Sector

Potentially Suitable as sectors have a potentially good functional relationship to eastern side of North Sector via Spixworth and North Walsham Road.

North Sector & North-West Sector

Potentially Suitable as sectors have a potentially good functional relationship as a result of shared radials providing connections to Norwich A140 & Reepham Rd.

APPENDIX K: IDENTIFICATION OF SUITABLE COMBINATION SECTORS

Author: URS based on GNDP information.

Preface:

Contains a justification of the three different scales of strategic growth that individual and combination sectors were evaluated against, including why certain scales of development were discounted from assessment. Specifically, these three scales were: Small (1,000 to 1,500), Medium (1,500 to 3,000) & Large (7,000 to 10,000).

1. Small Scale Strategic Growth

1.1. Schools are a key element of any sustainable community. At a smaller scale, primary education is often one of the significant service issues to be encountered. Evidence from Norfolk County Council Children's Services indicates that, where there is no existing local capacity, slightly fewer than 1,000 dwellings will support a new 210-place primary. To cater for maturing communities and uncertainty it would be preferable to aim for a higher threshold and this figure has therefore been taken as the lower end of small scale strategic development but the upper end of the range acknowledges that there will be instances where there is some existing local capacity.

2. Medium Scale Strategic Growth

- 2.1. Primary schools are also significant in the derivation of this range. The County Council's preferred model is for two form entry schools of 420 places, and typically these require a minimum of about 1600 dwellings to support them assuming no existing capacity in the locality. While a General Practitioner may well have about 2000 patients, recent dialogue with health care professionals confirms there is a tendency towards larger facilities which can also incorporate some specialist services, reinforcing the case for a concentration of at least 3000 homes to support an appropriate new facility.
- 2.2. The location and scale of development will need to ensure that high quality public transport can be provided. Experience with developments such as Thorpe Marriot suggests that around 3,000 dwellings provide sufficient concentration of demand to support a good standard of bus services to the City Centre (e.g.15 minute frequency).
- 2.3. These considerations have influenced the selection of the upper end of this range to 3,000.
- 2.4. At this scale, there is also the potential for some employment, though experience at Thorpe Marriott (approximately 2700 houses) and Dussindale (approximately 2000 houses) demonstrate that this is not certain, and is very heavily influenced by other factors including employment opportunities nearby.

3. Large-scale strategic (7000+ dwellings)

3.1. Secondary schools are recognised by Government as being a key element of a large scale sustainable community. A report on "Best Practice in Urban Extensions and New Settlements" by the Town & Country Planning Association recommends that the need to provide secondary education is the key determinant of the scale of new sustainable settlements. Norfolk County Council's demographics research indicates that, a minimum of 7-8,000 dwellings is required to provide a new secondary school. To cater for maturing communities and uncertainty it would be preferable to aim for a higher threshold

- and/or seek out locations that have longer term potential for further growth. The impact of existing capacity needs careful consideration as it could affect the appropriate scale of residential development and the ability to provide a new school at the heart of the community.
- 3.2. The provision of a very high quality express bus service would require a large scale of development located on a corridor that can be developed with the necessary infrastructure. Evidence produced for the 2010 public examination into the JCS suggests that a concentration of around 5000 houses is the minimum which could support bus rapid transit. (Public Transport Requirements of Growth – document T3). Better systems can be provided at higher scales of development.
- 3.3. Large new development should include a well-defined service centre providing a focus for the community. This should provide a range of community facilities, leisure and shopping. Clearly the larger the scale of growth the more comprehensive the facilities that can be provided. While the relationship is not clear cut, a broad-brush analysis suggests that 7,000 new dwellings would be necessary to support a food store capable of catering for everyday needs.
- 3.4. Other guidance on the creation of sustainable communities sees merit in concentration, in the absence of an existing centre on which to build. The Eco towns prospectus published by the Department for Communities and Local Government in July, 2007 notes that any new settlement must be of sufficient size to ensure a good level of services, jobs and community facilities to create attractive and sustainable places to live. This is translated into a target of 5000 10,000 homes in the key criteria set out in paragraph 13 of the document.
- 3.5. Experience elsewhere in the East of England shows a similar picture. Cambourne in Cambridgeshire has a current projected size of 4250 An evaluation by Cambridge Architectural Research Limited for Inspire East (Lessons From Cambourne - 2007) notes (page 5) "there is immense pressure from developers for Cambourne to grow, possibly to double its present size ... doubling the size would allow a secondary school to be built and would make the other facilities like shops and services more viable". Northstowe, the next planned addition to the Cambridge area, is destined to be twice the size of Cambourne. According the to (www.northstowe.uk.com) Northstowe is planned for approximately 9500 new homes and will include six primary schools, a secondary school and a post-16 education facility.
- 3.6. Large-scale development is also likely to offer the best potential for new employment areas, though local experience of this scale of development is limited to Bowthorpe which incorporates employment but where local authority land ownership has offered additional levers to achieve such an outcome.

3.7. Drawing together these considerations, this exercise has defined "large" scale development as being 7,000 - 10,000 dwellings, the level which would support a secondary school and convenience goods retailing serving the locality (though the latter will be constrained by the presence of competing centres nearby). Such a scale also offers the best prospect of incorporating new employment areas creating a genuine mixed use community. The figure of 7,000 dwellings also equates to the approximate level of development which GNDP considers could practically be delivered in any one strategic growth location within the plan period.

4. Growth within the 3,000-7,000 range

- 4.1. Growth within the 3,000 to 7,000 range was not considered as part of the assessment. This exclusion was made on the basis of the evidence cited above. In particular, growth of more than 3,000 in any one location is generally anticipated to exceed the potential for existing schools to expand to accommodate new school age residents but yet would not provide sufficient critical mass to support a new secondary school. The absolute minimum scale of development needed for a new secondary school being 7,000 new homes. In addition, developments of 3,000 7,000 would be not generally be expected to provide the requisite level of convenience shopping to meet day-to-day needs (e.g. a supermarket) and high quality, attractive and viable public transport services.
- 4.2. In light of the evidence, the 3,000 to 7,000 growth range was considered to be an inappropriate benchmark against which to evaluate the 18 locations in terms of suitability for strategic growth.

APPENDIX L: EVALUATION OF THE SUITABILITY OF INDIVIDUAL AND COMBINATION SECTORS FOR STRATEGIC SCALE GROWTH

Author: URS based on GNDP information.

Preface:

Contains the evaluation of the individual and combination sectors for Strategic Scale Growth. This evaluation has been undertaken in reference to the objectives of the adopted Joint Core Strategy, which remain the relevant objectives in relation to this plan.

Key:	Positive	Mixed	Negative	No Effects /
	Effects	Effects	Effects	Not applicable

Small scale strategic growth 1,000 to 1,500

North east sec	tor (in	side the NNDR)
Green 3	•	
Amber 6		
Red 0		
Score 3		
Objective 1 Climate change		Some existing public transport infrastructure providing an average level of service. The presence of multiple radial routes does provide opportunities for public transport and cycle prioritisation which has an acceptable resultant impact on the highway network, assuming delivery of the NDR and associated reduction on level of stress on existing roads. Well related to NAT IP proposals for Norwich Cycle Network.
		Excellent access, arguably best relationship in Greater Norwich, to large employment locations (NIA, BBP) and employment in city centre. Also well related to Salhouse Road industrial estate and Sprowston Retail Park. Reasonable relationship to Rackheath Industrial Estate.
		However, small scale growth limits the likelihood of significant investment in BRT or other prioritisation on Core Bus Routes.
		No significant risk of fluvial flooding. Limited sewer capacity and water infrastructure is a key infrastructure dependency for growth.
		Small scale development may limit scope for district scale low carbon/renewable energy generation.
		A range of facilities are provided within the existing urban fringe, which may indicate some opportunities to minimise need to travel. However, small scale development is unlikely to provide sufficient critical mass to deliver a significant range of new services and facilities and thereby limiting opportunity to minimise need to travel through new development.
Objective 2 Housing land in sustainable location		Land is available, and has been actively promoted for sites which could accommodate 1,500 homes in this sector which is close to city and services.
Objective 3 Economic		Broadland Business Park is a strategic employment location within the Sector, which has capacity to grow. Sector is adjacent to Norwich Aiport, also a strategic employment area with capacity to growth . Local employment at Salhouse

growth	Road and Sprowston Retail Park indicate some additional prospect for local employment growth in the sector.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	A choice of accessible high schools in this sector have some limited capacity and scope for extension which may be sufficient to serve this scale of growth.
Objective 6 Access to services	Well related to the range of services and facilities within the existing urban fringe parishes, including GPs and Dentists. Although capacity of these is, to some extent, finite. It is anticipated that, at the top end of the range, additional demand for GPs and Dentists could be met through the expansion of existing facilities. There are a public transport services, that have the opportunity to be enhanced, which connect to the city centre and the wide range of services available there. There are 2 existing district centres within the NE urban fringe and one potential centre, these all have a large anchor food store with a range of smaller facilities.
Objective 7 Transport and need to travel	This area is approximately 5km from the city centre, with some existing public transport services and is well related to cycle network. There is a large supermarket and good access to employment. However, small scale growth would not provide for significant public transport improvements including BRT. In terms of transport key infrastructure dependencies include Postwick junction.
Objective 8 Character	The sector is characterised by wooded estatelands. Particular landscape sensitivities include the mature landscape with large woodland blocks and the landscaped setting for the edge of Norwich which is created. Development will have localised impacts unlikely to affect identified areas of landscape value. NNDR will impact local character. Some local heritage and cultural assets such as historic parks and gardens and ancient woodlands but these would also be unlikely to be directly effected by development of this scale. It is anticipated that small scale strategic development in the sector would comprise one or more urban extensions to the Norwich Fringe, whilst having an effect on the landscape sensitivities this scale is not considered likely to have a significant detrimental effect on landscape or heritage/cultural assets.
Objective 9 Environmental protection	Small scale development unlikely to have impact on existing environmental designations but will provide limited new green infrastructure. Mineral resource would need investigation, possibly with phased extraction. The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the broads. Small scale development will offer some opportunities to provide green infrastructure, although the likelihood is that this will be more local than strategic in nature with lower scales of development Agricultural land mostly grade 3, but a small area of grade 2 near North Walsham Road.
Objective 10	Impacts are largely influenced by settlement designs and the facilities provided

Community safety	
Objective 11 Healthy lifestyles	Availability of local services including GP's and dental services in urban fringe and public transport could support walking & cycling, however small scale development unlikely to support additional services to further encourage walking and cycling including improved connections to employment areas. Potentially good access to the countryside.

North east sec	tor (or	itside NNDR, vicinity of Rackheath)
Green 0	101 (00	aside Widney of Rackicality
Amber 7		
Red 2		
Score -2		
Objective 1 Climate change		Limited availability of public transport although possibility for the utilisation of Salhouse rail station. Small scale development in isolation in this area unlikely to justify extension of BRT, although this circumstance may change if coupled with more development inside NNDR.
		Very limited range of local services and small scale development unlikely to provide sufficient critical mass to warrant significant new services and facilities, although may justify some new provision e.g. primary schools etc. This is likely to result in an increased need to travel.
		Relatively well located in relation to Broadland Business Park and, to a lesser extent, Norwich Airport More difficult to access city centre, although this might be improved through increased public transport but this would only be justified with high levels of development or if coupled with development in adjacent sectors.
		Sector is not significantly affected by the risk of fluvial flooding, even taking into account climate change. Limited sewer capacity and water infrastructure is a key infrastructure dependency for growth.
		Small scale development may limit scope for district scale low carbon/renewable energy generation.
		Sector currently relies on Broadland High School in Hoveton resulting in need to travel.
Objective 2 Housing land in sustainable location		There is sufficient land available within the sector to accommodate 1,500 homes which has also been promoted for development. However, is in a location which is some distance from city and existing services within the Norwich Fringe.
Objective 3 Economic growth		Rackheath Industrial Estate provides local employment opportunities within the sector. Sector is also close to Broadland Business Park and to a lesser extent Norwich Aiport, which are strategic employment locations with the capacity to grow.
Objective 4 Regeneration		Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education		No easily accessible high school in this sector. Currently relies on Broadland High School in Hoveton, which is poorly related to the sector and has no 6 th form. Some limited capacity and scope for extension within existing high schools

	within the Norwich Fringe but these are also poorly accessible.
Objective 6 Access to services	Relatively small selection of local services, although does support a Primary School, Village Hall, 2 small convenience stores, a post office and a pub. Hoveton Medical Practice provides a part-time local service. The potential district centre at Blue Boar Lane is not readily accessible other than by car. Local bus services do provide a connection to the district centre at Dussindale, which also contains a large foodstore, including a pharmacy, a part time doctors' surgery as an extension of the Woodside practice and some other services. This local transport connection also links the sector to the city centre.
Objective 7 Transport and need to travel	The sector is at some distance (in excess of 7km) from Norwich City Centre and contains only a limited range of services and facilities. The sector is relatively close to Broadland Business Park and Norwich Airport, although public transport accessibility is limited. Cycle links to the airport are not particularly direct, cycle links to Broadland Business Park use smaller rural roads, which may be less suitable in poor weather or poor lighting conditions. There is potential for BRT using the Salhouse Road/Gurney Road corridor. However, small scale development in this sector alone would be unlikely to support such investment. Some potential for use of railway. Cycle routes associated with the NDR will provide enhanced cycle access. Some key transport infrastructure dependencies including the NDR, which is necessary to provide the road capacity that
	will allow for public transport and cycle prioritisation.
Objective 8 Character	The sector is characterised by wooded estatelands. Particular sensitivities include the mosaic of parkland, arable field and woodlands and landscape setting of historic houses, halls, churches and the setting of villages and hamlets. Small scale development in this sector would be likely to result in the expansion of an existing suburban village(s) into the open countryside to the north. Some heritage and cultural assets including ancient woodlands and historic parks and gardens but these tend to be in the far north or west of the sector meaning that there is unlikely to be any significant impact upon these assets. Nonetheless small scale development within this area is likely to have an impact upon the existing rural setting. The former WWII Rackheath USSAF base, which is of significance in terms of local heritage could be affected.
Objective 9 Environmental protection	The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the broads. Small scale development will offer some opportunities to provide green infrastructure, although the likelihood is that this will be more local than strategic in nature with lower scales of development. It is likely to be necessary to retain an undeveloped buffer zone between the Broads and new development at Rackheath, even with small scale levels of development. Agricultural land generally grade 3. Limited mineral investigation area which may necessitate phased construction.
Objective 10 Community	Impacts are largely influenced by settlement designs and the facilities provided

safety	
Objective 11 Healthy lifestyles	Small scale growth, even at the higher end of the range, is unlikely to provide sufficient critical mass to support an increased range of employment opportunities, services and facilities. These limitations would include opportunities for an expanded range of health and social care services. Thereby there is limited scope to significantly increase levels of walking and cycling through the creation of new mixed use neighbourhoods. Nearest dental services in Spixworth or urban fringe
	Similarly, small scale development would limit the amount of funding which is likely to be directed to the sector to support improvements to wider cycling connections to Norwich, BBP and NIA.
	However, small scale development would still support the provision of a range of more local recreational open space facilities and there remains good links to the countryside.

Foot Contar (or	.40:40	NINDD)
East Sector (or Green 0	utsiae	NNDR)
Amber 2		
Red 7		
Score -7		
Objective 1 Climate change		Whilst the sector is flanked by the Norwich to Cromer/Sheringham and Norwich to Yarmouth/Lowestoft Railway lines, Brundall and Salhouse Stations are not likely to be readily accessible from the area. Existing public transport services are limited and there is no existing bus based prioritisation. The area is relatively well related geographically to Broadland Business Park and there is a network of local roads which might be suited to cycling, although would be less so in poor weather conditions or at night given nature of roads and lack of lighting.
		Good access to park & ride facilities at Postwick, which would provide connections to Norwich City Centre, though strategic growth should not rely on Park and Ride
		The Plumsteads provide a very small range of local service and facilities. Brundall and Blofield provide a wider range of facilities including a GPs surgery.
		However, dispersed nature of area and limited interconnection of villages by public transport is likely to mean that predominant mode of transport would be the private car.
		No risk of fluvial flooding within the sector, though nearby riverside parts of Brundall are prone to flooding. Limited sewer capacity without strategic improvements but sector is close to the Whitlingham Waste Water Treatment Works. Water infrastructure is a key infrastructure dependency for growth.
		Small scale development will afford opportunities for improved fabric and small scale renewables but may not provide sufficient critical mass to support larger district scale decentralised renewable/low carbon nergy infrastructure, particularly at the lower end of the range.
Objective 2 Housing land in sustainable location		There is sufficient land available to accommodate 1,500 homes. However, the area of land actually promoted by landowners may limit the ability of this area to meet the higher end of the range (we might need to check this as I think I drafted this based on inaccurate maps (PH)?). In addition, the sector is in a location which is some distance from the city and existing services within the Norwich Fringe.
Objective 3 Economic growth		There are some small scale local employment opportunities within the larger villages in the sector but these are expected to have limited capacity to expand. Parts of the area are close to Broadland Business Park, although larger villages are at

	some distance.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	No easily accessible high school to most of this sector. Thorpe St Andrew High School serves the area while it would be accessible to an urban extension it would be at a significant distance from growth focussed on the existing villages in the sector. While there is some scope for expansion, small scale development in this location is likely to place significant pressure on spaces, if coupled with development elsewhere (urban infill or closer greenfield).
Objective 6 Access to services	Small range of local services provided by the villages of the Plumstead, Blofield and Brundall. However, depending upon the location of any new development within the sector these could have limited access. Medical and dental services are available in Brundall and Blofield, with part time services in Thorpe St. Andrew and Rackheath. The accessibility of higher order services and the city centre is limited although, the Postwick park and ride and potential BRT on Yarmouth Road could enhance accessibility.
Objective 7 Transport and need to travel	The west of this area is approximately 6km from Norwich City centre, but existing settlements are considerably further away. Improved public transport through BRT and rail access is difficult to promote in this area, particularly at small scales of growth. The sector is served by two radials (limiting the options to serve traffic displaced by bus priority measures) and growth would increase local traffic on the trunk road. The limited range of services and facilities, coupled to the lack of critical mass provided by small scale development is likely to mean that there will be a significant need to travel resulting from development in this sector. There is limited public transport accessibility and no existing public transport prioritisation with the road system separating area from the business park. No clear prospect that for any extension of the Yarmouth Road BRT route would be possible with small scale development, or any other scale, of development in this sector.
Objective 8 Character	This area is characterised in part by Wooded Estatelands but mainly Tributary Farmland. Particular sensitivities include the strong mosaic of arable fields and mature woodland, strong rural character the landscape setting of hamlets and villages and characteristic views to church towers surrounded by woodland. In addition, there are local areas of landscape value adjacent to Witton Run and in between Blofield and Brundall. There are some areas of Ancient Woodland and Landscape Value north of Hemblington but these are unlikely to be directly effect by development. Small scale strategic development in the eastern sector would be likely to comprise the expansion of small or medium sized villages into the open countryside. As this area is characterised by its distinctly rural aesthetic, and is beyond the route of the NDR, such development is expected have a significant effect on this rural landscape.
Objective 9 Environmental	Proximity to the Broads would require significant mitigation through additional green space. In addition much of the area is Grade I & II agricultural land.

protection	These considerations raise significant issues about the potential suitability the eastern sector for development at any significant scale. A few limited local landscape and county wildlife site designations which should not be impacted by small-scale development
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Small scale growth, even at the higher end of the range, is unlikely to provide sufficient critical mass to support an increased range of employment opportunities, services and facilities. These limitations would include opportunities for an expanded range of health and social care services. Thereby there is limited scope to significantly increase levels of walking and cycling through the creation of new mixed use neighbourhoods.
	Nearest dental facilities in urban fringe. GPs in Brundall, Blofield and urban fringe
	Similarly, small scale development would limit the amount of funding which is likely to be directed to the sector to support improvements to wider cycling connections to Norwich, BBP and rail stations.
	However, smaller scale development would still support the provision of a range of more local recreational open space facilities and there would remain good access to the countryside and Broads for other type of recreation.

South east sec	tor (vicinity of Poringland)
Green 0	tor (violinty of rornigiana)
Amber 5	
Red 4	
Score -4	
Objective 1 Climate change	At distance from strategic employment locations with limited potential for high quality public transport priority measures, therefore growth would lead to increased car use. Surface water drainage issues.
Objective 0	Small scale development may limit scope for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location	The sector contains sufficient land for 1,500 homes, and this scale is also supported by the amount of land promoted for development. However, the location is at some distance from city (5-6km) and large scale convenience retailing, though there is a good range of local facilities.
Objective 3 Economic growth	Limited local employment, which is not expected to expand. Sector is not close to any strategic employment centres, access to city centre constrained.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Framingham Earl High School which could support small scale strategic growth beyond the current allocation if the site can be expanded. The school has no 6 th form
Objective 6 Access to services	Some existing facilities, including primary and secondary education, but no large scale convenience retail. Poor access to services in the City Centre.
Objective 7 Transport and need to travel	This area is at some distance from the city. There is limited access to employment. Existing congestion, the scale of growth and lack of options for accessing the city limit opportunities for new high quality public transport infrastructure.
Objective 8 Character	The sector is largely characterised by plateau farmland, although tributary farmland and the Tas river valley also influence the character of the area. Particular sensitivities include ribbon development along rural lanes, development that intrudes onto the plateau edge, opening up of the landscape through loss of woodland, hedgerow or hedgerow trees. There are a significant number of ancient monuments within the area between Poringland/Stoke Holy Cross and the A47. Small scale strategic development within the area is likely to take the form of expansion of large suburban village into open countryside. This will have an impact upon the landscape sensitivities.
Objective 9	No significant environmental constraints (County Wildlife Sites can be avoided).

Environmental protection	Some additional traffic congestion into city could impact on Bracondale and City Centre Conservation Areas.
	Some mineral areas research which may require phased construction. Agricultural land generally grade 3, but with some areas of grade to nearer 2 the River Yare
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Limited local services and small scale development do not encourage walking and cycling. Good access to the countryside.
-	GP services available in the village, but no dentist.

	A11 – .	A140, outside A47)
Green 0		
Amber 3 Red 6		
Score -6		
Objective 1 Climate change		Limited potential for accessible public transport connections to strategic employment areas and the city centre would lead to increased car use.
		Small scale development may limit scope for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location		Access constraints on to the A11 restrict potential land availability to the area served by the B1113 and A140. Sector contains sufficient land for up to 1,500 homes, and sites have been promoted for development that would support this level of growth. However, the sector contains with very few services and has little potential for public transport improvement. Active mineral workings and electricity infrastructure further limit choice of locations for development.
Objective 3 Economic growth		Very limited local employment within the sector, which is not expected to expand significantly. Poorly related to the strategic employment sites of the area.
Objective 4 Regeneration		Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education		No easily accessible high school in the sector, which is mainly served by Hethersett, though this is at some distance and has no 6 th form. The capacity at Hethersett High is likely to be taken up by growth at Hethersett and Cringleford. No capacity at City of Norwich School, potential capacity at the Hewett School but both are at some distance from the area.
Objective 6 Access to services		There are few local services and accessibility to large scale convenience retailing or the city centre is limited by public transport connections. Access to higher order services is expected to be largely car dependent.
Objective 7 Transport and need to travel		The lack of potential for accessible public transport connections due to constraints on providing bus priority on A140 lpswich Road. and to accessing A11 would lead to high car use. In addition, railway and level crossings on minor roads inhibit access to A140.
Objective 8 Character		The sector is characterised by Tributary and Plateau Farmland. Particular landscape sensitivities in the area include loss of rural urban divide and coalescence of settlements, intensive developments which breakup the skyline and Intrude on the sense of openness and incremental changes, such as upgrading rural lane network to create a more urban feel. Small scale strategic development in this sector is likely to comprise the expansion of existing villages and hamlets into the

	open countryside. Some local conservation areas
Objective 9 Environmental protection	Mineral resources in area which would necessitate phased development. Additional traffic congestion into city and implementation of BRT would impact on Conservation Area.
	Agricultural land generally grade 3
	Some local designations for county wildlife sites, but small-scale development should not impact on these
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy	Limited local services and small scale development do not encourage walking and cycling. Good access to countryside
lifestyles	GP facilities are available in Mulbarton, and in other villages further south served by the A 140. No nearby dental facilities

South west sec	otor (A	11 _ R1108\
Green 6	JOI (A	111 – 61 100)
Amber 3		
Red 0		
Score 6		
Objective 1 Climate change		Good public transport at present, but small scale growth would limit potential for further improvements including BRT. Good access to choice of employment areas and the city centre but limited local services. Good cycle route connecting to the city centre.
		Small scale development may limit scope for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location		Sector contains enough land to deliver 1,500homes and sites have been promoted for development which could in theory support significantly more development although opportunities are constrained by a need to avoid infringing river valley landscape
Objective 3 Economic growth		Sector is adjacent to the Hospital and UEA and to Norwich Research Park, which is a strategic employment area that has the potential to expand.
Objective 4 Regeneration		Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education		Well related to Hethersett High School which has the capacity to expand provided adjacent land can be made available to enlarge the site. Land promoted for development enables this expansion. No 6 th form.
		Sector is adjacent to UEA.
Objective 6 Access to services		Some existing services in Hethersett. Cringleford has good access to the services in nearby in Eaton. Higher order services within the City Centre are accessible by good public transport links and the proposed BRT.
Objective 7 Transport and need to travel		Public transport links and journey times are good here and the corridor has recently been improved but small scale growth limits potential for further improvement through BRT. The area is easily accessible to the Norwich Research Park and city centre. Employment at Wymondham and Longwater strategic employment areas can also be accessed.
Objective 8 Character		The sector is characterised by Tributary and Plateau Farmland. Particular landscape sensitivities in the area include loss of rural vernacular, the coalescence of settlements, intensive developments which intrude upon the views of important landmarks, e.g. Wymondham Abbey, and/or breakup the skyline and intruding on the sense of openness. Small scale development within this sector would be anticipated to take the form of expansion of villages and market towns into

	countryside This is expected to have some impact upon the landscape sensitivities of the area. There is some historic parkland unlikely to be affected by small scale development.	,
Objective 9 Environmental protection	Small scale allocation would maintain the green space area around Norwich and the River Yare corridor. Few local environmental designations apart from protection of the river valley. Small-scale development should be able to avoid impacting on any of these. Agricultural land is generally grade 3, with an area of grade 2 north west of Hethersett. Sector lies within green infrastructure priority corridor and may be able to contribute towards achievement of this, but contribution of small-scale development likely to be essentially local.	
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided	
Objective 11 Healthy lifestyles	Cycling opportunities to local services, including schools and strategic employment areas. Good access to the countryside. Local G. P. and dental facilities, Small-scale development unlikely to support significant extra services in locality	the

West sector (P	ver Yare to River Wensum)
Green 5	er fale to River Wensum)
Amber 4	
Red 0	
Score 5	
Objective 1 Climate change	Good public transport at present. Recent investment in public transport priorities in the corridor, but small scale growth would limit potential for extending the improvements, including BRT. Good access to employment, including reasonable access to Norwich Research Park, and large scale convenience retailing.
	Small scale development may limit scope for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location	1,500 dwellings could be accommodated in small urban extensions and/or village expansion on land away from river valleys and sufficient land has been promoted to support this scale of development.
Objective 3 Economic growth	Longwater lies within the sector, which has capacity to expand. The sector also includes other local employment in Costessey and at Easton College. The non strategic Bowthorpe employment area is also nearby.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Ormiston Victory High School (Costessey) where planned redevelopment will increase capacity to 1250 places. This is expected to cater for existing commitments in the area but the additional planned JCS allocation (1000 dwellings) is expected to take this slightly beyond its new design capacity. The site cannot be extended Sector includes Easton College.
Objective 6 Access to services	Large scale convenience retail at Longwater and other local services such as a health centre and leisure facilities available, though limited at Easton. Good public transport connections to higher order services within the City Centre.
Objective 7 Transport and need to travel	The area is at some distance from the city centre (6-8km), but it does have large employment areas close by. Small scale growth limits potential to extend BRT. The area is served by a single transport corridor unless local traffic were to use the A47 trunk road Need to expand capacity at A47 Longwater junction.
Objective 8 Character	The western sector is characterised by Tributary and settlement edge Farmland and by the Yare/Tiffey river valley. Particular landscape sensitivities include the preservation of rural views from the ridge adjacent to Easton, unsympathetic developments intruding into the rural landscape and the protection of the rural, undeveloped, character of the Tiffey River valley. It is anticipated that small scale strategic growth can be accommodated by limited expansion of urban edge

	villages, small stand alone settlement or small scale urban extensions into countryside away from river valleys and without significant detrimental impact upon the landscape.
Objective 9 Environmental protection	Sensitive river valleys (Rivers Yare, Tud and Wensum) restrict the area of development. Few other local environmental designations apart from protection of the setting of the southern by pass.river Wensum near Costessey is an SAC, but small-scale development should be able to avoid these. Agricultural land generally grade 3 with some pockets of grade 2 in the western part of the sector
	Some areas of search for minerals which will need investigation and may necessitate phased construction
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of good range of local services and public transport could support walking & cycling, however small scale development unlikely to support additional services to further encourage walking and cycling. Good access to countryside. G. P. services are available, and dental services in Costessey and nearby Bowthorpe.
	Complexity of Longwater junction means walking and cycling less attractive from parts of the area

North west Sector (A1067 - NNDR)				
Green 1	ctor (A	11067 - NNDR)		
	Amber 8			
Red 0				
Score 1				
Objective 1 Climate change		This sector lies between 6 & 10 km from Norwich City Centre. No significant public transport prioritisation outside of city centre for radial routes connecting sector to city. Some scope for enhancement along A1067, which is recognised in NATS as a potential BRT route, although this has landscape implications, as road widening would require the removal of trees. However, small scale development unlikely to directly support significant public transport enhancements. The limited number of radial routes will mean that scope for public transport enhancement is less significant than in other areas. The area is not well related to a choice of strategic employment areas.		
		Small scale development would not support a range of new services, facilities & employment. However, a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs.		
		Disposal of waste water from the Taverham, Drayton area may require new strategic sewer to pump to Whitlingham, which is potentially quite energy intensive.		
		No significant risk of fluvial flooding, even accounting for predicted effects of climate change, though there are surface water flooding issues in Drayton.		
		The parts of the sector which lie nearer the city are relatively close to Norwich Airport but no sites have been promoted for development on the edge of Hellesdon, meaning that any development is more likely to be as extensions to Drayton and Taverham and as such further from Strategic Employment. Small scale development may limit scope for district scale low carbon/renewable energy generation.		
Objective 2 Housing land in sustainable location		The sector contains enough land to accommodate 1,500 dwellings and land has been promoted that would in theory support this level of development. However, the areas close to the Hellesdon fringe are restricted by the Airport public safety zone and noise contours.		
Objective 3 Economic growth		There is some local employment areas within Hellesdon, Taverham and Drayton which provide local employment opportunities with some capacity to expand. However, previous medium scale development in the north west at Thorpe Marriott (about 2700 houses) failed to attract local employment in spite of an allocation for that purpose. The sector is adjacent to NIA and Sweetbriar Industrial Estate provides other opportunities between the City Centre and North-west		

	Sector.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Taverham or Hellesdon High Schools. There may be limited capacity at Taverham, although the site is constrained. There is some capacity at Hellesdon, which could expand if adjacent land promoted for development comes forward.
Objective 6 Access to services	There is a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham), including doctors and dentists, which could support new development within the area and may support some local needs without needing to rely on the private car.
	Reasonable public transport accessibility to the city centre and the A1067 has been identified for prioritisation measures through BRT enhancements. However the opportunities for this may be limited. Also the A140, which is identified for public transport enhancements, lies adjacent to sector.
Objective 7 Transport and need to travel	The parts of the sector which lie close to Taverham and Drayton are a long way from the City Centre and have only limited local employment opportunities. Some scope for BRT, although given limited number of radials and opportunities to accommodate displaced traffic, this may not achieve the same level of service which could be achieved on other BRT routes.
	Expansion would be likely to increase cross Wensum valley car trips to Longwater on roads which can not be improved due to environmental protection status of valley.
	Public transport accessibility of employment areas is limited, although there are some opportunities for cycle access using existing local roads, this is illustrated by the identified local cycle routes on the Norwich Cycle Network.
Objective 8 Character	The sector is characterised by the Wensum river valley along its southern edge and by wooded estatelands and woodland heath mosaic land types. Particular sensitivities include the mature landscape including large woodland blocks, the landscape setting of Norwich and villages which is created, the intimacy, tranquillity and natural meandering nature of the river valley. Small Scale Strategic development in this sector is likely to further consolidate development along the fringes of the existing settlements along the A1067. This would lead to a reduction in separation between settlements, and would extend into existing open countryside.
Objective 9	This sector is adjacent to the sensitive River Wensum valley area, which provides important landscape, recreation and

Environmental protection	natural habitat areas. The river has SAC status. However, development is more likely to be on the northern side of existing settlements and the A1067, rather than adjacent to the Wensum Valley.
	There are some areas of search for minerals which would require investigation and potentially phased construction
	Agricultural land is almost all grade 3
	Small scale development is unlikely to affect local County Wildlife Sites.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Small scale development unlikely to support large range of new services, facilities & employment opportunities which limits the scope to deliver a large scale mixed-use development which affords significant opportunities for enhanced walking and cycling. However, a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs without needing to
	rely on the private car. Would need to rely on existing health and social care services which includes GP and dental services.
	Good existing cycle routes in Thorpe Marriot provide access to local facilities. Also good access to established long distance cycle route to countryside and city centre.

North sector (I	north o	of airport)
Green 0		
Amber 8		
Red 1 Score 0		
Objective 1 Climate change		Closest part of the area is 6 to 7 km from the City Centre, though much is separated from the urban area by the airport which may make cycling routes longer, and the principal A140 route is not particularly well suited to cycling currently due to the magnitude and speed of traffic. There is however a good existing cycle route to Norwich from the eastern part of the area. Potential for public transport improvements using park and ride and potential BRT route.
		Small range of services provided by the existing villages along the north Norwich fringe. However, likely to be limited accessibility, although this would depend upon the exact location of development.
		Sector is relatively well geographically related to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe. BRT along the A140 has the potential to enhance connections to the city, although small scale development would not justify the extension of the route beyond the edge of the Norwich Urban Fringe. Limited sewer capacity and water infrastructure is a key infrastructure dependency for growth.
		Small scale development unlikely to support large range of new services, facilities & employment opportunities which limits the scope to deliver a large scale mixed-use development which affords significant opportunities for enhanced walking and cycling.
Objective 2		Small scale development may limit scope for district scale low carbon/renewable energy generation. In a technical sense there is a sufficient area of undeveloped land to provide for small scale development. However, only
Housing land in sustainable location		a limited amount of development land has been promoted, which would struggle to meet the upper end of the range.
Objective 3 Economic growth		Sector is relatively well geographically related to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe. There is local employment at Abbey Farm and some

	limited employment at Horsford.
Objective 4 Regeneration	Development of all greenfield sites will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	No easily accessible high school in this sector. Sector is poorly related to existing secondary schools. However, there is expected to be some capacity within Hellesdon High School. There may be some capacity at Sprowston or Taverham high schools, although these are also some distance from the sector.
Objective 6 Access to services	Limited range of existing services and facilities provided by the villages in the northern sector. A wider range of services is provided within the Norwich Fringe, but these are not likely to be particularly accessible from development in the Northern Sector by means other than the private car. Limited public transport access to the City Centre, although the A140 has been identified for public transport enhancements between the Airport and Norwich City Centre.
	Small scale development is unlikely to support the provision of a wide range of services and facilities, particularly if development is not concentrated. This limits the opportunity to improve accessibility through the provision of new services and facilities as part of mixed use developments.
Objective 7 Transport and need to travel	The sector is a minimum of 6km from city centre. Whilst there is some scope for increased public transport services along the A140, this potential is limited by the lack of alternative radials to support alternative modes. Spixworth Road offers alternative routes for modes such as cycling to the eastern edge of the area Limited links to alternative modes coupled with access to the NNDR and A140 could increase use of the private car.
	Area is served by airport park and ride but this should not be the solution to deal with public transport needs of strategic growth.
Objective 8 Character	Landscape of the northern sector characterised by Woodland Health Mosaic and Wooded estatelands. Particular landscape sensitivities include the mature landscape, which includes extensive blocks of woodland, the coherent, small scale settlement density and pattern in the area around Horsford & Felthorpe and generally unified rural character around Newton St Faiths and the landscape setting to the Norwich urban fringe and villages. Heritage assets within the sector include Horsford Castle, which is a Scheduled Ancient Monument, historic parkland adjacent to Spixworth and Ancient Woodland west of Horsham and Newton St Faiths.
	The pattern of small scale development in this area could comprise a single extension to a village, a stand alone village or extensions to multiple villages, although the pattern of land promotion would suggest extensions to villages the most likely.

	Small scale development in this sector is likely to have an effect on the inherent qualities of the area in forming a landscape edge to Norwich and the existing characteristics of the area. Although at small scale strategic this effect might be limited. Such development would also not necessarily result in the loss of the immediate landscape settings of the 17 th & 18 th century estatelands.
Objective 9 Environmental protection	Small river valleys with a large number of county wildlife site designations. Some assets in the form of Ancient Woodlands and areas of landscape value. There are also active mineral workings which are proposed for extension in the pre submission publication version of the minerals site allocations document. Development would need to investigate mineral resources and be phased accordingly. There is some potential for heathland re-creation.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of a small range of services and facilities in some existing villages provide scope to support some walking and cycling. However, apart from Spixworth, non-car based links to existing urban fringe are poor, limiting opportunities for walking and cycling. Some existing recreational open space available and small scale development would support the provision of an extended range of local facilities. Good access to countryside via a range of quieter local roads. Reasonable range of existing medical facilities in the area's villages including GPs in Spixworth, Horsham St Faith, and Horsford. Dental services available in Spixworth and urban fringe

Wymondham	
Green 6	
Amber 3	
Red 0	
Score 6	
Objective 1 Climate change	Good public transport at present, but small scale growth would limit potential for further improvements including BRT. Good access to choice of employment areas, and local services. Good train links to Norwich and Cambridge.
onango	Small scale development may limit scope for district scale low carbon/renewable energy generation.
	Some localised surface water and fluvial flooding issues.
Objective 2 Housing land in sustainable location	Sufficient sites to available and promoted to deliver up to 1,500 homes in a town providing a wide range of services, and taking account of environmental constraints and retention of historic character
Objective 3 Economic growth	The sector includes Gateway 11 business park. Although not within the sector there is also reasonable access to the NRP and Hethel employment areas.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Wymondham High School. The site restricted but recent masterplan demonstrates ability to accommodate children from additional 2,200 dwellings through effective use of existing buildings and space . This takes a school to the maximum size acceptable to the LEA and Governors and implementation is underway.
Objective 6 Access to services	A wide range of services are available within Wymondham and therefore the sector would not be dependent on Norwich, except for highest order facilities, and there are relatively good bus and train services which connect Wymondham to Norwich.
Objective 7 Transport and need to travel	Although at distance from the city, self contained nature of town, including local services and employment, and railway link reduce need to travel by car. However, small scale expansion may limit potential for public transport improvements including BRT facilities.
Objective 8 Character	The sector is characterised by Plateau and Tributary Farmland. Particular landscape sensitivities include insensitive developments that intrude upon skyline, loss of rural character, coalescence of settlements and development that intrudes upon the views to important features, e.g. Wymondham Abbey. Need to protect the historic landscape associated with Ketts Oak

	In addition there are areas of landscape value around the river in Wymondham. Wymondham contains a number of heritage assets, most notably Wymondham Abbey but also the Historic Core of the town itself., Small scale development is expected to take the form of extensions to the Market town and at this scale it is considered that it could be accommodated whilst respecting important landscapes and views to the west and south-west of town. It is considered that small scale strategic development could support Wymondham's vitality without detriment to the historic centre.
Objective 9 Environmental protection	Need to protect areas such as the Lizard Agricultural land mostly grade 3
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	The relatively compact nature of the town and wide range of local facilities including G P and dental services encourages walking and cycling as does ease of access to the countryside

Long Stratton	
Green 5	
Amber 1	
Red 3	
Score 2	
Objective 1 Climate change	Distance from strategic employment opportunities and limited opportunities for bus priority to promote modal shift. Good access to some local employment opportunities.
	Capacity for sewage disposal for small scale development but this would reach the limits imposed by the capacity of the receiving water course
Objective 2 Housing land in sustainable location	Sufficient sites available and promoted for an expansion of 1,500 in this large village with its range of facilities
Objective 3 Economic growth	Poorly related to the strategic employment sites around Norwich, but a range of successful local employment opportunities
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Long Stratton High School which could be expanded to support a new development of up to 1,500 dwellings. The school has no 6th form.
	Poor accessibility to tertiary and skills education facilities in Norwich
Objective 6 Access to services	There is a reasonable range of retail, leisure and other services available within Long Stratton and these would be accessible to new development. Council services are located in the village. Limited accessibility to higher order services provided in Norwich or other large scale strategic retail.
Objective 7 Transport and need to travel	Local access is good but significant bus priority along the A140 is unlikewlyand new train links are implausible. There are local employment opportunities but poor access to strategic employment areas.
Objective 8 Character	The sector is characterised by Tributary and Plateau Farmland. Particular sensitivities include the loss of vegetation creating a greater sense of openness and the gently sloping landscape being vulnerable to tall structures in the area north of Long Stratton and the strong sense of openness and sparse small scale settlement pattern in the area. There is also a need to respect the historic landscape character to the east of the village. Nonetheless, it is considered that Small Scale Strategic development could be accommodated in a manner that would not have a significant detrimental impact upon

	landscape or heritage sensitivities.
	It is worth noting that development at the top end of the scale (or beyond) could facilitate a bypass which would enhance the character of the village centre and enhance quality of life.
Objective 9 Environmental	Limited number of environmental designations and potential to improve water utilities enable small scale growth.
protection	Agricultural land mostly grade 3.
	Relatively few local environmental designations. Small-scale development should not significantly impact on these.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11	Good access to the countryside.
Healthy lifestyles	Proximity to local services and facilities including GP facilities and dental services, will promote walking and cycling.

Medium scale 1,500 to 3,500

North east sec Green 4	tor (in	side the NNDR)
Amber 4		
Red 1		
Objective 1 Climate change		Some existing public transport infrastructure providing an average level of service. The presence of multiple radial routes does provide opportunities for public transport and cycle prioritisation which has an acceptable resultant impact on the highway network, assuming delivery of the NDR and associated reduction on level of stress on existing roads. Well related to NAT IP proposals for Norwich Cycle Network. However, medium scale may support modest scale investment in BRT or other prioritisation on Core Bus Routes at the higher end of the range. No significant risk of fluvial flooding. Water infrastructure is a key infrastructure dependency for growth. Excellent access, arguably best relationship in Greater Norwich, to large employment locations (NIA, BBP) and employment in city centre. Also well related to Salhouse Road industrial estate and Sprowston Retail Park. Reasonable relationship to Rackheath Industrial Estate.
		A range of facilities are provided within the existing urban fringe, which may indicate some opportunities to minimise need to travel. Medium scale development, at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, although may struggle in isolation to support higher order services such as health and social care services and secondary schools, these would need to be met by extensions to existing facilities within the existing Urban Fringe. Thereby whilst the need to travel may be limited to some extent through the opportunities provided by medium scale growth there would remain some need to travel to access higher order facilities.
		Medium scale development, towards the top of the range, may provide some scope for district scale low carbon/renewable energy generation, although this may still be dependent upon finding other users within the area
Objective 2 Housing land in sustainable location		Provides sites for 1,500-3,500 homes close to city and services.

Objective 3 Economic growth	Broadland Business Park is a strategic employment location within the Sector, which has capacity to grow. Sector is adjacent to Norwich Aiport, also a strategic employment area with capacity to growth. Local employment at Salhouse Road and Sprowston Retail Park indicate some additional prospect for local employment growth in the sector.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Choice of accessible high schools in this sector have limited capacity and scope for extension. Towards the higher end of the range it is anticipated that development would cause significant stress on existing high schools
Objective 6 Access to services	Well related to the range of services and facilities within the existing urban fringe parishes, including GPs and Dentists. Although capacity of these is, to some extent, finite. There are a public transport services, that have the opportunity to be enhanced, which connect to the city centre and the wide range of services available there. There are two existing district centres within the NE urban fringe and one potential centre, these all have a large anchor food store with a range of smaller facilities. Medium scale development, towards the higher end of the range, is expected to support some additional local services.
Objective 7 Transport and need to travel	This area is approximately 5km from the city centre. There are 2 existing district centres within the NE urban fringe and one potential district centre, these all have a large anchor food store with a range of smaller facilities. In addition there is a range of other services and facilities within the Urban Fringe. This offers some opportunities to meet needs the needs of residents locally. In relative terms, access to public transport which provides connections to the city centre are considered reasonable in this location.
	The sector is related to the Norwich cycle network. Whilst medium scale growth would not necessarily support significant investment in public transport improvements and in particular BRT is would provide for some improvements, particularly at the higher end of the range. Therefore there is scope reduce the impact create by any need to travel resulting from development within this area. Some key transport infrastructure dependencies including the NDR, which is necessary to provide the road capacity that will allow for public transport and cycle prioritisation. In terms of transport key infrastructure dependencies include Postwick junction.
Objective 8 Character	The sector is characterised by wooded estatelands. Particular landscape sensitivities include the mature landscape with large woodland blocks and the landscaped setting for the edge of Norwich which is created. Development will have localised impacts unlikely to affect identified areas of landscape value. NNDR will impact local character. Some local heritage and cultural assets such as historic parks and gardens and ancient woodlands. However, even at the upper end of the range local designations and a landscape edge to built development could be retained. There are local heritage and cultural assets in the form of Ancient Woodland and Historic Parks and Gardens, but these would be unlikely to be directly

	affected by medium scale development.
Objective 9 Environmental protection	There are existing environmental designations in the area including historic parks and gardens, county wildlife sites, ancient woodlands and areas of landscape value. Whilst medium scale development would necessitate the loss of agricultural land it is unlikely to have significant impact on existing environmental designations and will also provide new green infrastructure, which could be of significant scale at the higher end of the range. There is an identified area of grade II agricultural land north of Sprowston and Old Catton, which could be impacted by medium scale development in the Sector.
	The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the Broads. Medium scale development will offer some opportunities to provide green infrastructure contributing to this objective.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of local services including GP's and dental services in urban fringe and public transport could support walking & cycling. In addition, medium scale development, at the higher end of the range, could support additional services to further encourage walking and cycling. Currently good access to countryside. There are a number of existing recreational areas within the fringe and the sector is relatively close to Mousehold Health. The sector is also relatively well connected to Norwich cycle network.
	Towards the upper end of the medium range there are some questions about whether development would be able to be supported through extension of existing health and social care facilities or whether it would, of itself, justify new provision.

North east sec	tor (or	itside NNDR, vicinity of Rackheath)
Green 0	(50	noido Mishi, visinity of Madidiatily
Amber 7		
Red 2		
Score -2		
Objective 1 Climate change		Limited availability of public transport although possibility for the utilisation of Salhouse rail station. Medium scale development in isolation in this area unlikely to justify BRT connecting to sector, although this circumstance may change if coupled with more development inside NNDR. However, medium scale development, particularly at the upper end of the range, could support localised improvements in public transport.
		Very limited range of local services, medium scale development, at the upper end of the range, could provide sufficient critical mass to warrant some new local services and facilities. However, unlikely to support, of itself, higher order services such as secondary schools and GPs. This is likely to result in an increased need to travel.
		Sector is not significantly affected by the risk of fluvial flooding, even taking into account climate change. Limited sewer capacity and water infrastructure is a key infrastructure dependency for growth.
		Relatively well located in relation to Broadland Business Park and, to a lesser extent, NIA. Rackheath Industrial Estate provides local employment opportunities. More difficult to access city centre, although this might be improved through increased public transport but this would only be justified at higher levels of development or if coupled with development in adjacent sectors.
		Medium scale development, towards the top of the range, may provide some scope for district scale low carbon/renewable energy generation, although this may still be dependent upon finding other users within the area.
		Sector currently relies on Broadland High School in Hoveton. This clearly results in the need to travel.
Objective 2 Housing land in sustainable location		Sufficient land available to accommodate 1,500 – 3,000 homes. However, is in a location which is some distance from city and existing services within the Norwich Fringe.
Objective 3 Economic growth		Rackheath Industrial Estate provides local employment opportunities within the sector. Sector is also close to Broadland Business Park and to a lesser extent Norwich Aiport, which are strategic employment locations with the capacity to grow.

Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	No easily accessible high school in this sector. Currently relies on Broadland High School in Hoveton, which is poorly related to the sector and has no 6 th form. It has insufficient capacity on its current site to support this scale of development. Development in this locality would not facilitate expansion of the site Some limited capacity and scope for extension within existing high schools within the Norwich Fringe but these are also poorly accessible. Towards the higher end of the range it is anticipated that development would cause significant stress on existing high schools.
Objective 6 Access to services	Relatively small selection of local services, although does support a Primary School, Village Hall, 2 small convenience stores, a post office and a pub. Hoveton Medical Practice provides a part-time local service. The potential district centre at Blue Boar Lane is not readily accessible other than by car. Local bus services do provide a connection to the district centre at Dussindale, which also contains a large foodstore, inc pharmacy, a part time doctor surgery as an extension of the Woodside practice and some other services. These bus services also provide connections to the higher order services provided in Norwich City Centre.
	Medium scale development, at the upper end of the range, could provide sufficient critical mass to warrant some new local services and facilities. However, unlikely to support, of itself, higher order services such as a secondary school.
Objective 7 Transport and need to travel	The sector is at some distance (in excess of 7km) from Norwich City Centre and contains only a limited range of services and facilities. The sector is relatively well related to Broadland Business Park and NIA in geographical terms, although public transport accessibility is limited. Cycle links to NIA are not particular direct, cycle links to BBP use smaller rural roads, which may be less suitable in poor weather or poor lighting conditions. Measures associated with the NDR will provide significantly improved cycle access to these locations. There is potential for BRT using the Salhouse Road/Gurney Road corridor. However, medium scale development in this sector alone would be unlikely to support such investment. Some potential for use of railway. Some key transport infrastructure dependencies including the NDR, which is necessary to provide the road capacity that will allow for public transport and cycle prioritisation.
Objective 8 Character	The sector is characterised by wooded estatelands. Particular sensitivities include the mosaic of parkland, arable field and woodlands and landscape setting of historic houses, halls, churches and the setting of villages and hamlets. Some heritage and cultural assets including ancient woodlands and historic parks and gardens but these tend to be in the far north or west of the sector meaning that there is unlikely to be any significant impact upon these assets.
	Medium scale development in this sector would be likely to result in the expansion of an existing suburban village(s) into the open countryside to the north this is likely to have a significant impact upon the existing rural setting. The are local heritage assets in the form of ancient woodland and historic parks and gardens but these are within the far north and west

Objective 9	of the sector and therefore unlikely to be directly effected by development. The former WWII Rackheath USSAF base, which is of significance in terms of local heritage could be effected. Medium scale development is likely to have an impact upon the existing rural setting of Rackheath. The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit
Environmental protection	related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the Broads. Medium scale development will offer some opportunities to provide green infrastructure, although the likelihood is that this will be more local than strategic in nature with lower scales of development. It is likely to be necessary to retain an undeveloped buffer zone between the Broads and new development at Rackheath.
	Agricultural land generally grade 3. Limited mineral investigation area which may necessitate phased construction.
Objective 10 Community safety	
Objective 11 Healthy lifestyles	Medium scale growth, particularly at the higher end of the range, may support an increased range of local employment opportunities, services and facilities. This affords the opportunity to increase levels of walking and cycling through the creation of new mixed use neighbourhoods.
	However, this scale of growth in isolation is unlikely to warrant the delivery of higher order services. and medium scale development in this sector in isolation is unlikely to justify comprehensive cycling connections to Norwich. Therefore there is still likely to be the need to travel, and options in this area may still depend on the private car.
	Nearest dental services in Spixworth or urban fringe.
	Medium scale development would support the provision of a range of local, and at the higher end of the range some strategic, recreational open space facilities and there remains good links to the countryside.

East Sector (outside NNDR)		
Green 0	itsiae	NNDR)
Amber 4		
Red 5		
Score -5		
Objective 1 Climate change		Whilst the sector is flanked by the Norwich to Cromer/Sheringham and Norwich to Yarmouth/Lowestoft Railway lines, Brundall and Salhouse Stations are not likely to be readily accessible from the area. Existing public transport services are limited and there is no existing bus based prioritisation. The area is relatively well related geographically to Broadland Business Park and there is a network of local roads which might be suited to cycling, although would be less so in poor weather conditions or at night given nature of roads and lack of lighting. Good access to park & ride facilities at Postwick, which would provide connections to Norwich City Centre, though strategic growth should not rely on Park and Ride.
		The Plumsteads provide a very small range of local service and facilities. Brundall and Blofield provide a wider range of facilities including a GPs surgery.
		However, dispersed nature of area and limited interconnection of villages by public transport is likely to mean that predominant mode of transport would be the private car.
		No risk of fluvial flooding within the sector, though nearby riverside parts of Brundall are prone to flooding. Limited sewer capacity without strategic improvements but sector is close to the Whitlingham Waste Water Treatment Works
		Medium scale development will afford opportunities for improved fabric and renewables but may not provide sufficient critical mass to support larger district scale decentralised renewable/low carbon energy infrastructure, particularly at the lower end of the range
Objective 2 Housing land in sustainable location		Whilst there is sufficient land available to accommodate 1,500 – 3,000 homes the amount of land actually promoted for development fall some way below this level. Therefore there are concerns about the likelihood of meeting this level of development within this area However, further land might come forward if area promoted. Existing villages in this sector are some distance from city and existing services within the Norwich Fringe.
Objective 3 Economic growth		There are some small scale local employment opportunities within the larger villages in the sector but these are expected to have limited capacity to expand. Parts of the area are close to Broadland Business Park, although larger villages are at some distance.

Objective 4 Regeneration	
Objective 5 Education	No easily accessible high school to most of this sector. Thorpe St Andrew High School serves the area, while it would be accessible to an urban extension it would be at a significant distance from growth focussed on the existing villages in the sector. While there is some scope for expansion, development at this scale would cause significant stress.
Objective 6 Access to services	Small range of local services provided by the villages of the Plumstead, Blofield and Brundall. However, depending upon the location of any new development within the sector these could have limited access. Medical and dental services are available in Brundall and Blofield, with part time services in Thorpe St. Andrew and Rackheath. An urban extension immediately to the east of Broadland Business Park could have reasonable potential access to its services and the District Centre at Pound Lane. There is limited accessibility to the higher order services in Norwich City Centre, although the Postwick Park and Ride and possible BRT enhancements to Yarmouth Road may improve this situation. Medium scale development, at the upper end of the range, could provide sufficient critical mass to warrant some new local services and facilities. However, unlikely to support, of itself, higher order services such as secondary schools and GPs.
Objective 7 Transport and need to travel	The west of this area is approximately 6km from Norwich City centre, but existing settlements are considerably further away. Improved public transport through BRT and rail access is difficult to promote in this area, particularly at small scales of growth. The sector is served by two radials (limiting the options to serve traffic displaced by bus priority measures) and growth would increase local traffic on the trunk road. In terms of transport key infrastructure dependencies include Postwick junction. The limited range of services and facilities, coupled to the lack of critical mass provided by medium scale development is likely to mean that there will be a need to travel resulting from development in this sector. There is limited public transport accessibility and no existing public transport prioritisation with the road system separating area from the business park. No clear prospect that for any extension of the Yarmouth Road BRT route would be possible with small scale development, or any other scale, of development in this sector.
Objective 8 Character	This area is characterised in part by Wooded Estatelands but mainly Tributary Farmland. Particular sensitivities include the strong mosaic of arable fields and mature woodland, strong rural character the landscape setting of hamlets and villages and characteristic views to church towers surrounded by woodland. In addition, there are local areas of landscape value adjacent to Witton Run and in between Blofield and Brundall. There are some areas of Ancient Woodland and Landscape Value north of Hemblington but these are on the far edge of the NPA and therefore unlikely to be directly effect by development.

	As this area is characterised by its distinctly rural aesthetic, and is beyond the route of the NDR, medium scale development taking the form of the expansion of small or medium villages into the open countryside, which is distinctly rural in character, would have a major urbanising effect on the landscape. However, if development took the form of an urban extension, perhaps in association with a neighbouring sector, the impact on villages would be less. While it would still have an impact on open countryside it would be read as part of the urban area.
Objective 9 Environmental protection	Proximity to the Broads would require significant mitigation through additional green space. In addition much of the area is Grade I & II agricultural land. These considerations raise significant issues about the potential suitability the eastern sector for development at any significant scale.
Objective 10 Community safety	
Objective 11 Healthy lifestyles	Medium scale growth, particularly at the higher end of the range, may support an increased range of local employment opportunities, services and facilities. This affords the opportunity to increase levels of walking and cycling through the creation of new mixed use neighbourhoods.
	However, this scale of growth in isolation is unlikely to warrant the delivery of higher order services. and medium scale development in this sector in isolation is unlikely to justify comprehensive cycling connections to Norwich. Therefore there is still likely to be the need to travel, and options in this area may still depend on the private car. However, an urban extension would have good potential for cycle access to Broadland Business Park and Norwich.
	Nearest dental facilities in urban fringe. GPs in Brundall, Blofield and urban fringe.
	Medium scale development would support the provision of a range of local, and at the higher end of the range some strategic, recreational open space facilities and there remains good links to the countryside and Broads.

South east sec	ctor (vicinity of Poringland)
Green 0	tor (vicinity of a ornigiana)
Amber 5	
Red 4	
Score -4	
Objective 1 Climate change	Distant from strategic employment locations with limited potential for high quality public transport priority measures, therefore growth would lead to increased car use.
	Surface water drainage issues.
Objective 2 Housing land in sustainable location	Provides sufficient land for 3,000 homes, but in location at some distance from city (5-6km) and large scale convenience retailing.
Objective 3 Economic growth	Limited local employment, which is not expected to expand. Sector is not close to any strategic employment centres, access to city centre constrained.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Framingham Earl High School which could only support medium levels of growth if the site can be significantly expanded. The school has no 6 th form.
Objective 6 Access to services	Some existing facilities, but no large scale convenience retail. Limited access to Norwich City Centre as a result of the limited potential for high quality public transport services. Medium scale growth at the higher end would provide scope to support an increased level of services
Objective 7 Transport and need to travel	This area is at some distance from the city. There is limited access to employment. Existing congestion, the scale of growth and lack of options for accessing the city limit opportunities for new high quality public transport infrastructure.
Objective 8 Character	The sector is largely characterised by plateau farmland, although tributary farmland and the Tas river valley also influence the character of the area. Particular sensitivities include ribbon development along rural lanes, development that intrudes onto the plateau edge, opening up of the landscape through loss of woodland, hedgerow or hedgerow trees. There are a significant number of ancient monuments within the area between Poringland/Stoke Holy Cross and the A47. Medium scale development is expected to take the form of the expansion of large suburban village into countryside. Whilst this would have some impact upon the landscape sensitivities it is not considered to be significantly detrimental to the landscape
Objective 9	No significant environmental constraints (County Wildlife Sites can be avoided).

Environmental protection	Likely traffic congestion into city could impact on conservation of historic areas. Mineral resource would require investigation and potential phased extraction.
	Agricultural land generally grade 3, but with some areas of grade to nearer 2 the River Yare
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Poor access to employment reduces opportunity for cycling and walking. Local services, particularly if strengthened, provides some opportunities. Good access to the countryside. GP services available in the village, but no dentist.

South sector (/	411 –	A140, outside A47)
Green 0		·····, ······,
Amber 3		
Red 6		
Score -6		
Objective 1 Climate change		Limited potential for accessible public transport connections to strategic employment areas and the city centre would lead to increased car use.
		Medium scale development may limit scope for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location		Access constraints on to the A11 restrict potential land availability to the area served by the B1113 and A140. Provides sites for up to 3,000 homes, but in location with very few services and with little potential for public transport improvement. Active mineral workings and electricity infrastructure limit choice of locations for development.
Objective 3 Economic growth		Very limited local employment opportunities within or adjacent to the sector. Poorly related to the strategic employment sites of the area. Limited potential for bus links on A140.
Objective 4 Regeneration		Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education		No easily accessible high school in the sector, which is mainly served by Hethersett, though this is at some distance and has no 6 th form. The capacity at Hethersett High is likely to be taken up by growth at Hethersett and Cringleford. No capacity at City of Norwich School, potential capacity at the Hewett School but both are at some distance from the area
Objective 6 Access to services		There are few local services and accessibility to large scale convenience retailing or the city centre is limited by public transport connections. Access to higher order services is expected to be largely car dependent.
Objective 7 Transport and need to travel		The lack of potential for accessible public transport connections due to constraints on providing bus priority on A140 lpswich Road and to accessing A11 would lead to high car use. In addition, railway and level crossings on minor roads inhibit access to A140.
Objective 8 Character		The sector is characterised by Tributary and Plateau Farmland. Particular landscape sensitivities in the area include loss of rural urban divide and coalescence of settlements, intensive developments which breakup the skyline and Intrude on the sense of openness and incremental changes, such as upgrading rural lane network to create a more urban feel. It is considered that Medium scale strategic development would require creation of new settlement or expansion of villages in open countryside, which would have a significant detrimental effect on the landscape sensitivities of the area.

Objective 9 Environmental protection	Mineral resources in area which would necessitate phased development. Additional traffic congestion into city and implementation of BRT would impact on Conservation Area. Agricultural land generally grade 3 Some local designations for county wildlife sites, but medium scale development should be able to avoid these
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Limited local services do not encourage walking and cycling. These may be enhanced by medium scale development at the top end of the range. GP facilities are available in Mulbarton, and in other villages further south served by the A 140. No nearby dental facilities Good access to countryside.

South west see	ctor (A11 – B1108)
Green 5	COI (ATT - BT100)
Amber 4	
Red 0	
Score 5	
Objective 1	
Climate	
change	Good public transport at present and medium scale growth (in conjunction with growth at Wymondham) enables further improvements including BRT. Good access to choice of employment areas, but limited local services. Good cycle route connecting to the city centre.
	Medium scale development may offer scope for district scale low carbon/renewable energy generation.
Objective 2	
Housing land in sustainable location	Land put forward could accommodate medium scale growth. Opportunities constrained by a need to avoid infringing river valley landscape.
Objective 3	Sector is adjacent to the Hospital and UEA and to Norwich Research Park, which is a strategic employment area that has
Economic growth	the potential to expand.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5	Well related to Hethersett High School which has the capacity to expand provided adjacent land can be made available to
Education	enlarge the site Land promoted for development enables this expansion. No 6 th form.
	Sector is adjacent to UEA.
Objective 6	
Access to	Some existing services in Hethersett. Cringleford has good access to the services in nearby in Eaton. Higher order
services	services within the City Centre are accessible by good public transport links and the proposed BRT. The sector is also close to hospital. Medium scale development is likely to result in some enhanced local services.
Objective 7	Public transport links and journey times are good here and the corridor has recently been improved and medium scale
Transport and	growth in association with other growth on this corridor offers potential for further improvement through BRT. The area is
need to travel	easily accessible to the Norwich Research Park and city centre. Employment at Wymondham and Longwater strategic
_	employment areas can also be accessed. Medium scale growth would require significant improvement to the Thickthorn
Ohia atiwa 0	junction
Objective 8	The sector is characterised by Tributary and Plateau Farmland. Particular landscape sensitivities in the area include loss

Character	of rural vernacular, the coalescence of settlements, intensive developments which intrude upon the views of important landmarks and/or breakup the skyline and intruding on the sense of openness. Medium scale strategic development in this area is expected to comprise the expansion of village and urban edge community into countryside. Whilst this would have some impact upon landscape sensitivities it is not considered to be significantly detrimental. There is some historic parkland unlikely to be affected by medium scale development.
Objective 9 Environmental	Medium scale development would maintain the green space area around Norwich and the River Yare.
protection	Few local environmental designations apart from protection of the river valley. Medium scale development should be able to avoid impacting on any of these.
	Agricultural land is generally grade 3, with an area of grade 2 north west of Hethersett Sector lies within green infrastructure priority corridor and medium-scale development may be able to contribute towards
	achievement of this.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy	Cycling opportunities to local services, including schools and strategic employment areas . Good access to the
lifestyles	countryside. Local G. P. and dental facilities, Medium scale development may support significant extra services in the locality, particularly at the upper end of the range

West sector (Ri	er Yare to River Wensum)
Green 3	
Amber 5	
Red 1	
Score 2	
Objective 1 Climate change	Good public transport at present. Recent investment in public transport priorities in the corridor. Medium scale growth would enhance potential for extending the improvements, including BRT. Good access to employment (Longwater and Norwich Research Park) and large scale convenience retailing.
	Medium scale development may offer scope for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location	Sites limited to small scale strategic urban extensions and village enlargement on land away from river valleys. The scop for medium scale growth at the upper end of the range is likely to be constrained by the availability of suitable sites and capacity issues.
Objective 3 Economic growth	Longwater lies within the sector, which has capacity to expand. The sector also includes other local employment in Costessey and at Easton College. The non strategic Bowthorpe employment area is also nearby.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Ormiston Victory High School (Costessey) where planned redevelopment will increase capacity to 1250 places. This is expected to cater for existing commitments in the area but the additional planned JCS allocation (1000 dwellings) is expected to take this slightly beyond its new design capacity. The site cannot be extended. Sector includes Easton College.
Objective 6 Access to services	Large scale convenience retail at Longwater and other local services such as a health centre and leisure facilities available, though limited at Easton. Good public transport also results in good links to higher order services provided in Norwich City Centre. Medium scale growth may enhance some local services
Objective 7 Transport and need to travel	The area is at some distance from the city centre, but it does have large employment areas close by. BRT links may be extended. Area served by only one radial road limiting options for traffic displaced by public transport priorites unless local traffic were to use the A47 trunk road. Need for major expansion to capacity at A47 Longwater junction.
Objective 8 Character	The western sector is characterised by Tributary and settlement edge Farmland and by the Yare/Tiffey river valley.

	Particular landscape sensitivities include the preservation of rural views from the ridge adjacent to Easton, unsympathetic developments intruding into the rural landscape and the protection of the rural, undeveloped, character of the Tiffey River valley. Medium scale strategic scale growth in this sector is expected to comprise the expansion of urban edge villages into countryside although the need to protect river valleys constrains development. Medium scale strategic development within this area is not expected to have a significant detrimental impact upon the character of the area.
Objective 9 Environmental protection	Sensitive river valleys (Rivers Yare, Tud and Wensum) restrict the area of development. Few other local environmental designations apart from protection of the setting of the southern by pass. River Wensum near Costessey is an SAC, but medium-scale strategic development should be able to avoid these. Agricultural land generally grade 3 with some pockets of grade 2 in the western part of the sector
	Some areas of search for minerals which will need investigation and may necessitate phased construction
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Local facilities particularly if enhanced by this scale of growth, would encourage more walking and cycling. Opportunities to enhance access to countryside. GP services are available, and dental services in Costessey and nearby Bowthorpe. Complexity of Longwater junction means walking and cycling less attractive from parts of the area
	Complexity of Longwaler junction means walking and cycling less attractive from parts of the area

North west Sec Green 0 Amber 8 Red 1 Score -1	ctor (A	1067 - NNDR)
Objective 1 Climate change		This sector lies between 6 & 10 km from Norwich City Centre. No significant public transport prioritisation outside of city centre for radial routes connecting sector to city. Some scope for enhancement along A1067, which is recognised in NATS as a potential BRT route, although this has landscape implications, as road widening would require the removal of trees. However, medium scale development of itself unlikely to directly support significant public transport enhancements, but associated with existing developed areas it may support BRT. The area is not well related to a choice of strategic employment areas.
		Medium scale development, particularly at the higher end of the range, may enhance the range of local services, facilities & employment and promote opportunities for walking and cycling. However, it is in isolation unlikely to support a higher order services e.g. GPs or secondary schools. In addition, a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs without needing to rely on the private car.
		Disposal of waste water from the Taverham, Drayton area may require new strategic sewer to pump to Whitlingham, which is potentially quite energy intensive. This strategic intercept sewer is a key infrastructure deficiency in the area
		The parts of the sector which lie nearer the city are relatively close to Norwich Airport but no sites have been promoted for development on the edge of Hellesdon, meaning that any development is more likely to be as extensions to Drayton and Taverham and as such further from Strategic Employment.
		Medium scale development may offer scope for district scale low carbon/renewable energy generation.
		No significant risk of fluvial flooding, even accounting for predicted effects of climate change, though there are surface water flooding issues in Drayton.
Objective 2 Housing land in sustainable location		There is potentially land available for 3,000 dwellings. However, outside of the urban area of Hellesdon only enough land has been promoted for approximately 1,200 homes as extensions to Drayton and Taverham. This could of course change if the prospect of development was considered likely by developers. Areas close to the Hellesdon fringe are restricted by the Airport public safety zone and noise contours, which limits the potential scale of development in this area

There is some local employment areas within Hellesdon, Taverham and Drayton which provide local employment opportunities with some capacity to expand. However, previous medium scale development in the north west at Thorpe Marriott (about 2700 houses) failed to attract local employment in spite of an allocation for that purpose. The sector is adjacent to NIA and Sweetbriar Industrial Estate provides other opportunities between the City Centre and North-west Sector.
Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Well related to Taverham or Hellesdon High Schools. There may be limited capacity at Taverham, although the site is constrained. There is some capacity at Hellesdon, which could expand if adjacent land promoted for development comes forward. It is likely that medium scale growth could only be accommodated within existing facilities in the lower part of the range.
Medium scale development, particularly at the higher end of the range, may support range of local services, facilities & employment opportunities promoting walking and cycling. However, it is in isolation unlikely to support a higher order services e.g. GPs or secondary schools. At the lower end of the range development may be able to utilise existing secondary school facilities, at the higher end is most unlikely.
There is, nonetheless, a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs without needing to rely on the private car.
Reasonable public transport accessibility to the city centre and the A1067 has been identified for prioritisation measures through BRT enhancements. However the opportunities for this may be limited. Also the A140, which is identified for public transport enhancements, lies adjacent to sector.
The parts of the sector which lie close to Taverham and Drayton are a long way from the City Centre and have only limited local employment opportunities. Some scope for BRT, although given limited number of radials and opportunities to accommodate displaced traffic, this may not achieve the same level of service which could be achieved on other BRT routes.

	Expansion would be likely to increase cross Wensum valley car trips to Longwater on roads which pass through existing communities and can not be improved due to environmental protection status of valley. At medium scale levels of growth this would be a major problem. Public transport accessibility of employment areas is limited, although there are some opportunities for cycle access using existing local roads, this is illustrated by the identified local cycle routes on the Norwich Cycle Network.
Objective 8 Character	The sector is characterised by the Wensum river valley along its southern edge and by wooded estatelands and woodland heath mosaic land types. Particular sensitivities include the mature landscape including large woodland blocks, the landscape setting of Norwich and villages which is created, the intimacy, tranquillity and natural meandering nature of the river valley. Additional development is likely to further consolidate development along the fringes of the existing settlements along the A1067. This would lead to a reduction in separation between settlements, and would extend into existing open
	countryside. The effect of the NNDR would minimise the relative intrusion into open countryside.
Objective 9 Environmental protection	This sector is adjacent to the sensitive River Wensum valley area, which provides important landscape, recreation and natural habitat areas. The river has SAC status. However, development is more likely to be on the northern side of existing settlements and the A1067, rather than adjacent to the Wensum Valley.
	There are some areas of search for minerals which would require investigation and potentially phased construction
	Agricultural and is almost all grade 3
	Medium scale development is unlikely to affect local County Wildlife Sites.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Medium scale development may support some new local services, facilities & employment opportunities which could therefore promote walking and cycling. In addition, there is a relatively wide range of services and facilities existing within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs without needing to rely on the private car. Medium scale growth would support the provision of enhanced local recreational facilities, and possibly also strategic

facilities at the higher end of the range.

Would need to rely on existing health and social care services which include GP and Dental services subject to their capacity to expand. Good existing cycle routes in Thorpe Marriot provide access to local facilities. Also good access to established long distance cycle route to countryside and city centre.

North sector (north of airport) Green 0 Amber 5 Red 4 Score -4 Closest part of the area is 6 to 7 km from the City Centre, though much is separated from the urban area by the airport Objective 1 Climate which may make cycling routes longer, and the principal A140 route is not particularly well suited to cycling currently due change to the magnitude and speed of traffic. There is however a good existing cyle route to Norwich from the eastern part of the area. Potential for public transport improvements using park and ride and potential BRT route. Small range of services provided by the existing villages along the north Norwich fringe. However, likely to be limited accessibility, although this would depend upon the exact location of development. Sector is relatively well geographically related to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe. BRT along the A140 has the potential to enhance connections to the city, although medium scale development is unlikely justify the extension of the route beyond the edge of the Norwich Urban Fringe. Sector is close to the existing and proposed new strategic employment area at the Airport. Medium scale development may support some new local services, facilities & employment opportunities which could promote walking and cycling. However, even at the higher end of the range, in isolation would be unlikely to support higher order services e.g. GPs & Secondary Schools. Sector is relatively close to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe and to higher order services. Medium scale development may offer scope for district scale low carbon/renewable energy generation. Objective 2 There is a sufficient area of undeveloped land to provide for medium scale development. However, only a limited amount Housing land of development land has been promoted, which would struggle to meet even the lower end of the range. Sites would be in sustainable separated from urban area by airport, which limits accessibility to services within the Norwich Fringe.

location

Objective 3 Economic growth	Sector is relatively well geographically related to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe. There is local employment at Abbey Farm and some
Objective 4 Regeneration	limited employment at Horsford. Development of all greenfield sites will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	No easily accessible high school in this sector. Sector is poorly related to existing secondary schools. However, there is expected to be some capacity within Hellesdon High School. The ability to expand this school further is reliant on growth outside the North Sector. There may be some capacity at Sprowston or Taverham high schools, although these are also some distance from the sector
Objective 6 Access to services	Limited range of existing services and facilities provided by the villages in the northern sector. A wider range of services is provided within the Norwich Fringe, but these are not likely to be particularly accessible from development in the Northern Sector by means other than the private car. Limited public transport access to the City Centre, although the A140 has been identified for public transport enhancements between the Airport and Norwich City Centre.
	Medium scale development may support the provision of a range of local services and facilities, although the scope for this may be reduced if development is spread as extensions to existing villages thus limiting critical mass, unless good functional links can be created. This could allow for some accessibility improvements for services.
Objective 7 Transport and need to travel	The sector is a minimum of 6km from city centre. Whilst there is some scope for increased public transport services along the A140, this potential is limited by the lack of alternative radials to support alternative modes. Spixworth Road offers alternative routes for modes such as cycling to the eastern edge of the area Limited links to alternative modes coupled with access to the NNDR and A140 could increase use of the private car.
	BRT along the A140 has the potential to enhance connections to the city if development were to beconcentrated close to the A140 corridor
	Area is served by airport park and ride but this should not be the solution to deal with public transport needs of strategic growth.
Objective 8 Character	Landscape of the northern sector characterised by Woodland Health Mosaic and Wooded estatelands. Particular landscape sensitivities include the mature landscape, which includes extensive blocks of woodland, the coherent, small scale settlement density and pattern in the area around Horsford & Felthorpe and generally unified rural character around Newton St Faiths and the landscape setting to the Norwich urban fringe and villages. Heritage assets within the sector include Horsford Castle, which is a Scheduled Ancient Monument, historic parkland adjacent to Spixworth and Ancient Woodland west of Horsham and Newton St Faiths.

The form of development could comprise a single extension to a village, a stand alone village or extensions to multiple villages, Extensions to villages would result from the pattern of land promoted for development but this may change if the sector were promoted through the planning process.
This is likely to have a significant effect on the inherent qualities of the area in forming a landscape edge to Norwich and the existing characteristics of the area. Although development would not necessarily result in the loss of the immediate landscape settings of the 17 th & 18 th century estatelands.
Small river valleys with a number of county wildlife site designations. Some assets in the form of Ancient Woodlands and areas of landscape value. There are also active mineral workings which are proposed for extension in the pre submission publication version of the minerals site allocations document.
Development would need to investigate mineral resources and be phased accordingly.
There is some potential for heathland re-creation.
Impacts are largely influenced by settlement designs and the facilities provided
Availability of a small range of services and facilities in some existing villages provide scope to support some walking and cycling. However, apart from Spixworth, non-car based links to existing urban fringe are poor limiting opportunities for walking and cycling.
Some existing recreational open space available and medium scale development would support the provision of an extended range of local facilities. Good access to countryside via a range of quieter local roads.
Reasonable range of existing medical facilities in the area's villages, including GPs in Spixworth, Horsham St Faith, and Horsford. Dental services available in Spixworth and urban fringe, but medium scale growth would need to rely on these subject to their ability to expand given their dispersed locations.

Wymondham Green 6 Amber 3 Red 0 Score 6	
Objective 1 Climate change	Contributions from car use could be reduced by frequent train services and the self-containment. Medium scale development likely to support development of BRT as an extension of the existing town particularly if associated with other growth in the corridor. Good train links to Norwich and Cambridge. Some localised surface water and fluvial flooding issues. Medium scale development may offer scope for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location	Sufficient available land, and promoted sites, to provide for medium scale growth in a town providing a wide range of services, and taking account of environmental constraints and retention of historic character.
Objective 3 Economic growth	Sector contains Gateway 11 business park. Whilst not within the sector there is also reasonable access to the NRP and Hethel employment areas.
Objective 4 Regeneration	Development of all greenfield sites will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Wymondham High School. The site is restricted but recent masterplan demonstrates ability to accommodate children from additional 2,200 dwellings through effective use of existing buildings and space. This takes a school to the maximum size acceptable to the LEA and Governors and implementation is underway.
Objective 6 Access to services	A wide range of services are available within Wymondham and therefore the sector would not be dependent on Norwich, except for highest order facilities, and there are relatively good bus and train services which connect Wymondham to Norwich. Medium scale development may support the provision of enhanced local services and facilities.
Objective 7 Transport and need to travel	Although at distance from the city, self contained nature of town, including local services and employment, and railway link reduce need to travel by car. Medium scale growth particularly in association with other growth in the corridor provides potential for public transport improvements including BRT facilities.
Objective 8 Character	The sector is characterised by Plateau and Tributary Farmland. Particular landscape sensitivities include insensitive developments that intrude upon skyline, loss of rural character, coalescence of settlements and development that intrudes upon the views to important features, e.g. Wymondham Abbey. In addition there are areas of landscape value around the river in Wymondham. Wymondham contains a number of heritage assets, most notably Wymondham Abbey but also the

	Historic Core of the town itself. Also need to protect the historic landscape associated with Ketts Oak. However, it is anticipated that Medium scale strategic expansion in this sector could support Wymondham's vitality without detriment to the historic centre. Also, depending on location(s), development could be accommodated whilst respecting landscapes and views to the west and south-west of town, although this is likely to become very challenging towards the upper end of the range.
Objective 9 Environmental protection	Need to protect areas such as the Lizard The area lies in a priority green infrastructure coroner (Wymondham to Norwich). Medium scale development may be able to contribute towards this.
	Agricultural land mostly grade 3
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	The relatively compact nature of the town and wide range of local facilities including GP and dental services, encourages walking and cycling as does ease of access to the countryside.

Long Stratton Green 3 Amber 2 Red 4	
Score -1	
Objective 1 Climate change	Distance from strategic employment opportunities and limited opportunities for bus priority to promote modal shift But has good accessibility to local employment opportunities.
	Capacity for sewage disposal for small scale development but this would reach the limits imposed by the capacity of the receiving water course
Objective 2 Housing land in sustainable location	Sufficient land available, and sites promoted, for medium scale development. However water utilities issues and need to protect historic landscape east of village limits potential for expansion to the lower end of the medium range. The waste water disposal issues limit growth to very close to the bottom of the medium scale range i.e. 1800 dwellings.
Objective 3 Economic growth	Poorly related to the strategic employment sites around Norwich, but a range of successful local employment opportunities
Objective 4 Regeneration	Development of all greenfield sites will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Long Stratton High School which could be expanded to support medium scale development in the lower part of the range. No 6 th form
	Poor accessibility to tertiary and skills education in Norwich
Objective 6 Access to services	There is a reasonable range of retail, leisure and other services available within Long Stratton and these would be accessible to new development. Council services are located in the village. Limited accessibility to higher order services provided in Norwich or other large scale strategic retail. Medium scale development may support the provision of enhanced local services and facilities.
Objective 7 Transport and need to travel	Local access is good but significant bus priority along the A140 is unlikely and new train links are implausible. There is limited access to strategic employment areas.
Objective 8 Character	The sector is characterised by Tributary and Plateau Farmland. Particular sensitivities include the loss of vegetation creating a greater sense of openness and the gently sloping landscape being vulnerable to tall structures in the area north of Long Stratton and the strong sense of openness and sparse small scale settlement pattern in the area. There is also a need to respect the historic landscape character to the east of the village. Nonetheless, it is considered that some

	development could be accommodated in a manner that would not have a significant detrimental impact upon landscape or heritage sensitivities. It should be noted that development at the lower end of the scale would facilitate a bypass which would enhance the character of the village centre and enhance quality of life.
Objective 9 Environmental protection	Few environmental designations would constrain development, and A140 by-pass would significantly reduce pollution in the village.
	Agricultural land mostly grade 3. Relatively few local environmental designations. Medium scale development should not significantly impact on these.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Good access to the countryside. Proximity to local services, employment, and facilities including GP and dental facilities will promote walking and cycling. If development facilitates construction of a bypass, it could contribute towards improved air quality.

Large scale growth 7,000 to 10,000

North east sector (inside the NNDR)

Green 5 Amber 4 Red 0 Score 5

Objective 1 Climate change Some existing public transport infrastructure providing an average level of service. The presence of multiple radial routes does provide opportunities for public transport and cycle prioritisation which has an acceptable resultant impact on the highway network, assuming delivery of the NDR and associated reduction on level of stress on existing roads. Well related to NAT IP proposals for Norwich Cycle Network.

Large scale development would support significant investment in BRT and other prioritisation on Core Bus Routes, particularly at the higher end of the range.

No significant risk of fluvial flooding. There are sewer capacity issues and water infrastructure is a key infrastructure dependency.

A range of facilities are provided within the existing urban fringe, which may indicate some opportunities to minimise need to travel. Large scale development, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and secondary schools.

Excellent access, arguably best relationship in Greater Norwich, to large employment locations (NIA, BBP) and employment in city centre. Also well related to Salhouse Road industrial estate and Sprowston Retail Park. Reasonable relationship to Rackheath Industrial Estate.

Therefore large scale development in the sector offers significant opportunities to create a series of interrelated mixed use communities which support a wide range of services, facilities and employment opportunities, which, if designed to promote walking and cycling, could significantly reduce the need to travel and the reliance on the private car. This offers notable potential benefits in terms of climate change.

Large scale development, provides good conditions to support district scale low carbon/renewable energy generation, although this may still be dependent upon finding other users within the area

Objective 2 Housing land in sustainable location	Provides sites for at least 7,000 new homes close to city and services. At the higher end of the range, if becomes difficult to accommodate development without some impact, and in some cases significant, impact on local designations. The form of development is likely to be less than ideal at the higher end of the range
Objective 3 Economic growth	Broadland Business Park is a strategic employment location within the Sector, which has capacity to grow. Sector is adjacent to Norwich Aiport, also a strategic employment area with capacity to growth. Local employment at Salhouse Road and Sprowston Retail Park indicate some additional prospect for local employment growth in the sector. Large scale growth is expected to support mixed use developments which would enhance the range of local employment opportunities.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Choice of accessible high schools in this sector have limited capacity and scope for extension to cater for early devlopment. With the scale of development in this sector limited to the lower end of the range, provision of a new secondary school of the preferred scale would be challenging. Critical mass could be achieved through development in adjacent sectors with good functional relationships
Objective 6 Access to services	Well related to the range of services and facilities within the existing urban fringe parishes. There are public transport services, that have the opportunity to be enhanced, which connect to the city centre and the wide range of services available there. Large scale development would support significant improvements to public transport and cycling infrastructure to access services in the city centre. There are two existing district centres within the NE urban fringe and one potential centre, these all have a large anchor food store with a range of smaller facilities.
	Large scale development, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and a secondary school. Therefore large scale development in the sector offers the opportunity to create mixed use communities
Objective 7 Transport and need to travel	This area is approximately 5km from the city centre. There are 2 existing district centres within the NE urban fringe and one potential district centre, these all have a large anchor food store with a range of smaller facilities. In addition there is a range of other services and facilities within the Urban Fringe. This offers some opportunities to meet needs the needs of residents locally. In relative terms, access to public transport which provides connections to the city centre is considered reasonable in this location.
	The sector is well related to the Norwich cycle network. Large scale growth would be likely to justify significant investment

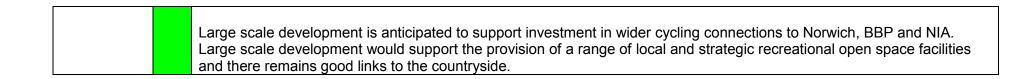
	in public transport improvements, and in particular BRT.
	Therefore there is scope reduce the impact create by any need to travel resulting from development within this area.
	The area will be served by the NDR for which funding has been confirmed. This will create the conditions for significant public transport priorities in the sector. It also provides associated cycle infrastructure. Consequently the NDR, and associated junction improvements, are a key infrastructure dependency in this sector.
Objective 8 Character	The sector is characterised by wooded estatelands. Particular landscape sensitivities include the mature landscape with large woodland blocks and the landscaped setting for the edge of Norwich which is created. Development will have localised impacts unlikely to affect identified areas of landscape value. NNDR will impact local character. Some local heritage and cultural assets such as historic parks and gardens and ancient woodlands
	At the upper end of the range there is likely to be increased pressure on some local landscape and heritage designations. Any landscape edge to Norwich between development and the NNDR is likely to be significantly reduced at the upper end of the range. As such significant development is expected to significantly affect local character.
Objective 9 Environmental protection	There are a number of existing environmental designations in the area including county wildlife sites, ancient woodlands, and areas of landscape value. Large scale development, particularly at the higher end of the range, would necessitate the loss of grade II agricultural land and could impact on existing environmental designations such as county wildlife sites.
	The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the Broads.
	Large scale development would provide significant new green infrastructure, which could be of significant scale and could contribute towards this priority link.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of local services including GP's and dental services in urban fringe and public transport could support walking & cycling. In addition, large scale development would support additional services to further encourage walking and cycling. Currently good access to countryside. Measures associated with the NDR will enhance cycle access. There are a number of existing recreational areas within the fringe and the sector is relatively close to Mousehold Health. The sector is also relatively well connected to Norwich cycle network.

Large scale development is also expected to support the delivery of new health and social care facilities.

Nouth cost cost	1/	tolde NNDDleighty of Doolde oth)
Green 3	tor (ou	itside NNDR, vicinity of Rackheath)
Amber 5		
Red 1		
Score 2		
Objective 1 Climate change		Limited availability of public transport although possibility for the utilisation of Salhouse rail station. Large scale development would be expected to justify BRT connections to sector. In addition, large scale development would support significant investment into cycling facilities.
		Very limited range of local services currently. Large scale development would provide sufficient critical mass to warrant a wide range of new local services and facilities. This is expected to include some higher order services such as health and social care facilities. Relatively well located in relation to Broadland Business Park and, to a lesser extent, NIA. Rackheath Industrial Estate provides successful local employment opportunities and large scale growth would stimulate expansion . More difficult to access city centre.
		Sector is not significantly affected by the risk of fluvial flooding, even taking into account climate change. Limited sewer capacity, which is a key infrastructure dependency, but scale of growth would justify the necessary strategic investment.
		Large scale development, provides good conditions to support district scale low carbon/renewable energy generation, although this may still be dependent upon finding other users within the area
		Sector currently relies on Broadland High School in Hoveton to a significant degree. This clearly results in the need to travel. However, large scale development in this or in combination with other sectors, would justify a new secondary school, if minimum 7,000 homes reached, although 10,000 may be needed to secure long term security.
Objective 2 Housing land in sustainable location		There may be sufficient land available to accommodate large scale development but this would require land to the west of Wroxham Road which has not been promoted and is poorly related to existing services and would be largely reliant on this radial road. This sector is constrained by proximity to the Broads. The areas of the land currently promoted for development, and the need to retain a Broads buffer zone are likely to limit the scale of growth below 7,000. The location is some distance from city and existing services within the Norwich Fringe.
Objective 3 Economic growth		Rackheath Industrial Estate provides local employment opportunities within the sector and large scale growth is expected to support its expansion. Sector is also close to Broadland Business Park and to a lesser extent Norwich Aiport, which are strategic employment locations with the capacity to grow. Large scale growth is expected to support mixed use developments which would enhance the range of local employment opportunities.

Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	No easily accessible high school in the sector which currently relies on Broadland High School in Hoveton, which is poorly related to the sector and has no 6 th form. Early development would rely on this school. With the scale of development in this sector limited to the lower end of the range, provision of a new secondary school of the preferred scale would be challenging. Critical mass could be achieved through development in adjacent sectors with good functional relationships
Objective 6 Access to services	Relatively small selection of local services, although does support a Primary School, Village Hall, 2 small convenience stores, a post office and a pub. Hoveton Medical Practice provides a part-time local service. The potential district centre at Blue Boar Lane is not readily accessible other than by car. Local bus services do provide a connection to the district centre at Dussindale, which also contains a large foodstore, inc pharmacy, a part time doctor surgery as an extension of the Woodside practice and some other services. These bus services also provide connections to the higher order services provided in Norwich City Centre.
	Large scale development would provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing. There is also the scope for higher order services such as health and social care services and a secondary school, although given expected constrained land availability this is likely to depend on development being combined with an adjacent sector.
Objective 7 Transport and need to travel	The sector is at some distance (in excess of 7km) from Norwich City Centre and contains only a limited range of services and facilities. The sector is relatively well related to Broadland Business Park and NIA in geographical terms, although public transport accessibility is limited. Cycle links to NIA are not particular direct, cycle links to BBP use smaller rural roads, which may be less suitable in poor weather or poor lighting conditions. Measures associated with the NDR will provide significantly improved cycle access to these locations. There is potential for BRT using the Salhouse Road/Gurney Road corridor.
	Access to the city centre could to be improved through increased public transport i.e. BRT and this would be justified with large scale development in this area even at lower end of the range and particularly if coupled with development in adjacent sectors inside the NDR.
	There is potential for BRT using the Salhouse Road/Gurney Road corridor. Large scale development in this sector is expected to support investment into enhanced BRT services in this location. Some potential for use of railway.
	Some key transport infrastructure dependencies including the NDR, and its associated junction improvements, which is

	necessary to provide the road capacity that will allow for public transport and cycle prioritisation.
	Large scale development is also expected to provide sufficient critical mass to support a significantly enhanced range of local services, facilities and employment opportunities.
Objective 8 Character	The sector is characterised by wooded estatelands. Particular sensitivities include the mosaic of parkland, arable field and woodlands and landscape setting of historic houses, halls, churches and the setting of villages and hamlets. Some heritage and cultural assets including ancient woodlands and historic parks and gardens but these tend to be in the far north or west of the sector meaning that there is unlikely to be any significant impact upon these assets. The Broads lies to the north of the sector. The former WWII Rackheath USSAF base, which is of significance in terms of local heritage could be affected.
	Large scale strategic development in this sector would be likely to result in the significant expansion of an existing suburban village(s) into the open countryside to the north is likely to have a significant impact upon the existing rural character of the area and the setting of the Broads.
Objective 9 Environmental protection	The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the broads. Large scale development will offer opportunities to provide both local and strategic level green infrastructure.
	It will be necessary to retain an undeveloped buffer zone between the Broads and new development at Rackheath, particularly with large scale levels of development.
	Agricultural land generally grade 3. Limited mineral investigation area which may necessitate phased construction.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Large scale growth is expected to support an increased range of local employment opportunities, services and facilities. This affords the opportunity to increase levels of walking and cycling through the creation of new mixed use neighbourhoods.
	With large scale development there is some opportunity to provide higher order services such as GPs, although given expected constrained land availability this is likely to depend on development being combined with an adjacent sector. Nearest dental services in Spixworth or urban fringe.



East Sector (outside NNDR)		
Green 2		
Amber 4 Red 3		
Score -1		
Objective 1 Climate change		Whilst the sector is flanked by the Norwich to Cromer/Sheringham and Norwich to Yarmouth/Lowestoft Railway lines, Brundall and Salhouse Stations are not likely to be readily accessible from the area. Existing public transport services are limited and there is no existing bus based prioritisation. The area is relatively well related geographically to Broadland Business Park and there is a network of local roads which might be suited to cycling, although would be less so in poor weather conditions or at night given nature of roads and lack of lighting. Good access to park & ride facilities at Postwick, which would provide connections to Norwich City Centre, though
		strategic growth should not rely on Park and Ride.
		The Plumsteads provide a very small range of local service and facilities. Brundall and Blofield provide a wider range of facilities including a GPs surgery.
		No risk of fluvial flooding within the sector, though nearby riverside parts of Brundall are prone to flooding Limited sewer capacity without strategic improvements but sector is close to the Whitlingham Waste Water Treatment Works.
		Large scale development would provide sufficient critical mass to warrant a wide range of new local services and facilities. This is expected to include some higher order services such as health and social care facilities and a secondary school.
		Large scale development, provides good conditions to support district scale low carbon/renewable energy generation, although this may still be dependant upon finding other users within the area
Objective 2 Housing land in sustainable location		There is sufficient land potentially available to accommodate large scale growth, but the scale of land promoted is far below this level. Whilst further land might come forwards if promoted for development the very large disparity results in significant concerns about possible deliverability. Existing villages in this sector are some distance from city and existing services within the Norwich Fringe.
Objective 3 Economic growth		There are some small scale local employment opportunities within the larger villages in the sector but these are expected to have limited capacity to expand. Parts of the area are close to Broadland Business Park, although larger villages are at some distance. Large-scale development would support a genuine mixed use community, but would predominantly

	remain detached from the urban area and the potential labour force offered by it.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	No easily accessible high school to most of this sector. Early development would rely on Thorpe St Andrew High School. While it would be accessible to an urban extension it would be at a significant distance from growth focussed on the existing villages in the sector. Large scale development would create sufficient critical mass to support a new secondary school if acceptable sites can be found to exceed the 7,000 dwelling level. Critical mass could also be achieved through development in adjacent sectors with good functional relationships.
Objective 6 Access to services	Small range of local services provided by the villages of the Plumstead, Blofield and Brundall. However, depending upon the location of any new development within the sector these could have limited access. Medical and dental services are available in Brundall and Blofield, with part time services in Thorpe St. Andrew and Rackheath. An urban extension immediately to the east of Broadland Business Park could have reasonable potential access to its services and the District Centre at Pound Lane. There is limited accessibility to the higher order services in Norwich City Centre, although the Postwick Park and Ride and possible BRT enhancements to Yarmouth Road may improve this situation. Large scale development is expected to provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, and for higher order services such as health and social care services and a secondary school. The potential for improved access to Norwich remains uncertain
Objective 7	
Transport and need to travel	The west of this area is approximately 6km from Norwich City centre, but existing settlements are considerably further away. Improved public transport through BRT and rail access is difficult to promote in this area,. The sector is served by two radials (limiting the options to serve traffic displaced by bus priority measures) and growth would increase local traffic on the trunk road .It is doubtful that this scale of development could be accommodated close to the business park given constraints of trunk road access and junctions including Postwick., This would also constrain public transport accessibility and prioritisation. No clear prospect that any extension of the Yarmouth Road BRT route would be possible with any scale of development in this sector
	There is limited public transport accessibility and no existing public transport prioritisation with the road system separating area from the business park. No clear prospect that for any extension of the Yarmouth Road BRT route would be possible with small scale development, or any other scale, of development in this sector.

	Large scale development is expected to be able to provide sufficient critical mass to support a significantly enhanced range of local services, facilities and employment opportunities.
Objective 8 Character	This area is characterised in part by Wooded Estatelands but mainly Tributary Farmland. Particular sensitivities include the strong mosaic of arable fields and mature woodland, strong rural character the landscape setting of hamlets and villages and characteristic views to church towers surrounded by woodland. In addition, there are local areas of landscape value adjacent to Witton Run and in between Blofield and Brundall. There are some areas of Ancient Woodland and Landscape Value north of Hemblington but these are unlikely to be directly effect by development.
	If large scale development in the eastern sector comprised the expansion of small or medium villages into the open countryside, which is characterised by its distinctly rural aesthetic, it would have a significant impact on local character. However, if development took the form of an urban extension, perhaps in association with a neighbouring sector, the impact on villages would be less. While it would still have an impact on open countryside it would be read as part of the urban area.
Objective 9 Environmental protection	Proximity to the Broads would require significant mitigation through additional green space. In addition much of the area is Grade I & II agricultural land. Large scale development would require a significant loss of high quality agricultural land
	These considerations raise significant issues about the potential suitability the eastern sector for development at any significant scale.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Large scale growth is expected to support an increased range of local employment opportunities, services and facilities. This affords the opportunity to increase levels of walking and cycling through the creation of new mixed use neighbourhoods.
	With large scale development there is some opportunity to provide higher order services such as GPs, although given land availability constraints, the delivery of a secondary school is expected to be reliant on combining with growth in adjacent areas.
	Nearest dental facilities in urban fringe.GPs in Brundall, Blofield and urban fringe
	Large scale development is anticipated to support investment in wider cycling connections to Norwich & BBP. Large scale development would support the provision of a range of local and strategic recreational open space facilities and there remain good links to the countryside.

North east sector (inside and outside the NNDR combined)

Green 7 Amber 2 Red 0 Score 7

Objective 1 Climate change Some existing public transport infrastructure providing an average level of service. The presence of multiple radial routes does provide opportunities for public transport and cycle prioritisation which has an acceptable resultant impact on the highway network, assuming delivery of the NDR and associated reduction on level of stress on existing roads. Well related to NAT IP proposals for Norwich Cycle Network.

Large scale development would support significant investment in BRT and other prioritisation on Core Bus Routes, particularly at the higher end of the range, serving the combined sector. The outer part may also be able to make some use of Salhouse station.

Excellent access, arguably best relationship in Greater Norwich, to large employment locations (NIA, BBP) and employment in city centre. Also well related to other local employment opportunities such Rackheath and Salhouse Road industrial estates and Sprowston Retail Park.

No significant risk of fluvial flooding. Limited sewer capacity, which is a key infrastructure dependency, but scale of growth would justify the necessary strategic investment.

A range of facilities are provided within the existing urban fringe, and some limited services at Rackheath, which give some opportunities to minimise need to travel. Large scale development, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and secondary schools.

Therefore large scale development in the sector offers significant opportunities to create a series of interrelated mixed use communities which support a wide range of services, facilities and employment opportunities, which, if designed to promote walking and cycling, could significantly reduce the need to travel and the reliance on the private car. This offers notable potential benefits in terms of climate change.

Large scale development, provides good conditions to support district scale low carbon/renewable energy generation, although this may still be dependent upon finding other users within the area

Objective 2 Housing land in sustainable location	There is sufficient land, and sites promoted for development, to accommodate large scale growth in a location which is close to city and services. In combination the sector provides sufficient scale and choice of land to protect environmental designations and aid delivery.
Objective 3 Economic growth	Broadland Business Park is a strategic employment location within the Sector, which has capacity to grow. Sector is adjacent to Norwich Airport, also a strategic employment area with capacity to growth. Rackheath Industrial Estate provides local employment opportunities within the sector and large scale growth is expected to support its expansion. Additional local employment at Salhouse Road and Sprowston Retail Park indicate some additional prospect for local employment growth in the sector. Large scale growth is expected to support mixed use developments which would enhance the range of local employment opportunities.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Choice of accessible high schools to the inner pert of this sector have limited capacity and scope for extension to cater for early development. Combined sector could provide the 10,000 homes needed to support long term security of new secondary school of a preferred scale. A new secondary school would reduce the current need to travel for residents of the outer part of the combined sector.
Objective 6 Access to services	The part of the sector inside the NNDR is well related to the range of services and facilities within the existing urban fringe parishes, including GPs and Dentists. There are public transport services, that could be enhanced, which connect to the city centre and the wide range of services available there. These could be extended to serve the combined sector. There are two existing district centres within the NE urban fringe and one potential centre. All have a large anchor food store with a range of smaller facilities. Outside the NNDR there is a more limited selection of local services. Hoveton Medical Practice provides a part-time local service complementing the facilities in the urban fringe. The potential district centre at Blue Boar Lane is not readily accessible other than by car from the outer part of the combined sector, although these connections could be improved as part of a large scale development in the combined sector. Local bus services provide a connection to the district centre at Dussindale, which also contains a part time doctor surgery as an extension of the Woodside practice and some other services.
	Large scale development would support significant improvements to public transport and cycling infrastructure to access services in the city centre, which could improve accessibility in the combined sectors as a result of the possible for the shared use of a public transport corridor along Salhouse/Gurney Road.
	Large scale development offers the opportunity to create mixed use communities, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools

	and other enhanced retail and servicing, including for higher order services such as health and social care services and a secondary school.
Objective 7 Transport and need to travel	The closest part of the area is approximately 5km from the city centre. There are 2 existing district centres within the NE urban fringe and one potential district centre, these all have a large anchor food store with a range of smaller facilities. In addition there is a range of other services and facilities within the Urban Fringe and limited services in Rackheath. This offers some opportunities to meet the needs of residents locally. Services will be greatly expanded locally as a result of large scal growth. Some key transport infrastructure dependencies including the NDR, and its associated junction improvements, which is necessary to provide the road capacity that will allow for public transport and cycle prioritisation.
	The sector is well related to the Norwich cycle network. Large scale growth would be likely to justify significant investment in public transport improvements, and in particular BRT. The area is served by a number of radial routes (more than any other sector in the Norwich Policy Area) which provide opportunities for bus and cycle priority.
	Therefore there is scope reduce the impact created by any need to travel resulting from development within this area.
	The area will be served by the NDR for which funding has been confirmed. This will create the conditions for significant public transport priorities in the sector. It also provides associated cycle infrastructure.
	The outer part of the combined sector is served by Salhouse railway station which may provide some opportunity.
Objective 8 Character	The combined sector is characterised by wooded estatelands. Particular landscape sensitivities include the landscape setting of historic houses, halls, churches and the setting of villages and hamlets, the mature landscape with a mosaic of parkland, arable fields and large woodland blocks, and the resultant landscaped setting for the edge of Norwich.
	Development will have localised impacts unlikely to affect identified areas of landscape value. There are some heritage and cultural assets, including ancient woodlands and historic parks and gardens but it should be possible for even large scale development to avoid any significant impact upon these assets. The former WWII Rackheath USSAF base, which is of significance in terms of local heritage could be affected. NNDR will impact local character.
	Large scale strategic development in the combined sector is expected to allow for local designations inside the proposed NNDR to be retained along with a landscape edge to new built development, maintain a landscape setting incorporating and retaining. Ancient Woodland and Historic Parks and Gardens,.

	Development in the outer part of the combined sector would be likely to take the form of expansion of an existing suburban village(s) into the open countryside to the north which is likely to have a significant impact upon the existing rural setting. The combined sector offers the opportunity to reduce these impacts by retaining large areas of undeveloped land and providing the opportunity for a more coherent form of development.
Objective 9 Environmental protection	There are a number of existing environmental designations in the area including county wildlife sites, ancient woodlands, and areas of landscape value. and an area of grade II agricultural land. However, combining the inner and outer sectors reduces the pressure on these assets and large scale development would also provide significant new green infrastructure, which could be of strategic scale. The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the broads. Large scale development will offer opportunities to provide both local and strategic level green infrastructure. It will be necessary to retain an undeveloped buffer zone between the Broads and new development at Rackheath. Agricultural land is largely grade 3, but with some grade 2 near North Walsham Road. Mineral investigation areas will require investigation and may necessitate phased construction
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of local services and public transport could support walking & cycling. In addition, large scale development would support additional services to further encourage walking and cycling. Currently good access to countryside. Measures associated with the NDR will enhance cycle access. There are a number of existing recreational areas within the fringe and the sector is relatively close to Mousehold Health. The sector is also relatively well connected to Norwich cycle network. Large scale development is also expected to support the delivery of new health and social care facilities.

North east sec	tor (o	utside the NNDR) combined with east
Green 2	`	, and the second
Amber 3		
Red 4		
Score -2		
Objective 1 Climate change		The area is some distance from the City centre. Spans the railway line from Norwich to Sheringham, but only existing station is at Salhouse at the northern extremity, and unclear if even large scale growth will support the creation of a new station in the short term, but position may change in future and therefore the railway becomes a potential asset, but only in the longer term. Larger scale development, particularly in the upper end of the spectrum may justify significant bus priorities, but the area remains detached from the major urban area.
		The combined sector would be served by the proposed Salhouse Road BRT route but this would not easily serve parts of this combined sector in the vicinity of the Plumsteads.
		There is no significant fluvial flood risk in this combined sector. Limited sewer capacity without strategic improvements, which makes this a key infrastructure dependency. However sector is close to the Whitlingham Waste Water Treatment Works.
		Sector is well related to Strategic Employment areas in the form of Broadland Business Park and to a lesser extent Norwich Airport and local employment at Rackheath.
		Large scale development affords the opportunity to provide for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location		Physically enough land to accommodate up to 10,000 dwellings, but no existing major facilities to build on, so development would be relatively isolated in the early stages, unless focused on the existing villages, of which Rackheath is the most central example which offers a limited range of services. Limited land promoted in the area immediately south of new Rackheath, and none immediately adjacent to the railway. Limited land promoted in the area immediately adjacent to Salhouse.
Objective 3 Economic growth		Rackheath Industrial Estate provides local employment opportunities within the sector and large scale growth is expected to support its expansion. There are also some small scale local employment opportunities within the other larger villages in the sector but these are expected to have limited capacity to expand. Parts of the sector are close to Broadland Business Park, although larger villages are at some distance. Large-scale development would support a genuine mixed use community, but would remain detached from the urban area and the potential labour force offered by it.

Objective 4	Development of any Greenfield side will have a similar, limited effect on regeneration of deprived urban areas. Distance
Regeneration	means any locally created employment would be more remote from residents of such areas.
Objective 5 Education	No easily accessible school to this combined sector to provide for early development. Consequently a new school would be needed to be provided early. Combined sector could provide the 10,000 homes needed to support long term security of new secondary school of a preferred scale. A new secondary school would reduce the current need to travel for residents of the combined sector.
Objective 6 Access to services	The Sector contains a relatively small selection of local services, focused on the existing villages, including medical and dental services in Brundall and Blofield, with part time services available in Rackheath and also in the Dussindale centre, However, depending upon the location of any new development within the combined sector these could have limited access An urban extension immediately to the east of Broadland Business Park could have reasonable potential access to its services and the District Centre at Pound Lane. The potential district centre at Blue Boar Lane is not readily accessible from either part other than by car and this situation is unlikely to be altered by development in the combined sector.
	Local bus services from Rackheath and Salhouse provide a connection to the district centre at Dussindale, and to the higher order services provided in Norwich City Centre. The villages in the Eastern Sector have limited accessibility to the higher order services in Norwich City Centre, although the Postwick Park and Ride and possible BRT enhancements to Yarmouth Road may improve this situation. However, the potential for improved access to Norwich remains uncertain, and there is no obvious single corridor on which investment could be focused to provide good access to the city from the combined sector.
	Large scale development is expected to provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, and for higher order services such as health and social care services and a secondary school.
Objective 7 Transport and need to travel	If development were to span the railway line at Rackheath, but extending into the east sector it would be likely to draw traffic onto small roads in that area requiring major improvements, and significantly increase the use of some level crossings for very local journeys. This would be likely to lead to intense pressure to close or improve the crossings, necessitating longer local journeys or large-scale investment. Unclear if even large scale growth will support the creation of a new station in the short term, but position may change in future and therefore the railway becomes a potential asset. However in the short term, the railway remains a barrier.
Objective 8 Character	The combination sector is characterised by wooded estatelands, with Tributary Farmland in the eastern part. Particular sensitivities include the mosaic of parkland, arable field and woodlands and landscape setting of historic houses, halls, churches, with towers often surrounded by Woodland and the setting of villages and hamlets. There is a strong rural

	character, particularly in the east . with local areas of landscape value adjacent to Witton Run and between Blofield and Brundall. There are some areas of Ancient Woodland and Landscape Value north of Hemblington. Similarly, there are small areas of ancient Woodland north and west of Rackheath . These are unlikely to be directly effect by development. The former WWII Rackheath USSAF base, which is of significance in terms of local heritage could be affected. If the sector were to be combined to accommodate large scale development, it would be likely to focus on the interface between the two sectors,, that is the area to the south of Rackheath and north of the Plumsteads. This would have a major impact on the established existing very.rural setting. The sector would be divided by a railway line which would constrain urban form.
Objective 9 Environmental protection	Area east of the railway line includes large tracts of grade 1 and 2 agricultural land. The northeast out side of the NDR includes extensive safeguarded sand and gravel resource areas which would require investigation, and where feasible prior extraction before development. The Mousehold Heath to Broads green infrastructure priority link pass through the sector. Large scale development would be likely to offer opportunities to provide green infrastructure contributing towards strategic links between Mousehold Heath and the Broads. Likely to be need for a buffer zone between the Broads and new development. Relatively few local environmental designations.
Objective 10 Community safety	Impacts largely influenced by designs and facilities provided. Smaller scale development less likely to support extensive local facilities
Objective 11 Healthy lifestyles	Large scale growth is expected to support an increased range of local employment opportunities, services and facilities. This affords the opportunity to increase levels of walking and cycling through the creation of new mixed use neighbourhoods. With large scale development there is some opportunity to provide higher order services such as GPs, and dental facilities.
	Large scale development is anticipated to support investment in wider cycling connections to Norwich, BBP and NIA. Large scale development would support the provision of a range of local and strategic recreational open space facilities and there remains good links to the countryside.

North east sector (inside the NNDR) & North sector (north of airport – area around Spixworth)

Green 4 Amber 3 Red 2 Score 2

Objective 1 Climate change Some existing public transport infrastructure providing an average level of service. The presence of multiple radial routes does provide opportunities for public transport and cycle prioritisation which has an acceptable resultant impact on the highway network, assuming delivery of the NDR and associated reduction on level of stress on existing roads. Well related to NAT IP proposals for Norwich Cycle Network.

Large scale development would support significant investment in BRT and other prioritisation on Core Bus Routes, particularly at the higher end of the range, serving the combined sector. The adjacent outer part (around Spixworth) is difficult to serve with proposed BRT but is on an existing cycle route.

The part of the sector inside the NNDR is well related to strategic employment opportunities at Broadland Business Park, Norwich Airport and in Norwich City Centre and local employment at Salhouse Road and to a lesser extent Rackheath. The parts of the sector north of the Airport are close to the Airport Employment area and local employment at Abbey Farm.

No significant risk of fluvial flooding. Limited sewerage capacity, which makes water infrastructure a key infrastructure dependency.

Excellent access, arguably best relationship in Greater Norwich, to large employment locations (NIA, BBP) and employment in city centre. Also well related to Salhouse Road industrial estate and Sprowston Retail Park.

A range of facilities are provided within the existing urban fringe, and some limited services at Spixworth, which give some opportunities to minimise need to travel. Large scale development, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and a secondary school.

Therefore large scale development in the sector offers significant opportunities to create a series of interrelated mixed use communities which support a wide range of services, facilities and employment opportunities, which, if designed to promote walking and cycling, could significantly reduce the need to travel and the reliance on the private car. This offers notable potential benefits in terms of climate change.

	Large scale development, provides good conditions to support district scale low carbon/renewable energy generation, although this may still be dependent upon finding other users within the area
Objective 2	Provides sites for large scale growth.
Housing land in sustainable location	There is a limited amount of unconstrained land in the part of the northern sector around Spixworth. There is also a very limited amount of development land promoted in the northern sector. Although clearly there is the chance that more land could come forwards should the location be promoted. Sites in the north would be separated from the urban area by the airport, which limits accessibility to services within the Norwich Fringe.
	In combination there is some uncertainty as to the ability of the combined sector to provide sufficient scale and choice of land to protect environmental designations and aid delivery while producing a coherent development.
Objective 3 Economic growth	Rackheath Industrial Estate provides local employment opportunities, is capable of expansion but lies outside this combined sector and access is poor Access to all these locations will improve with the NDR and associated measures.
	Broadland Business Park is a strategic employment location within the part of the Sector inside the NDR, which has capacity to grow. Both parts of the Sector are adjacent to Norwich Aiport, also a strategic employment area with capacity to growth. However, the northern sector is generally poorly related to other strategic employment areas on the Norwich Fringe. For the part of the sector inside the NDR there is local employment at Salhouse Road and Sprowston Retail Park which indicates some additional prospect for local employment growth in the sector. For the northern sector there is local employment at Abbey Farm and some limited employment at Horsford. Large-scale development would support a genuine mixed use community, but such development in the North sector would predominantly remain detached from the urban area and the potential labour force offered by it.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Choice of accessible high schools to the inner pert of this sector have limited capacity and scope for extension to cater for early development. Combined sector could provide the 10,000 homes needed to support long term security of new secondary school of a preferred scale. A new secondary school would reduce the current need to travel for residents of the outer part of the combined sector.
Objective 6 Access to	The North East part of the Sector is well related to the range of services and facilities within the existing urban fringe parishes. There are public transport services, which could be enhanced, which connect to the city centre and the wide

services

range of services available there. The northern part of the sector has limited public transport access to the City Centre. Potential BRT routes have been identified within NATS implementation plan on the Salhouse Road and A 140 corridors. However the combined sector cannot adequately be served by a single corridor and would therefore require investment in both because of its geography.

Large scale development would support significant improvements to public transport and cycling infrastructure to access services in the city centre.

There are two existing district centres within the NE urban fringe and one potential centre, these all have a large anchor food store with a range of smaller facilities. One of these is relatively accessible from the Spixworth area of the northern sector Whilst a wider range of services is provided within the Norwich Fringe, and these would be accessible to an urban extension in the northeast, they are not easily accessible from development in the Northern Sector by means other than the private car.

Large scale development, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and a secondary school. Therefore large scale development in the sector offers the opportunity to create mixed use communities.

Objective 7 Transport and need to travel

The closest part of the area is approximately 5km from the city centre. There are 2 existing district centres within the NE urban fringe and one potential district centre, these all have a large anchor food store with a range of smaller facilities. In addition there is a range of other services and facilities within the Urban Fringe and limited services in Spixworth. This offers some opportunities to meet the needs of residents locally. Services will be greatly expanded locally as a result of large scal growth.

The sector is well related to the Norwich cycle network.

Large scale growth would be likely to justify significant investment in public transport improvements,. However, the northern part of the combined sector is less well related to BRT proposals. This may undermine the effectiveness of BRT.

The area is served by a number of radial routes (more than any other sector in the Norwich Policy Area) which provide opportunities for bus and cycle priority.

Therefore there is scope reduce the impact created by any need to travel resulting from development within this area.

The area will be served by the NDR for which funding has been confirmed. This will create the conditions for significant public transport priorities in the sector. It also provides associated cycle infrastructure.

This combined sector offers no current scope for use of the railway line and significantly reduces future potential.

Some key transport infrastructure dependencies including the NDR, and its associated junction improvements, which is necessary to provide the road capacity that will allow for public transport and cycle prioritisation.

Objective 8 Character

The landscape of the combined sector is characterised by wooded estatelands, with some woodland heath mosaic in the northern part. Particular landscape sensitivities include the mature landscape with large woodland blocks, the coherent, small scale settlement density and pattern in the area around Horsford, generally unified rural character around Newton St Faiths

and the landscaped setting for the edge of Norwich. Development will have localised impacts unlikely to affect identified areas of landscape value.

NNDR will impact local character.

Some local heritage and cultural assets such as historic parks and gardens and ancient woodlands

Heritage assets within the sector include Horsford Castle, which is a Scheduled Ancient Monument, historic parkland adjacent to Spixworth, in Sprowston, Beeston and Rackheath and Ancient Woodland west of Horsham and Newton St Faiths and in the vicinity of Rackheath and Beeston Parks.

In the part of the sector inside the NNDR, development is likely to take the form of significant urban extensions. The presence of constraints associated with the Airport suggests that development in the combined sector would not be continuous .The component in the northern part of the combination sector could comprise a single extension to a village, e.g. large extensions to Spixworth perhaps extending towards St Faiths, a stand alone village or extensions to multiple villages. However Spixworth is constrained to the north by active mineral workings and a sensitive river valley which is identified as an area of landscape value. Expansion to the east is limited by the North Walsham Road and to the west by historic parkland. Consequently, development in the outer part of the combined sector would be likely to result in the expansion of Spixworth into the open countryside to the south and a detached area of development to the west. This makes achieving a coherent form more difficult. Overall, this is likely to have a significant impact upon the existing rural setting.

Large scale strategic development in the combined sector would be expected to allow for local designations to be retained

	along with a landscape edge to new built development, maintain a landscape setting. The local heritage and cultural assets in the form of Ancient Woodland and Historic Parks and Gardens, would not necessarily be directly affected by this scale of development, though development around Spixworth may result in the loss of some of the immediate landscape settings of the 17 th & 18 th century estatelands. The combined sector offers the opportunity to reduce impacts inside the NDR by retaining large areas of undeveloped land, but for the reasons noted above, the coherence of development across a combined sector remains open to question.
Objective 9 Environmental protection	There are a number of existing environmental designations in the area including county wildlife sites, ancient woodlands, and areas of landscape value and an area of grade II agricultural land
	However, combining the sectors reduces the pressure on the inner area assets but puts pressure on assets in the outer part. The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the broads. Large scale development will offer opportunities to provide both local and strategic level green infrastructure. It will be necessary to retain an undeveloped buffer zone between the Broads and new development at Spixworth. In addition, the river valley to the north of Spixworth feeds Crostwick Marshes SAC and continues into the Broads. This has the potential to be a major constraint. The two parts of the sector would be separated by the airport flight path and associated noise contours and safety zone.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of local services and public transport could support walking & cycling. In addition, large scale development would support additional services including health and social care, to further encourage walking and cycling. Currently good access to countryside. Measures associated with the NDR will enhance cycle access. There are a number of existing recreational areas within the fringe and the sector is relatively close to Mousehold Health. The sector is also relatively well connected to Norwich cycle network. Large scale development is also expected to support the delivery of new health and social care facilities

North east Sector (Inside NNDR) & East Sector (Outside NNDR- Plumsteads and south to the A47)

Green 4 Amber 2 Red 3 Score 1

Objective 1 Climate change

Some existing public transport infrastructure providing an average level of service. The presence of multiple radial routes in the inner sector provides opportunities for public transport and cycle prioritisation which has an acceptable resultant impact on the highway network, assuming delivery of the NDR and associated reduction on level of stress on existing roads. Well related to NAT IP proposals for Norwich Cycle Network. The outer part of this sector has limited radial opportunities.

Large scale development would support significant investment in BRT and other prioritisation on Core Bus Routes, particularly at the higher end of the range, serving the combined sector. The adjacent outer part beyond the NDR and railway line is difficult to serve with proposed BRT although cycle links from the east to BBP will be provided.

No significant risk of fluvial flooding. Limited sewerage capacity, which makes water infrastructure a key infrastructure dependency.

Excellent access, arguably best relationship in Greater Norwich, to large employment locations (NIA, BBP) and employment in city centre. Also well related to Salhouse Road industrial estate and Sprowston Retail Park.

The part of the sector inside the NNDR is well related to strategic employment opportunities at Broadland Business Park, Norwich Airport and in Norwich City Centre and local employment at Salhouse Road and to a lesser extent Rackheath. The eastern part of the sector is well related to Strategic Employment areas in the form of Broadland Business Park and to a lesser extent Norwich Airport and local employment at Rackheath.

A range of facilities are provided within the existing urban fringe, and some limited services in villages in the eastern sector (Plumseads), which give some opportunities to minimise need to travel. Large scale development, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and a secondary school.

Large scale development in the sector offers some opportunities to create a series of interrelated mixed use communities inside the NDR which support a wide range of services, facilities and employment opportunities, which, if designed to promote walking and cycling, could significantly reduce the need to travel and the reliance on the private car. This offers notable potential benefits in terms of climate change. Areas outside the NDR and railway line would be difficult to connect

	satisfactorily to the remainder of the combined sector.
	Large scale development, provides good conditions to support district scale low carbon/renewable energy generation, although this may still be dependent upon finding other users within the area
Objective 2 Housing land in sustainable location	Provides sites for a large scale development. Although, there is a limited amount of unconstrained land in the eastern part of the combined sector .Only a very limited amount of development land has been promoted in the eastern part,. Although clearly there is the chance that more land could come forwards should the location be promoted. Sites in the eastern sector would be separated from urban area by the combination of the NDR and railway line, which limits accessibility to services within the Norwich Fringe.
	In combination there is some uncertainty as to the ability of the combined sector to provide sufficient scale and choice of land to protect environmental designations and aid delivery while producing a coherent development.
Objective 3 Economic growth	Broadland Business Park is a strategic employment location within the Sector, which has capacity to grow, although some of the larger villages within the Eastern Sector are at some distance from it. The part of the combined Sector within the NNDR is adjacent to Norwich Aiport, also a strategic employment area with capacity to grow. For the area inside the NNDR, local employment at Salhouse Road and Sprowston Retail Park indicate some additional prospect for local employment growth in the sector. For the eastern sector outside the NNDR there are some small scale local employment opportunities within the larger villages in the sector but these are expected to have limited capacity to expand. Large-scale development would support a genuine mixed use community, but such development in the eastern sector outside the NNDR would predominantly remain detached from the urban area and the potential labour force offered by it.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Choice of accessible high schools to the inner pert of this sector have limited capacity and scope for extension to cater for early development. Combined sector could provide the 10,000 homes needed to support long term security of new secondary school of a preferred scale. A new secondary school would reduce the current need to travel for residents of the outer part of the combined sector
Objective 6 Access to services	The part of the combined Sector inside the NNDR is well related to a range of services and facilities within the existing urban fringe parishes. There are public transport services, which could be enhanced, which connect to the city centre and the wide range of services available there. In the eastern part of the combined sector there are a amall range of local services provided by the villages of the Plumsteads, Blofield and Brundall. However, depending upon the location of any new development within the sector these could have limited access.

There are two existing district centres within the NE urban fringe and one potential centre. These all have a large anchor food store with a range of smaller facilities. An urban extension immediately to the east of Broadland Business Park could have reasonable potential access to its services and the District Centre at Pound Lane.but would have limited accessibility to the higher order services in Norwich City Centre. While the Postwick Park and Ride and possible BRT enhancements to Yarmouth Road may improve this situation, the local road network and presence of the railway line are complicating factors. The geography of the area particularly the road network suggests it would be difficult for a single BRT corridor to satisfactorily serve the combined sector, with the risk of investment being dissipated.

Therefore, while large scale development could support significant improvements to public transport and cycling infrastructure to access services in the city centre, the potential for improved access to Norwich from the eastern part of the combined Sector remains uncertain, even if it were adjacent to the urban area.

Large scale development would provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing. There is also the scope for higher order services such as health and social care services and a secondary school.

Objective 7 Transport and need to travel

The closest part of the area is approximately 5km from the city centre. There are 2 existing district centres within the NE urban fringe and one potential district centre, these all have a large anchor food store with a range of smaller facilities. In addition there is a range of other services and facilities within the Urban Fringe and very limited services in the Plumsteads. This offers some opportunities to meet the needs of residents locally. Services will be greatly expanded locally as a result of large scale growth.

The sector is well related to the Norwich cycle network.

Large scale growth would be likely to justify significant investment in public transport improvements,. However, the eastern part of the combined sector is poorly related to BRT proposals. This may undermine the effectiveness of BRT.

The inner part of the area is served by a number of radial routes (more than any other sector in the Norwich Policy Area) which provide opportunities for bus and cycle priority. The outer part is poorly served, particularly if local traffic is to be restrained from using the trunk road.

Therefore there is scope, particularly in the inner part of the area, to reduce the impact created by any need to travel resulting from development within this area.

The area will be served by the NDR for which funding has been confirmed. This will create the conditions for significant

	public transport priorities in the inner part of the sector. It also provides associated cycle infrastructure.
	There is no existing station in this combined sector to offer scope for use of the railway line.
	Some key transport infrastructure dependencies including the NDR, and its associated junction improvements, which is necessary to provide the road capacity that will allow for public transport and cycle prioritisation.
Objective 8 Character	The combined sector is characterised by wooded estatelands and tributary farmland in the east. Particular landscape sensitivities include the mature landscape with a mosaic of arable feels and large woodland blocks and the landscaped setting of the edge of Norwich. The eastern part has a strong rural character providing the landscape setting of hamlets and villages and characteristic views to church towers surrounded by woodland. Some local heritage and cultural assets such as historic parks and gardens and ancient woodlands There are local areas of landscape value adjacent to Witton Run and between Blofield and Brundall and centered around the Woodlands of the urban fringe and historic parklands. it should be possible for large-scale development in the combined sector to avoided direct impacts on these.
	NNDR will impact local character, though the larger amount of land available through combining the sectors may help mitigate this.
	The logic of looking at those sectors in combination would suggest that development would take the form of an urban extension, (though this would extend across across the NDR and railway line), rather than focusing on individual villages in the east. The southern parts of the eastern sector at the boundary of the two sectors are also separated from residential suburbs by the Broadland Business Park area.
	Large scale strategic development in the increased area offered by the combined sector is expected to allow for local designations inside the proposed NNDR to be retained along with a landscape edge to new built development, maintain a landscape setting, and help avoid an impact on Ancient Woodland and Historic Parks and Gardens, and areas of landscape value. if it took the form of an urban extension spanning the railway, it would also limit impact on the setting of villages in the east.
Objective 9 Environmental protection	There are a number of existing environmental designations in the inner part of the area including county wildlife sites, ancient woodlands, areas of landscape value and an area of grade 2 agricultural land. The outer part (to the east of the railway line) is dominated by Grade 1 and 2 agricultural land which would be a significant loss as a result of any major development

	Combining the inner and outer sectors reduces the pressure on the inner area assets but puts pressure on assets in the outer part. Large scale development would also provide significant new green infrastructure, which could be of strategic scale.
	The Mousehold Heath to Broads Green Infrastructure priority link runs through the sector. There is an identified benefit related to the re-creation of healthland to provide stepping stone links between Mousehold Health and the broads. Large scale development will offer opportunities to provide both local and strategic level green infrastructure.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of local services and public transport could support walking & cycling. In addition, large scale development would support additional services to further encourage walking and cycling. Currently good access to countryside. Measures associated with the NDR will enhance cycle access. There are a number of existing recreational areas within the fringe and the sector is relatively close to Mousehold Health. The sector is also relatively well connected to Norwich cycle network. Large scale development is also expected to support the delivery of new health and social care facilities

South east sec	r (vicinity of Poringland)
Green 1	(violinty of total gland)
Amber 4	
Red 4	
Score -3	
Objective 1 Climate	Distant from strategic employment locations with limited potential for high quality public transport priority measures, therefore growth would lead to increased car use. Surface water drainage issues
Change Objective 2 Housing land in sustainable location	Provides sites for large scale growth, but in location at distance from city centre, strategic employment and higher order services
Objective 3 Economic growth	Limited local employment, which is not expected to expand. Sector is not close to any strategic employment centres, access to city centre constrained. Large-scale development would support a genuine mixed use community, but such development in this sector would predominantly remain detached from the urban area and the potential labour force offered by it.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	This scale of growth would support provision of a new school, with existing accessible school at Framingham Earl providing for early development. Existing school has no 6 th form.
Objective 6 Access to services	Some existing facilities, but no large scale convenience retail. Limited access to Norwich City Centre as a result of the limited potential for high quality public transport services.
	Large scale development would provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing. There is also the scope for higher order services such as health and social care services and a secondary school.
Objective 7 Transport and need to travel	Lack of options for new high quality public transport infrastructure due to constraints on A140 transport corridor and in accessing A11 corridor. There are few services.
Objective 8 Character	The sector is largely characterised by plateau farmland, although tributary farmland and the Tas river valley also influence the character of the area. Particular sensitivities include ribbon development along rural lanes, development that intrudes onto the plateau edge, opening up of the landscape through loss of woodland, hedgerow or hedgerow trees. There are a significant number of ancient monuments within the area between Poringland/Stoke Holy Cross and the A47. Large scale

	development in this sector is expected to take the form of major expansion of large suburban village into countryside and this could have a significant impact upon the local landscape sensitivities.
Objective 9 Environmental	No significant environmental constraints (County Wildlife Sites can be avoided).
protection	Likely traffic congestion into city could impact on conservation of historic areas.
	Mineral resource would require investigation and potential phased extraction.
	Agricultural land generally grade 3, but with some areas of grade to nearer 2 the River Yare
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Poor access to employment reduces opportunity for cycling and walking. Large scale development will strengthen local services, providing some opportunities, potentially broadening the range to include services such as dental facilities. Good access to the countryside.

South sector (/	A11 – <i>i</i>	A140, outside A47)
Green 0		
Amber 4		
Red 5		
Score -5		
Objective 1 Climate change		Limited potential for accessible public transport connections to strategic employment areas and the city centre would lead to increased car use.
Objective 2 Housing land in sustainable location		Access constraints on to the A11 restrict potential land availability to the area served by the B1113 and A140. Provides potential sites for large scale growh, but in location with limited services with little potential for BRT Active mineral workings and electricity infrastructure limit choice of locations for development
Objective 3 Economic growth		Very limited local employment opportunities within or adjacent to the sector. Poorly related to the strategic employment sites of the area. Limited potential for bus links on A140. Large-scale development would support a genuine mixed use community, but such development in this sector would predominantly remain detached from the urban area and the potential labour force offered by it.
Objective 4 Regeneration		Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education		No high school in the sector, which is mainly served by Hethersett, though this is at some distance and has no 6 th form. The capacity at Hethersett High is likely to be taken up by growth at Hethersett and Cringleford. No capacity at City of Norwich School. Potential capacity at the Hewett School but this is at distance from the area. Consequently, while this scale of growth would support a new high school it would have to be provided early. It would reduce the need to travel for existing residents.
Objective 6 Access to services		There are few local services and accessibility to large scale convenience retailing or the city centre is limited by public transport connections. Lack of BRT potential would continue to limit access to higher order services in the city centre by sustainable modes of transport. Therefore Access to higher order services is expected to be largely car dependent.
		Large scale development would provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing. There is also the scope for higher order services such as health and social care services and a secondary school.
Objective 7 Transport and		The lack of potential for accessible public transport connections due to constraints on providing bus priority on A140 lpswich Road. and to accessing A11 would lead to high car use. In addition, railway and level crossings on minor roads

need to travel	inhibit access to A140
	inhibit access to A140.
Objective 8	The sector is characterised by Tributary and Plateau Farmland. Particular landscape sensitivities in the area include loss
Character	of rural urban divide and coalescence of settlements, intensive developments which breakup the skyline and intrude on
	the sense of openness and incremental changes, such as upgrading rural lane network to create a more urban feel.
	Large scale development in this sector is expected to take the form of major development which would intrude into the
	open countryside resulting in a significant impact upon the local landscape sensitivities.
Objective 9	Major mineral resources in area including existing workings with extensions proposed in the pre submission publication
Environmental	version of the minerals site allocations plan, which would necessitate phased development. Additional traffic congestion
protection	into city and implementation of BRT would impact on Conservation Area.
	Agricultural land ganarally grada 2
	Agricultural land generally grade 3
	Some local designations for county wildlife sites . Large scale development should be able to avoid these, but possibly
	after the expense of urban form if other constraints are to be avoided.
Objective 10	Impacts are largely influenced by settlement designs and the facilities provided
Community	map and an gray amount of the gray and an area and an area area.
safety	
Objective 11	Enhanced local services associated with this scale of development would encourage walking and cycling. Good access
Healthy	
	to countryside May be some potential to invest in cycle enhancements to city centre and NRP, more opportunity for
lifestyles	walking and cycling to work with the scale of development, but would remain detached from the urban area and
	employment opportunities within it.
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South west sec	ctor (A	11 – B1108)
Green 5	J. (7)	
Amber 3		
Red 1		
Score 4		
Objective 1 Climate change		Good public transport at present and large scale growth enables further improvements including BRT. Good access to choice of employment areas, but limited local services. Good cycle route connecting to the city centre. Large scale development affords the opportunity to provide for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location		Land put forward by landowners earlier in the plan process could accommodate large scale growth. Opportunities constrained by a need to avoid infringing river valley landscape.
Objective 3 Economic growth		Sector is adjacent to the Hospital and UEA and to Norwich Research Park, which is a strategic employment area that has the potential to expand. Large-scale development would support a genuine mixed use community which might further increase local employment opportunities.
Objective 4 Regeneration		Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education		Hethersett High School the has the capacity to expand to accommodate the JCS allocation provided adjacent land can be made available to enlarge the site. Land promoted for development enables this expansion. The existing school has no 6 th form. However, large scale growth would require either a very large expansion or an additional high school. Expansion may be the more straightforward option but may not be able to deal with large scale strategic growth even at the lower end of the range
		Sector is adjacent to UEA
Objective 6 Access to services		Some existing services in Hethersett. Cringleford has good access to the services in nearby in Eaton. Higher order services within the City Centre are accessible by good public transport links and the proposed BRT. The sector is also close to hospital.
		Large scale development would provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing. There is also the scope for higher order services such as health and social care services and a secondary school.
Objective 7 Transport and		Public transport links and journey times are good here and the corridor has recently been improved and large scale growth would enable further improvement through BRT. The area is easily accessible to the Norwich Research Park and

need to travel	city centre. Employment at Wymondham and Longwater strategic employment areas can also be accessed. Major improvements to Thickthorn junction needed.
Objective 8 Character	The sector is characterised by Tributary and Plateau Farmland. Particular landscape sensitivities in the area include loss of rural vernacular, the coalescence of settlements, intensive developments which intrude upon the views of important landmarks, and/or breakup the skyline and intruding on the sense of openness. Large scale strategic growth is expected to comprise major expansion of village and urban edge community into countryside. This is expected to have a significant impact upon local character and landscape sensitivities. River valley issues and the proximity to Norwich southern bypass limit options. It should be possible to avoid historic parkland.
Objective 9 Environmental protection	The allocation would need to maintain the green space area around Norwich and the River Yare. Few local environmental designations apart from protection of the river valley. Large scale development should be able to avoid impacting on any of these. 'Agricultural land is generally grade 3, with an area of grade 2 north west of Hethersett.
	Sector lies within green infrastructure priority corridor (Wymondham to Norwich) and large scale development may be able to contribute significantly towards achievement of this.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	There is a High school at Hethersett. Cycling opportunities to local services and strategic employment areas . Good access to the countryside. Local medical facilities, including the hospital. Such facilities could be enhanced by the scale of development increasing the opportunities for walking and cycling to access services.

West sector (R	iver Y	are to River Wensum)
Green 5		
Amber 2		
Red 2		
Score 3		
Objective 1 Climate change		Good public transport at present. Recent investment in public transport priorities in the corridor. Large scale growth would enhance potential for extending the improvements, including BRT. Good access to employment (Longwater and Norwich Research Park) and large scale convenience retailing.
		Large scale development affords the opportunity to provide for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location		Sites limited to small scale strategic urban extensions and village enlargement on land away from river valleys. The scope for large scale growth is therefore likely to be constrained by the availability of suitable sites.
Objective 3 Economic growth		Longwater lies within the sector, which has capacity to expand. The sector also includes other local employment in Costessey and at Easton College. The non strategic Bowthorpe employment area is also nearby. Large-scale development would support a genuine mixed use community, which may further increase the opportunities for local employment.
Objective 4 Regeneration		Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education		Well related to Ormiston Victory High School (Costessey) where planned redevelopment will increase capacity to 1250 places. This is expected to cater for existing commitments in the area but the additional planned JCS allocation (1000 dwellings) is expected to take this slightly beyond its new design capacity. The site cannot be extended.
		Large scale growth would support provision of a new school, though very limited capacity to serve early development
		Sector includes Easton College.
Objective 6 Access to services		Large scale convenience retail at Longwater and other local services such as a health centre and leisure facilities available, though limited at Easton. Good public transport also results in good links to higher order services provided in Norwich City Centre.
		Large scale development would provide sufficient critical mass to support a range of new services and facilities, including

	new primary schools and other enhanced retail and servicing. There is also the scope for higher order services such as health and social care services and a secondary school.
Objective 7 Transport and need to travel	The area is at some distance from the city centre, but it does have large employment areas close by. BRT links may be extended. Area served by only one radial road limiting options for traffic displaced by public transport priorites unless local traffic were to use the A47 trunk road. Need for major expansion to capacity at A47 Longwater junction.
Objective 8 Character	The western sector is characterised by Tributary and settlement edge Farmland and by the Yare/Tiffey river valley. Particular landscape sensitivities include the preservation of rural views from the ridge adjacent to Easton, unsympathetic developments intruding into the rural landscape and the protection of the rural, undeveloped, character of the Tiffey River valley. Large scale development in the sector is expected to comprise significant expansion of urban edge villages into countryside. This is expected to have a significant impact upon local character and landscape sensitivities. The complexity of the road system and the need to protect river valleys is a major constraint on the potential form of large scale development.
Objective 9 Environmental protection	Sensitive river valleys (Rivers Yare, Tud and Wensum) restrict the area of development. Few other local environmental designations apart from protection of the setting of the southern by pass. River Wensum near Costessey is an SAC, but large scale strategic development should be able to avoid direct impact on these. Agricultural land generally grade 3 with some pockets of grade 2 in the western part of the sector Some areas of search for minerals which will need investigation and may necessitate phased construction
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Local facilities particularly if enhanced by this scale of growth, would encourage more walking and cycling. Opportunities to enhance access to countryside. Large-scale development would require significant remodelling of the junction which could improve opportunities for walking and cycling between different parts of the sector.

North west Sector (A1067 - NNDR) Green 1 Amber 3 Red 5 Score -4 Objective 1 This sector lies between 6 & 10 km from Norwich City Centre. No significant public transport prioritisation outside of city Climate centre for radial routes connecting sector to city. Some scope for enhancement along A1067, which is recognised in change NATS as a potential BRT route, although this has landscape implications, as road widening would require the removal of trees. Large scale development would be expected to directly support some public transport enhancements. The efficiency of this BRT route may be limited by lack of radials to support other traffic movements. Whilst large scale development is expected to support range of local services, facilities & employment opportunities promoting enhanced walking and cycling the area is not well related to a choice of strategic employment areas. It could also support Health and Social Care Services and a secondary school, provided it exceeds a minimum of 7,000 units, although long terms security may require 10,000. In addition, a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs without needing to rely on the private car. The parts of the sector which lie nearer the city are relatively close to Norwich Airport and there are other local industrial estates in Taverham and Drayton. Additional employment at Sweetbriar Industrial Estate provides other opportunities between the City Centre and North-west Sector. No sites have been promoted for development on the edge of Hellesdon meaning that any development is more likely to be as extensions to Drayton and Taverham the part of the sector furthest from the strategic employment opportunity at the Airport. Disposal of waste water likely to rely on large strategic intercept sewer which would need to pump to Whitlingham, which is therefore a key infrastructure dependency. This is potentially quite energy intensive. Large scale development affords the opportunity to provide for district scale low carbon/renewable energy generation. No significant risk of fluvial flooding, even accounting for predicted effects of climate change, though there are surface water flooding issues in Drayton.

There are questions about whether there is sufficient undeveloped land to deliver the higher end of the large scale range

in this location. Outside of the urban area of Hellesdon only enough land has been promoted for approximately 1,200

Objective 2

Housing land

in sustainable location	homes as extensions to Drayton and Taverham. This could of course change if the prospect of development was considered likely by developers. However, given the very large disparity this is a significant concern. Areas close to the Hellesdon fringe are restricted by the Airport public safety zone and noise contours, which limits the potential scale. Outside of the urban area of Hellesdon only enough land has been promoted for approximately 1,200 homes as extensions to Drayton and Taverham. This could of course change if the prospect of development was considered likely by developers. However, given the very large disparity this is a significant concern. Areas close to the Hellesdon fringe are restricted by the Airport public safety zone and noise contours, which limits the potential scale.
Objective 3 Economic growth	There are some local employment areas within Hellesdon, Taverham and Drayton which provide local employment opportunities with some capacity to expand. However, previous medium scale development in the north west at Thorpe Marriott (about 2800 houses) failed to attract local employment in spite of an allocation for that purpose. The sector is adjacent to NIA and Sweetbriar Industrial Estate provides other opportunities between the City Centre and North-west Sector. Large-scale development would support a genuine mixed use community, which might further increase local employment opportunities.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Well related to Taverham or Hellesdon High Schools. There may be limited capacity at Taverham, although the site is constrained. There is some capacity at Hellesdon, which could expand if adjacent land promoted for development comes forward. Large scale development, of at least 7,000 units, could support a new secondary school. However, there are distinct concerns about whether this scale of development could be achieved in this area, even if coupled with development opportunities within the Hellesdon Urban area.
Objective 6 Access to services	Large scale development is expected to support a range of local services, facilities & employment opportunities promoting walking and cycling. This could include health and social care services. Howevert, given capacity concern, is unlikely to be able to support a secondary school and the full range of other services may also be limited,unless the sector could be combined with an adjacent sector. There is, nonetheless, a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs without needing to rely on the private car. Reasonable public transport accessibility to the city centre and the A1067 has been identified for prioritisation measures through BRT enhancements, however the opportunities for this may be limited. Also A140 lies adjacent to sector.
Objective 7	The parts of the sector which lie close to Taverham and Drayton are a long way from the City Centre and have only

Transport and need to travel	limited local employment opportunities. Some scope for BRT, although given limited number of radials and opportunities to accommodate displaced traffic, this may not achieve the same level of service which could be achieved on other BRT routes.
	Expansion would be likely to increase cross Wensum valley car trips to Longwater and potentially the NRP on roads which pass through existing communities and can not be improved due to environmental protection status of valley. At large scale levels of growth this would be a major problem
	Public transport accessibility of these areas is limited, although there are some opportunities for cycle access using existing local roads, this is illustrated by the identified local cycle routes on the Norwich Cycle Network. Potential for BRT enhancements could support connections to Sweetbriar and the City Centre.
	Some scope for enhanced public transport for Drayton and Taverham through BRT, although limited number of radial routes will mean that scope for enhancement is less significant than in other areas.
Objective 8 Character	The sector is characterised by the Wensum river valley along its southern edge and by wooded estatelands and woodland heath mosaic land types. Particular sensitivities include the mature landscape including large woodland blocks, the landscape setting of Norwich and villages which is created, the intimacy, tranquillity and natural meandering nature of the river valley.
	Large scale strategic development would consolidate development along the fringes of the existing settlements along the A1067, and probably Reepham Road as well. This would erode separation between settlements, and would extend into existing open countryside. The effect of the NNDR would minimise the relative intrusion into open countryside. Given the limited land available there would be little opportunity for green space. Nonetheless, it is expected that large scale strategic development would have a significant impact upon local character and landscape sensitivities.
Objective 9 Environmental protection	This sector is adjacent to the sensitive River Wensum valley area, which provides important landscape, recreation and natural habitat areas. The river has SAC status. However, development is more likely to be on the northern side of existing settlements and the A1067, rather than adjacent to the Wensum Valley.
	There are three CWS in the sector comprising Walsingham Plantation, Drayton Wood & Canhams Hills. Large scale development may affect local County Wildlife Sites.
	The sector includes singnificant mineral investigation areas which would need to be assessed and potentially require phased development. There are some areas of search for minerals which would require investigation and potentially phased construction

	Agricultural and is almost all grade 3
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Large scale development is expected to support a range of local services, facilities & employment opportunities which could therefore therefore promote walking and cycling. In addition, there is a relatively wide range of services and facilities exist within existing settlements (Hellesdon, Drayton & Taverham) which could support new development within the area and may support some local needs without needing to rely on the private car. Large scale growth would support the provision of enhanced local recreational facilities, and possibly also strategic facilities if sufficient suitable land can be identified
	Good existing cycle routes in Thorpe Marriot provide access to local facilities. Also good access to established long distance cycle route to countryside and city centre. Good access to the countryside.

North sector (r	orth o	of airport)
Green 1 Amber 4		
Red 4		
Score -3		
Objective 1 Climate change		Closest part of the area is 6 to 7 km from the City Centre, though much is separated from the urban area by the airport which may make cycling routes longer, and the principal A140 route is not particularly well suited to cycling currently due to the magnitude and speed of traffic. There is however a good existing cyle route to Norwich from the eastern part of the area.
		Sector is relatively close to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe and to higher order services. BRT along the A140 has the potential to enhance connections to the city if development were to be concentrated close to the A140 corridor.
		Potential for public transport improvements using park and ride and potential BRT route.
		Close to the strategic employment area, and proposed new area at the airport,
		Small range of services provided by the existing villages along the north Norwich fringe. However, likely to be limited accessibility, although this would depend upon the exact location of development.
		Large scale development would support new local services, facilities & employment opportunities which could promote walking and cycling including higher order services e.g. GPs & Secondary Schools
		Large scale development affords the opportunity to provide for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location		There is sufficient undeveloped land to provide for large scale development, at least toward the bottom end of the range. However, only a very limited amount of development land has been promoted, therefore it is highly unlikely that anything approaching the upper end of the range could be achieved. Although clearly there is the chance that more land could come forwards should the location be promoted.
		The form that large scale development could take in this sector is constrained by the pattern of existing development and existing and proposed roads. Sites would be separated from urban area by airport, which limits accessibility to services within the Norwich Fringe.

Objective 3 Economic growth	Sector is relatively well geographically related to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe. There is local employment at Abbey Farm and some limited employment at Horsford. Large-scale development would support a genuine mixed use community, but such development in this sector would predominantly remain detached from the urban area and the potential labour force offered by it.
Objective 4 Regeneration	Development of any greenfield site will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	No easily accessible high school in this sector. Sector is poorly related to existing secondary schools. However, there is expected to be some capacity within Hellesdon High School. The ability to expand this school further is reliant on growth outside the North Sector. There may be some capacity at Sprowston or Taverham high schools, which could accommodate early development, although these are also some distance from the sector. There is some concern about the ability of this sector to provide for the scale of growth necessary to support a new high school.
Objective 6 Access to services	Limited range of existing services and facilities provided by the villages in the northern sector. A wider range of services is provided within the Norwich Fringe, but these are not likely to be particularly accessible from development in the Northern Sector by means other than the private car. Limited public transport access to the City Centre, although the A140 has been identified for public transport enhancements between the Airport and Norwich City Centre. Large scale development would support the provision of a range of local services and facilities. Extensions of the A140 BRT could enhance accessibility of services in the city centre. However, enhancing cycling connections to Norwich and the urban fringe may be difficult and non-direct given geography of the area and routes of existing roads.
Objective 7 Transport and need to travel	The sector is a minimum of 6km from city centre. Whilst there is some scope for increased public transport services along the A140, this potential is limited by the lack of alternative radials to support alternative modes. Spixworth Road offers alternative routes for modes such as cycling to the eastern edge of the area. Limited links to alternative modes coupled with access to the NNDR and A140 could increase use of the private car. Area is served by airport park and ride but this should not be the solution to deal with public transport needs of strategic growth.
Objective 8 Character	Landscape of the northern sector characterised by Woodland Health Mosaic and Wooded estatelands. Particular landscape sensitivities include the mature landscape, which includes extensive blocks of woodland, the coherent, small scale settlement density and pattern in the area around Horsford & Felthorpe and generally unified rural character around Newton St Faiths and the landscape setting to the Norwich urban fringe and villages. Heritage assets within the sector

	include Horsford Castle, which is a Scheduled Ancient Monument, historic parkland adjacent to Spixworth and Ancient Woodland west of Horsham and Newton St Faiths. The pattern of development in this area could comprise a single extension to a village, a stand alone village or extensions to multiple villages, although the pattern of land promotion would suggest extensions to villages the most likely. The form that large scale development could take in this sector is constrained by the pattern of existing development and existing and proposed roads, It is anticipated that it would take the form of large extensions to all villages or a large new town which subsumes existing villages. Whatever the pattern of development, sites would be separated from urban area by airport, which limits accessibility to services within the Norwich Fringe. This is likely to have a significant effect on the inherent qualities of the area in forming a landscape edge to Norwich and the existing characteristics of the area and may result in the loss of some of the immediate landscape settings of the 17 th
Objective 9 Environmental protection	& 18 th century estatelands. Small river valleys with a number of county wildlife site designations. Some assets in the form of Ancient Woodlands and areas of landscape value. There are also active mineral workings A large area of woodland north and east of Horsford contains wildlife designations.
	Large scale development in this area is likely to impact upon some of these areas. The limited amount of land may also limit the opportunity to create new green spaces.
	There are also active mineral workings which are proposed for extension in the pre submission publication version of the minerals site allocations document. Development would need to investigate mineral resources and be phased accordingly.
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided
Objective 11 Healthy lifestyles	Availability of a small range of services and facilities in some existing villages provide scope to support some walking and cycling. However, apart from Spixworth, non-car based links to existing urban fringe are poor limiting opportunities for walking and cycling.
	Large scale development would however support the provision of a range of services, facilities and employment

opportunities, which if designed appropriately could encourage greater walking and cycling.

Some existing recreational open space available and large scale development would support the provision of an extended range of local and strategic facilities.

Good access to countryside via a range of quieter local roads.

Large scale development is expected to support the provision of additional health and social care services.

North and north west sectors combined (the combined location would tend to extend from the edge of Drayton and Thorpe Marriot across the NDR to the A140 and the St Faiths)

Green 2 Amber 5 Red 2 Score 0

Objective 1 Climate change

Closest part of the area is 6 to 7 km from the City Centre,. Extending to the north of the airport would separate development from the urban area and make cycling routes longer, and the principal A140 route is not particularly well suited to cycling currently due to the magnitude and speed of traffic. Currently, no significant public transport prioritisation outside of city centre for radial routes connecting sector to city. Some scope for enhancement along A140 and A1067, which are recognised in NATS as potential BRT routes. Implementation of BRT on the A1067 has landscape implications, as road widening would require the removal of trees. The efficiency of these BRT route may be limited by lack of radials to support other traffic movements

Marriots Way and the route from Spixworth to Norwich are good existing cycle routes but are at the extremities of the combined area.

Accessible to the city centre and close to the strategic employment area, and proposed new area at the airport, Less well related to other strategic employment areas.

Large scale development is expected to support range of local services, facilities & employment opportunities promoting enhanced walking and cycling. It could also support Health and Social Care Services and a secondary school, provided it exceeds a minimum of 7,000 units, although long terms security may require 10,000. In addition, a relatively wide range of services and facilities within existing settlements which could support new development within the area and may support

	some local needs without needing to rely on the private car.
	Disposal of waste water likely to rely on large strategic intercept sewer which would need to pump to Whitlingham, this would be a very long route and, potentially quite energy intensive.
	No significant risk of fluvial flooding, even accounting for predicted effects of climate change although there are some localised issues in the south western part of Horsford and north of Horsham St Faith. There are surface water flooding issues in Drayton
	Large scale development affords the opportunity to provide for district scale low carbon/renewable energy generation.
Objective 2 Housing land in sustainable location	Land is potentially available for large scale growth in the combined area though either sector individually may not be able to achieve such a scale. Limited areas of land have been promoted, but this position might change if the area were actively promoted through the plan making process. The environmental and physical constraints in the area, coupled with the distribution of land that has been promoted undermine the ability to provide for large scale growth as a coherent new community
Objective 3 Economic growth	North sector is relatively well geographically related to employment at Norwich International Airport but is generally poorly related to other strategic employment areas on the Norwich Fringe. There is local employment at Abbey Farm and some limited employment at Horsford. In the North-West sector there is some local employment areas within Hellesdon, Taverham and Drayton which provide local employment opportunities with some capacity to expand. However, previous medium scale development in the north west at Thorpe Marriott (about 2800 houses) failed to attract local employment in spite of an allocation for that purpose. The sector is adjacent to NIA and Sweetbriar Industrial Estate provides other opportunities between the City Centre and North-west Sector. Large-scale development would support a genuine mixed use community, but such development in this sector would predominantly remain detached from the urban area and the potential labour force offered by it.
Objective 4 Regeneration	Development of all greenfield sites will have a similar, limited effect on regeneration of deprived urban areas, though those closest to those areas may prove more accessible to their residents increasing employment opportunities. Deprived wards in Norwich tend to be focused in the centre, north and north west. This effect is likely to be greater in the case of large scale development Than medium or small.
Objective 5 Education	Parts of the combined sector are poorly related to existing secondary schools from an accessibility point of view. However, there is expected to be some capacity within Hellesdon and Taverham High Schools which could accommodate

	some early development within the Sector
	Large scale development could support a new high school, but would require at least 7,000 new dwellings, and ideally up to 10,000, there is some uncertainty as to whether enough land can be provided in this combined sector in a location that would deliver a sufficiently coherent community.
Objective 6 Access to services	A relatively wide range of services and facilities exist within existing settlements of Hellesdon, Drayton and Taverham supplemented by a more limited range in the villages in the northern sector which could support new development within the area. Although likely to be relatively peripheral to the main focus of development these may support some limited local needs without needing to rely on the private car. A wider range of services is provided within the Norwich Fringe, but these are not likely to be particularly accessible from development in the combined sector by means other than the private car.
	Large scale development would support the provision of a range of local services and facilities. Provision of the A140 and A1067 BRT routes could enhance accessibility of services in the city centre. However, enhancing cycling connections to Norwich and the urban fringe may be difficult and non-direct given geography of the area and routes of existing roads. There would be a need to enhance connectivity across the NDR to different parts of new development in this combined sector.
	Large scale development offers the opportunity to create mixed use communities, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and a secondary school.
Objective 7 Transport and need to travel	The parts of the sector which lie close to Taverham and Drayton are a long way from the City Centre and have only limited local employment opportunities. The A1067 and A140 routes are both identified for BRT. The only other radial routes are the Holt Road which joins the A140 at the edge of the current built up area, and the Reepham Road which joins the A140 at the constrained Boundary Junction. The A140 BRT route would need to be extended across the NDR into the development area. However, with environmental constraints on the former in particular, and the limited number of radials and opportunities to accommodate displaced traffic, it may be difficult to achieve the same level of service which could be achieved on other BRT routes. Opportunities for safe cycle routes into the city centre are limited.
	BRT particularly along the A140 has the potential to enhance connections to the city. Large scale development would justify the extension of the route beyond the edge of the Norwich Urban Fringe. Public transport accessibility of employment areas is limited, although there are some opportunities for cycle access using existing local roads, this is

illustrated by the identified local cycle routes on the Norwich Cycle Network. Potential for BRT enhancements on the A1067 could support connections to Sweetbriar. The area is served by airport park and ride but this should not be the solution to deal with public transport needs of strategic growth Outside the NDR the A140 would form a significant barrier to connections between areas if growth needed to extend to the east. Expansion would be likely to increase cross Wensum valley car trips to Longwater and potentially to NRP on roads which pass through existing communities and can not be improved due to environmental protection status of valley. At large scale levels of growth this would be a major problem Objective 8 The combined sector is characterised by the Wensum river valley along its southern edge and by wooded estatelands and Character woodland heath mosaic land types. Particular sensitivities include the mature landscape including large woodland blocks, the coherent, small scale settlement density and pattern in the area around Horsford & Felthorpe and generally unified rural character around Newton St Faiths, the landscape setting of Norwich and villages which is created, the intimacy, tranquillity and natural meandering nature of the river valley. Heritage assets within the sector include Horsford Castle, which is a Scheduled Ancient Monument, historic parkland adjacent to Spixworth and at Taverham Hall Schooland Ancient Woodland west of Horsham and Newton St Faiths and in the Wensum valley near Taverham Hall School. The form that large scale development could take in this sector is constrained by the pattern of existing development and existing and proposed roads. It is anticipated that it would take the form of large extensions to the existing settlements or a large new town which subsumes existing villages. Large scale development in the combined sector could be expected to consolidate development along the fringes of the existing settlements along the A1067, and either side of Reepham Road. It would extend across the NDR into the area around Horsford and extend towards the A140 at Horsham. This would reduce separation between settlements, and would extend into existing open countryside. This is likely to have a significant effect on local character and landscape sensitivities, including the inherent qualities of the area in forming a landscape edge to Norwich and the existing characteristics of the area. If development work to extend for the east towards Spixworth it may result in the loss of some of the immediate landscape settings of the 17th & 18th century estatelands. Objective 9 To the north there are small river valleys with a number of county wildlife site designations, assets in the form of Ancient

Environmental protection	Woodlands and areas of landscape value. A large area of woodland north and east of Horsford contains other wildlife designations. There are also active mineral workings. Proposed for extension in the pre submission publication version of the minerals allocations plan. These would require investigation and possibly phased construction Similarly, there are mineral investigation areas in the north west sector. The north west sector is adjacent to the sensitive River Wensum valley area, which provides important landscape, recreation and natural habitat areas and contains three CWS (Walsingham Plantation, Drayton Wood & Canhams Hills). Combining the sectors provides better opportunities to avoid any detrimental impact on these environmental assets and provide new green spaces. However the identified assets would still constrain the areas suitable for development. The river Wensum has SAC status but even large-scale development should be able to avoid direct impact on this. Indirect impacts, for example to traffic may be more difficult to avoid. Agricultural land in the combined sector is almost all grade 3.
Objective 10 Community safety	Impacts are largely influenced by settlement design and the facilities provided
Objective 11 Healthy lifestyles	Availability of a range of services and facilities in existing settlements provide scope to support some walking and cycling. However, non-car based links to existing urban fringe are poor limiting opportunities for walking and cycling. Large scale development would however support the provision of a range of services, facilities and employment
	opportunities, which if designed appropriately could encourage greater walking and cycling.
	Some existing recreational open space available and large scale development would support the provision of an extended range of local and strategic facilities.
	Good access to countryside via a range of quieter local roads and Marriots Way.
	Large scale development is expected to support the provision of additional health and social care services.

Wymondham	
Green 4	
Amber 1	
Red 4	
Score 0	
Objective 1 Climate change	Contributions from car use could be reduced by frequent train services and the self-containment .Large scale development would support development of BRT as an extension of the existing town particularly if associated with other growth in the corridor. Good train links to Norwich and Cambridge.
	Some localised Fluvial and Surface Water Flooding issues.
	Large scale expansion would require significant expansion of existing sewage treatment and sewerage capacity.
Objective 2 Housing land in sustainable location	While sufficient land has been promoted for large scale expansion, acceptable locations are likely to be limited by environmental constraints to west of town, the A11 and railway line to the east and the need to retain historic character. Consequently even the lower end of the range would be challenging.
Objective 3 Economic growth	Sector contains Gateway 11 business park. Whilst not within the sector there is also reasonable access to the NRP and Hethel employment areas. Large-scale development would support a genuine mixed use community, which would afford the opportunity to build upon the Towns existing attributes enhancing local employment opportunities.
Objective 4 Regeneration	Development of all greenfield sites will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	High School site restricted but recent masterplan demonstrates ability to accommodate children from additional 2,200 dwellings through effective use of existing buildings and space. This takes a school to the maximum size acceptable to the LEA and Governors and implementation is underway. In this context, provision of an additional high school would require an additional 7,000 to 10,000 dwellings above the adopted JCS (i.e 9,200 to 12,200).
Objective 6 Access to services	A wide range of services are available within Wymondham and therefore the sector would not be dependent on Norwich, except for highest order facilities, and there are relatively good bus and train services which connect Wymondham to Norwich.
	Large scale development offers the opportunity to create mixed use communities, particularly at the higher end of the range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and a

	secondary school.	
Objective 7 Transport and need to travel	Although at distance from the city, the self contained nature of town, including local services and employment, and railway link reduce need to travel by car. Large scale growth particularly in association with other growth in the corridor would enable public transport improvements including BRT facilities. Large scale growth would require significant investment in trunk road junctions including Thickthorn.	
Objective 8 Character	The sector is characterised by Plateau and Tributary Farmland. Particular landscape sensitivities include insensitive developments that intrude upon skyline, loss of rural character, coalescence of settlements and development that intrudes upon the views to important features, e.g. Wymondham Abbey. In addition there are areas of landscape value around the river in Wymondham. There is need to protect the historic landscape associated with Ketts Oak Wymondham contains a number of heritage assets, most notably Wymondham Abbey but also the Historic Core of the town itself. Whilst large scale strategic expansion could support Wymondham's vitality it could be detrimental to the historic centre. It would be very difficult to identify locations to accommodated large scale development whilst respecting landscapes and views to the west and south-west of town. Therefore large scale development is expected to have a significant impact	
	upon local character and the landscape sensitivities of the area.	
Objective 9 Environmental	Need to protect areas such as the Lizard .	
protection	Agricultural land mostly grade 3	
	The area lies in a priority green infrastructure coroner (Wymondham to Norwich) Large-scale development should be able to contribute significantly to wards the achievement of this.	
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided	
Objective 11 Healthy lifestyles	The relatively compact nature of the town and wide range of local facilities encourages walking and cycling as does ease of access to the countryside. Large-scale development could support additional facilities, further enhancing access to services.	

Long Stratton	
Green 3	
Amber 2	
Red 4	
Score -1	
Objective 1 Climate change	Distance from strategic employment opportunities and limited opportunities for bus priority to promote modal shiftbut good access to some local employment opportunities.
-	Capacity for sewage disposal for small scale development but this would reach the limits imposed by the capacity of the receiving water course
	Large scale growth is expected to create conditions that would support the provision of district scale de-centralised low carbon or renewable energy.
Objective 2 Housing land in sustainable location	Water utilities issues and need to protect historic landscape east of village remove potential for large scale expansion.
Objective 3 Economic growth	Poorly related to the strategic employment sites around Norwich, but a range of successful local employment opportunities. Large-scale development would support a genuine mixed use community, but such development in this sector would predominantly remain detached from the urban area of Norwich or other large market towns and therefore the potential labour force offered by it.
Objective 4 Regeneration	Development of all greenfield sites will have a similar, limited affect on regeneration of deprived urban areas.
Objective 5 Education	Limited capacity at Long Stratton High School for early development. The existing school has no 6 th form. Major development would support provision of additional high school
	Poor accessibility to tertiary and skills education in Norwich
Objective 6 Access to services	There is a reasonable range of retail, leisure and other services available within Long Stratton and these would be accessible to new development. Council services are located in the village. Limited accessibility to higher order services provided in Norwich or other large scale strategic retail.
	Large scale development offers the opportunity to create mixed use communities, particularly at the higher end of the

	range, will provide sufficient critical mass to support a range of new services and facilities, including new primary schools and other enhanced retail and servicing, including for higher order services such as health and social care services and a secondary school.	
Objective 7 Transport and need to travel	Local access is good but bus priority along the A140 and new train links are implausible. There is limited access to local strategic employment areas	
Objective 8 Character	The sector is characterised by Tributary and Plateau Farmland. Particular sensitivities include the loss of vegetation creating a greater sense of openness and the gently sloping landscape being vulnerable to tall structures in the area north of Long Stratton and the strong sense of openness and sparse small scale settlement pattern in the area. There is also a need to respect the historic landscape character to the east of the village. Nonetheless, it is considered that some development could be accommodated in a manner that would not have a significant detrimental impact upon landscape or heritage sensitivities. Large scale development would facilitate a bypass which would enhance the character of the village centre and enhance quality of life. However the impact of local traffic generated by large scale development would be expected to erode the character of the centre.	
Objective 9	Few environmental designations would constrain development, and A140 by-pass would significantly reduce pollution in	
Environmental protection	the village.	
	Agricultural land mostly grade 3.	
	Relatively few local environmental designations. Large scale development would facilitate the construction of a bypass, but the resultant positive effect on the conservation area could be compromised if significant additional local traffic were generated within the town centre.	
Objective 10 Community safety	Impacts are largely influenced by settlement designs and the facilities provided	
Objective 11 Healthy lifestyles	Good access to the countryside. Proximity to local services and facilities will promote walking and cycling. Large scale development could enhance the range of services, and further improve accessibility to local services by these modes.	

Wymondham a Green 4 Amber 3 Red 2 Score 2	ind So	uth West Sectors combined (focussed on the B1172 BRT corridor)
Objective 1 Climate change		Contributions from car use could be reduced by frequent train services and the self-containment at Wymondham although the focus of development would tend to be some distance from the station. Large scale development would support development of BRT as an extension of the existing town of Wymondham and will be strengthened by the additional focus of development on this corridor. There are some localised fluvial and surface water flooding issues that would need to be taken into account. The combined area would be served by its two sewage treatment works, at Wymondham and at Whitlingham capacity
		limitations and sewerage constraints at Wymondham could be a local factor, but the option of draining to Whitlingham would offer an alternative and greater resilience The combined area has good access to choice of employment areas at NRP, Wymondham and Hethel, Existing local services would be concentrated at the south western end of the combined sector, with an additional existing concentration of more local services at Hethersett. Good cycle route connecting to the city centre, although distances from the Wymondham would be considerable.
		Large scale growth is expected to create conditions that would support the provision of district scale de-centralised low carbon or renewable energy.
Objective 2 Housing land in sustainable location		In the context of high school constraints, development would either be at the low end of the range or would need to go beyond the upper end to around 12,000 dwellings or more. Sufficient land has previously been promoted for large scale expansion. In the southern part of the combined sector acceptable locations are likely to be limited by environmental constraints to west of Wymondham, the A11 and railway line to the east and the need to retain historic character. In the northern part of the combined sector opportunities would be constrained by a need to avoid infringing river valley landscape.
Objective 3 Economic growth		Good access to Gateway 11 business park, to the NRP and Hethel employment areas. The northern part of the sector would have reasonable access to the Longwater employment area,. Good train links to Norwich and Cambridge from Wymondham.

Objective 4	The south-western part of the sector is adjacent to the Hospital and UEA and to Norwich Research Park, which is a strategic employment area that has the potential to expand. Wymondham contains Gateway 11 business park and also has reasonable access to the NRP and Hethel employment areas. Large-scale development would support a genuine mixed use community, which would afford the opportunity to build upon Wymondham's existing attributes enhancing local employment opportunities there and in the south-western part of the sector. Development of all greenfield sites will have a similar, limited effect on regeneration of deprived urban areas.
Regeneration Objective 5 Education	A combined sector raises particular complexities around high school provision. Wymondham High School site is restricted but a recent masterplan demonstrates the ability to accommodate children from the JCS provision of 2,200 dwellings through effective use of existing buildings and space. This takes the school to the maximum size acceptable to the LEA and Governors and implementation of this expansion is underway. Hethersett High School has the capacity to expand to accommodate the JCS allocations for Hethersett and Cringleford, provided adjacent land can be made available to enlarge the site. Land currently being promoted for development enables this expansion. If growth in the combined sector were to rely on this expansion it would restrict growth to the lower end of the scale but also tend to move the focus away from the school, consequently challenging the ability to bring forward the land required for its expansion. This indicates that growth of a scale that would justify combining the two sectors would need to be sufficient to support an additional high school. This would require an additional 7,000 to 10,000 dwellings above the JCS allocation in Wymondham (2,200). In addition, as Cringleford growth relies on Hethersett High School, and the expansion of Hethersett High relies on the ability to bring forward adjacent land, growth in the combined sector may need to be additional to these existing allocations in the JCS (totaling a further 2,200). Consequently the ultimate scale of development in the area
	required to support reasonable high school provisions could be significantly in excess of 10,000 dwellings. Inner part of sector is adjacent to UEA – but the combined sector moves the focus further away.
Objective 6 Access to services	A wide range of services are available within Wymondham and therefore this part of sector would not be dependent on Norwich, except for highest order facilities, and there are relatively good bus and train services which connect Wymondham to Norwich. There are some existing services in Hethersett. Cringleford has good access to the services in nearby in Eaton. Higher order services within the City Centre are accessible from this part of the sector by good public transport links and the proposed BRT. The combined sector, and in particular the northern part is close to the hospital.
	Large scale development would provide sufficient critical mass to support a range of new services and facilities, including

	new primary schools and other enhanced retail and servicing. There is also the scope for higher order services such as health and social care services and a secondary school. Major development would support new large scale convenience retail and other services and facilities, but this might be at the expense of urban form in that expanding Wymondham town centre is likely to be difficult or impossible and would not optimize access to services for those residents of the northern part of the combined sector, while locating very large retail facilities in the north could be seen as a competitor running the risk of undermining existing services in the historic core of Wymondham. Co-location with any new high school would tend to place a new centre somewhere between Wymondham and Hethersett adding to the risk of competitive impacts on existing centres.
Objective 7 Transport and need to travel	Although at distance from the city, the self contained nature of Wymondham, including local services and employment, and railway link reduce need to travel by car. Large scale growth particularly as part of a combined sector using the same corridor would enable public transport improvements including BRT facilities. The corridor has recently been improved. The scale and focus of the growth implied by this option would require significant investment in trunk road junctions including Thickthorn and Wymondham The combined sector is easily accessible to the Norwich Research Park, city centre, Wymondham Access is to Hethel and Longwater strategic employment areas is reasonable to good depending on the actual location of growth.
Objective 8 Character	This combined sector is characterised by Plateau and Tributary Farmland. Particular landscape sensitivities include insensitive developments that intrude upon skyline and the sense of openness, loss of rural character, coalescence of settlements and development that intrudes upon the views to important features, e.g. Wymondham Abbey and historic parkland. In addition there are areas of landscape value around the river in Wymondham. Wymondham contains a number of heritage assets, most notably Wymondham Abbey but also the Historic Core of the town itself. It would be very difficult to identify locations to accommodate large scale development in Wymondham whilst respecting landscapes and views to the west and south-west of town. Scope for additional growth at Cringleford is likely to be constrained by the valley landscape and the setting of the Norwich southern bypass, though it may be possible to locate some additional growth here in the form of an extension of the urban edge community. This means that the possibility of large-scale growth in the combined sector would be likely to be located predominantly between Wymondham and Hethersett involving a major expansion of the village into open countryside eroding the separation between the two. Since the landscape in this area is open, there are no readily identifiable existing physical features which could demarcate the two communities. it would be necessary to protect the historic landscape associated with Ketts Oak. Proximity to Norwich southern bypass limit options between Hethersett and Cringleford. The area is

	currently characterized by stand alone settlements in rural settings – this character would be severely eroded.
	Therefore, it is considered that large scale development in this combination sector would have a significant impact upon local character and landscape sensitivities.
Objective 9 Environmental protection	Scope for major growth in the Wymondham area is limited by the need to to protect areas such as the Lizard. There are also river valley and localised flood constraints to the west of the town.
	In the northern part of the combined zone any allocations would need to maintain the green space area around Norwich and the River Yare.
	A focus on the area between Wymondham and Hethersett would reduce pressure on these assets.
	Land is generally grade 3, with an area of grade 2 north west of Hethersett.
	The area lies in a green infrastructure priority corridor (Wymondham to Norwich) and large-scale development should be able to contribute significantly towards this.
Objective 10 Community safety	Impacts are largely influenced by settlement design and the facilities provided
Objective 11 Healthy lifestyles	The relatively compact nature of Wymondham and wide range of local facilities encourages walking and cycling as does ease of access to the countryside
	There are High schools at Hethersett and Wymondham, but the scale of growth sufficient to justify combining the sectors would be likely to require a further high school. There are good cycling opportunities to local services and strategic employment areas. Good access to the countryside.
	Local medical facilities exist and would be expanded. Good access to the hospital.

North-East (Outside NNDR) & North (North of Airport) Combination Sector

Green 2 Amber 4 Red 4 Score -2

Objective 1 Climate change The closest part of this combination sector would be 6-7km from Norwich City Centre. Much of the western part of the sector is separated from the Urban fringe by Norwich International Airport. The sector would be separated from the Urban fringe by the proposed route of the NNDR, but this has some permeability measures built in, e.g. foot/cycle bridge and at grade junctions, in the vicinity of Rackheath. The design of the NDR will also protect the continuity of the existing cycle route connecting Spixworth to the urban area The eastern part of the sector, vicinity of Rackheth would be adjacent to the Salhouse Station, which could offer some opportunities for public transport services. In addition, the Salhouse/Gurney Road corridor offers good opportunities for BRT and offers a particular advantage for access inside the inner ring road via Gurney road, which is not available to other north city transport corridors. The western part of the sector, vicinity of Horsford and Horsham St Faiths does have access to the A140, which is proposed for BRT albeit only as far as NIA within current plans. Clearly these public transport opportunities are at some distance from one another bringing into question whether they would operate in a synerginistic way, supporting a combined sector. While both feature in NATS implementation plan, a strategy which required both to be implemented simultaneously would make it more difficult to phase investment over the plan period.. That being said, the centre of the sector has the Wroxham Road, North Walsham/Norwich Road and Spixworth/Buxton Road running through it. Wroxham Road and North Walsham Road may offer some opportunities for public transport enhancements, although improving connections to the city center beyond the outer ring road remain difficult as a consequence of limited opportunities for prioritisation and enhancement. Spixworth/Buxton road would be expected to continue to perform well as a cycling corridor though improved continuity within the urban area would be desirable. The sector would be relatively close to strategic employment areas at NIA and BBP, also local employment areas at Rackheath and, to a lesser extent, Salhouse Road, Sprowston. There are some smaller local roads within the area that could offer opportunities for orbital movements by cycle across the sector if suitably protected from increased traffic.

There are a range of services and facilities within the Norwich fringe but physical separation from the urban fringe, further restricted by NIA in the western part of the sector, would limit actual accessibility. There is a modest range of local services within the villages and settlements in the Sector, but capacity in these is expected to be limited meaning that they would only be able to support very early stages of development. Clearly development at large scale would provide sufficient critical mass to support a relatively wide range of services and facilities, and provide these in such a way that they would be accessible by foot and cycle.

No significant risk of fluvial flooding in the area, although some localised issues with drainage in the area around Horsham

	St. Faiths.
	Large-scale growth would afford opportunities to support de-centralised renewable and low carbon energy solutions.
Objective 2 Housing land in sustainable location	There is sufficient undeveloped land within the sectors to support large-scale development, although limited areas of land have been promoted outside of the eastern side of the sector, vicinity of Rackheath. This leads to some concerns about deliverability of large-scale development in the range 7,000 to 10,000 dwellings in this sector. This position might change if development were promoted in the combined sectors.
	Western part of the Sector has limited accessibility to services and facilities in the urban fringe owing to the segregation created by NIA.
Objective 3 Economic growth	The eastern part of the sector is well related to BBP and NIA, the western part of the sector only to NIA. Rackheath Industrial Estate and Abbey Farm Industrial Estate offer some local employment opportunities within the eastern and western part of the sector respectively. There are some opportunities to enhance connections to Norwich City centre but these are constrained.
Objective 4 Regeneration	Development of this sector offer little, if any, opportunity for regeneration. Indeed it will have no significant direct effect upon deprived urban areas, although any local employment opportunities stimulated by development would be relatively accessible to some deprived wards in the northern part of Norwich.
Objective 5 Education	The western part of the sector is poorly related to existing high schools, although the closest secondary school, Hellesdon, does have some capacity to expand. The eastern part of the sector is also relatively poorly geographically related to secondary schools, it also relies upon Broadland High school in Hoveton for secondary education which is distant from the sector. This poor relationship could result in accessibility problems in the early phases of development.
	Large-scale development of between 7,000 to 10,000 new homes could support the delivery of new secondary school and this affords the opportunities to resolve these problems. In the same way as access to the city centre is limited from an economic perspective, public transport access to tertiary education at City College, Norwich University College of the Arts and UEA is limited.
Objective 6 Access to services	There are limited services and facilities within the existing small villages and other settlements within the sector and the western part of the sector is not well related to the urban fringe as a result of being separated from the urban fringe by NIA. The eastern part of the sector is better related to the fringe, despite also being separated from the Urban Fringe. The

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	eastern sector does have some existing bus services which provide cor	nnections to the Dussindale district centre.
Objective 7 Transport and need to travel	The most suitable routes for improved public transport services appear question whether either could appropriately service a contiguous, coher this area. Incoherent development, would in effect mean the sectors we should be made to their individual evaluations in this regard. That being the middle of the sector and offers good potential cycle links to the city. Sprowston offer some potential for improved radial bus links, although the prioritisation inside the outer ring road. Local cycling links to NIA or BBF roads, which albeit are quiet may not be suitable in poor weather conditional although this might be improved. Local road links are also not particular Broadland business park from the eastern part of the combined sectors part on foot or cycle will need to negotiate a fairly complex new junction from the central part by way of Spixworth road will remain very good.	rent development, or series of developments within ould operate as individual sectors and reference g said, the Spixworth/Buxton corridor runs through centre. Equally, North-Walsham Road and this is limited to some extent by opportunities for P from the sector are currently reliant on local tions and are unlit which may limit their suitability, rly direct. The NDR will offer cycling connections to s, but access to the urban area from the western
Objective 8 Character	The sector is characterised by Woodland Heath Mosaic and Wooded E sector comes very close to a small section of landscape characterised to respect the Ancient Monument, which is Horsford Castle, in the wester development within this area would likely comprise of a number of new urban quarters or urban simultaneuosly in a number of locations, enabling the necessary rate to likely in some instances to be extension of existing villages, e.g. Rackher result in a significant change in the character of the landscape as the exconstruction of new settlements. There is historic parkland surrounding and existing mineral workings limit opportunities to the north and west of while the proximity of the NDR to the south and southwest, Beeston parassociated flood risk to the north limit opportunities, in the central part of the sectors in a coherent development form.	as Marshes Fringe. Development would also need tern part of the combined sector. Large scale villages in order to ensure development occurs to be achieved. These might be stand-alone but are eath/Horsford/Spixworth/ St Faiths. This would xisting agricultural landscape is altered by the Spixworth which would need to be respected. This of Spixworth, at least until the minerals are worked, rk to the south east and a river valley with
Objective 9 Environmental protection	There are a number of small river valleys and CWS designations within also a SAC/SPA at Crostwick Marshes. The eastern part of the sector control of the former USAAF base at Rackheath. The Broads SAC lies to would need to be given to the scale of development which could occur close proximity of Broads habitats exceeds environmental levels. The Hodevelopment in the range of 4,000 homes could occur in the vicinity of levelopment.	contains some small areas of ancient woodland, the north of Rackheath. Careful consideration in the area before the scale of development within HRA undertaken for the JCS indicates that

	Broads SAC provided a buffer zone is maintained. However, significant increases to this level may not be appropriate in environmental terms. There are some GI priority links that run through the sector which development could help to deliver and this will help improve habitat connectivity and the resilience of environmentally important sites. There are significant mineral resources in the form of an active working which is identified for extension in the pre-submission version of the minerals site specific allocations document (reference MIN 96). Development would need to be phased with this work.
Objective 10 Community safety	This is likely to be largely a matter of detailed design.
Objective 11 Healthy lifestyles	Large scale development affords the opportunity to create places which support walking and cycling, which supports healthy lifestyles. There is some potential for increasing cycling connections to the City Centre, which would support cycle commuting. Access to NIA may be more difficult to achieve. The sector is also a significant distance from the city centre, which might limit the take up of cycling. There would be excellent access to the countryside and Broads from the sector because of the geographic relationship of the sector to the rural area. There are two circular walks established within the sector which could be incorporated and enhanced. Large scale development affords the opportunity to provide new health services, this would benefit new development and may also go someway to improving access to health services within the existing villages and settlements within the sector.

APPENDIX M: UPDATED REVIEW OF RELEVANT PLANS, PROGRAMMES AND STRATEGIES FOR SUSTAINABLE DEVELOPMENT

Author: URS based on GNDP information.

Preface:

Contains an update to the Literature Review undertaken as part of the initial Sustainability Appraisal Scoping undertaken in 2007.

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
Tomorrow's Norfolk, Today's Challenge – A Climate Change Strategy for Norfolk (2008).	To cut carbon emissions by reducing energy consumption and promoting a shift to low-carbon technology (mitigation) To improve Norfolk's resilience to the changing climate, including reduction of the socio-economic and environmental risks associated with flooding and coastal erosion (adaptation)	Norfolk LAA target is a 11% reduction in CO2 emissions across Norfolk by 2011. LAA target is to reach Level 3 of the Government's performance framework by 2011.	Consider the means for reducing emissions and designing / locating development that deals with the risks from climate change.	 contribution to reducing greenhouse gas emissions contribute to sustainable energy development and use risks of flooding contribution to enhanced biodiversity contribution to more sustainable modes of transportation minimising waste production
Norfolk Action - Norfolk's Local Area Agreement 2008-11 (2008)	This Local Area Agreement takes the Sustainable Community Strategy of Norfolk County Strategic Partnership (Norfolk Ambition) and looks to deliver its long term vision.	Using national and local indicators as monitoring tools.	Maintain and enhance the elements that contribute to the quality of life of residents.	- Improve the quality of where people live - Maintenance and improvement of the health of the population - Improve accessibility to essential services and facilities - Encourage local community identity, good behaviour and co-operative attitudes - Maximise the use of

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
				renewable energy solutions and reduce contributions to climate change - Reduce vulnerability to climate change
				- Improve education and skills of population.
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 well being.	Proposed Action Plan of potential projects to deliver the strategy.	- 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 affects on climate change
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 elsewhere and where possible, reducing		Consider the implications of flood risk for development, avoiding risks where possible and enabling improvements	- avoid, reduce and manage flood risk

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
	flood risk overall.			
Broadland Community Plan - Update to the Broadland Community Partnership Community Strategy 2004- 2014 (2008)	Update on the Broadland Community Plan 2004. The people in Broadland will: - Feel safer in their communities - Have access to facilities and services they need - Live in a place where the special character of the countryside, natural and built environment is valued - Be able to make informed choices about their own health - Have choices about their homes appropriate to their needs - Benefit from a thriving economy - Be able to develop to their full potential - Be living a more sustainable lifestyle - Be proud of where they live and have more opportunities to be involved in shaping decisions and taking action to improve quality of life		- Promote a safe environment - Improve access to jobs, facilities and services for all - Protect and enhance the natural and built environment - Consider issues of health and the promotion of a healthy environment and provision of facilities -Provide for housing requirements (for all sectors of the population) - Encourage economic development - Provide for educational requirements - Promote sustainable development - Promote local character and diversity	- contribution to a safe environment - contribution to accessibility - impact on / enhancement of the environment - contribution to healthy environment and provision of facilities - contribution to housing provision - contribution to economic provision - contribution to educational provision - contribution to sustainability - contribution to local character and diversity
Broadland Play - Children's	To guide development of play areas in the		- Recognise the health and	- maintain and improve the

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
Play Strategy	 Equitable distribution of play areas, Attractive, well designed and safe play areas for children and young people, Areas for young people to meet, Consultation with children and young people on provision of new or rehabilitation of existing play areas, Easy access to play areas for more residents, Improved access to play facilities for disabled children and people from other disadvantaged sections of the community. 		social benefits of play	health of whole population and improve healthy lifestyle - contribution to accessibility for all
Broadland Youth Engagement Strategy	To help and inform young people of what the Council is doing and thinking of doing, and having their views on this listened to, together with training the young people to help them play a role in the Councils work. Provide events and projects that young people have said they want.		- Increase community involvement in implementation,	- contribution to community involvement - contribution to accessibility for all
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.	National and local indicators as monitoring tools including; - percentage of small businesses	 Promote sustainable development, protecting and enhancing the natural and built environment. Encourage economic development, ensuring that the 	 Contribution to economic provision Sustainability of development locations Contribution to strategic

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
		in the area showing employment growth - percentage of workforce employed in higher occupations	necessary infrastructure and quality to attract and retain investment and support business growth. - Coordinate the location of employment areas, housing and the provision of a sustainable transport 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.	 infrastructure Contribution to sustainable transport infrastructure Contribution to accessibility for all Contribution to regeneration and renewal Protection of and contribution to green infrastructure Encouraging cultural diversity
Draft Landscape Character Assessment Supplementary Planning Document (SPD) (2008)	Assessment of the landscape character 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.			 Impact on environmental assets Impact on / enhancement of countryside and the environment
Norfolk Community Engagement Framework (2009) Norfolk Ambition - The Sustainable Community Strategy for Norfolk, 2003 - 2023.	Outlines community engagement and the intentions to engage with the community in Norfolk to ensure citizens have the opportunity to influence the decision making process. Objectives include;		Involve communities in the decision making process ensuring engagement is delivered in an honest, transparent and accessible way.	- Contribution to community involvement

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
	 A shared understanding and strong commitment to community engagement Approach engagement in a coordinated and consistent approach in an honest, transparent and accessible way. Ensure communities have access to information available and time to take part Feedback to the community recognising participation. 			
Broadland District Community Involvement Protocol (CIP) (2010)	Demonstrates Broadland's commitment to community involvement in planning for growth in the District, ensuring communities and other shareholders have genuine opportunities to shape development proposals which may affect their community before an application is submitted.		 Ensure proposals for development in Broadland is approached in an inclusive manner from an early stage to allow a sufficient time for stakeholders and communities to contribute views on proposals. Provide accessible, clear and relevant information relating to the proposals for major development. Feedback results from any involvement stages to demonstrate that all views have been listened to and considered. Request stakeholders 	 Contribution to community involvement Contribution to accessibility for all Contribution to local character and diversity

Document Title (and main reference point	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
where appropriate)		indicators	involved in significant developments in Broadland to sign up to the CIP.	
Draft Norwich Urban Area Surface Water Management Plan (2011)	Undertake a risk assessment of Surface Water Flows across the Norwich Urban Area Identify potential options for surface water management across Norwich Urban Area Prepare an Action Plan for Surface Water Management and set out proposals for implementation and review (including proposals for spatial planning measures).		Identifies three Critical Drainage Areas:	 avoid, reduce and manage flood risk, including surface water flood risk. risks of flooding

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
			LIPP in terms of the incorporation of SUDS into existing public spaces and roads to address existing problems.	
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	Range of Qualitative Action Plan Aims, including: Work with the Homes and Communities Agency to put the Local Investment Plan & Programme into practice. Work closely with developers to ensure not only that they remain operational in the area but also that funding can maximise delivery over the next two years. Ensure close alignment between the	Provide for housing requirements (for all sectors of the population)	- contribution to housing provision (market and social)

Document Title (and main reference point	Key Relevant Objectives	Key Relevant Targets and	Implications for Local Development Framework	Issues for Sustainability Appraisal
where appropriate)		Indicators Housing Strategy and other strategies, plan and investment programmes.		
NATS Implementation Plan http://www.norfolk.gov.uk/co nsumption/groups/public/doc uments/committee report/ca binet060410item26pdf.pdf	Supports the achievement of NATS objectives	Supports the achievement of NATS Targets and shares relevant indicators.	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. Rail Station Transport Interchange. Bittern Line: Longer Trains, possible implementation of tram train. Possible Rail Stations at Rackheath and Broadland Business Park.	- 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 - contribution to strategic and local transport infrastructure

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
			London Main Line: Shorter journey times, new rolling stock & increased capacity. Cambridge Main Line: Longer trains & increased frequency of service. Airport public transport interchange with improved public transport access. Norwich Cycle Network. City Centre Transport Initiatives: including cross city centre public transport and walking and cycle enhancements.	
NATS Review 2010	 Cover; overall strategy, accessibility, congestion, pollution, safety, economic vitality and livability and community. These embrace Catering for travel needs arising from growth Promoting sustainable means of transport, minimizing trip lengths and encouraging reduced car use through land use policies, layout of development and travel planning Minimising congestion and delays by improving the efficiency of the transport network 	Targets to be developed for. 1. The amount of traffic crossing the Inner Ring Road Cordon and Peak hour Outer Ring Road Cordon. 2. The amount of cycle traffic	Sets out the agreed and adopted transport strategy for the area at a relatively high level augmented by NATS implementation plan.	Sets the baseline for the transport strategy for the area including the proposal for a northern distributor road.

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
	 Reducing carbon dioxide emissions by encouraging transport by sustainable modes and less polluting fuels Safety and accident reduction Protection of residential amenity and minimise community severance 	crossing the Inner Ring Road and Outer Ring Road cordons. 3. The number of passengers on buses and on trains 4. Mode share of journeys to work 5. Mode share of journey to school 6. Congestion 7. Proportion of workforce covered by travel plans 8. Local targets as per Air Quality Action Plan 9. Accessibility Indicator(s) relating to education, work, health care, major shopping centres, to be		

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
		part of Accessibility Planning work 10. Percentage of bus passengers satisfied with service 11. Bus punctuality		
Green Infrastructure Delivery Plan (2009) http://www.gndp.org.uk/conte nt/wp- content/uploads/downloads/2 010/06/gndp-green- infrastructure-delivery- plan.pdf	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	No specific targets and indicators	Identifies five green infrastructure priority areas focused on Norwich City and the SW and NE sectors: Five Rivers Wymondham to Norwich Water City – Rivers Yare and Wensum Long Stratton to Norwich Norwich to the Broads	 protection of and contribution to green infrastructure impact on environmental assets impact on / enhancement of countryside and the environment mitigate potential adverse affects on climate change

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
Local Infrastructure Plan & Programme (February 2012 version)	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.	Maintain a 5 year rolling investment plan. 6 monthly update of LIPP Targets and Indicators as expressed within the GNDP AMR	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 Joint Core Strategies 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
Connecting Norfolk, Norfolk's 3rd Local Transport Plan (2011-2026)	Maintaining and managing the highway network	LTP3 SEA monitoring reorts against Number of AQMA % of East of	Provide for strategic transport Infrastructure Focus development on	- contribution to transport infrastructure
	Delivering sustainable growth	England rivers WFD at good or	accessible locations where need to travel is	- accessibility of development / location and links to jobs and services

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
	Enhancing strategic connections	above for Chemical Water Quality of East of England rivers WFD at	reduced, providing for transport improvements where necessary. Consider need for strategic transport	- contribution to strategic transport Infrastructure
	Reducing emissions	good or above for Biological	improvements related to development	
	Improving road safety	Water Quality IMD- health and disability domain (no of	Reduce need for travel	- necessary contributions to, and scope of infrastructure needed to support certain patterns of growth.
	Improving accessibility	LSOAS in the 10% most deprived areas of England) Percentage	Provide for / require necessary transport infrastructure improvements	- contribution to transport infrastructure
		of pupils attaining 5+ GCSEs graded Road traffic collisions Number of VAT registered businesses	Focus development on accessible locations where need to travel is reduced, providing for transport improvements where necessary.	- accessibility of development / location and links to jobs and services
		Number of business start ups Employment rate of working age		

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
		population and for 16-74 year old		
New Anglia Local Enterprise Partnership – Business Plan	The aim of the LEP is: • Enabling business start up and growth • Developing existing growth sectors, clusters and supply chains • Championing infrastructure improvements to aid business productivity and the smooth functioning of local labour • Delivering action at the level that is meaningful and works for business • Facilitating business and local community engagement • Promoting skills and workforce development	none	- Encourage economic development, ensuring the necessary infrastructure and quality to attract and retain investment and support business growth. - Increase the number of new business start ups and support the growth of small and medium sized enterprises to create more sustainable jobs. - provision and accessibility of education facilities	- Contribution to economic provision - Contribution to strategic infrastructure - develop skills and retain a skilled workforce - Contribution to community involvement
New Anglia Local Enterprise Partnership – Green Economy Pathfinder Manifesto 2012-2015	Five Overarching Objectives: - Norfolk & Suffolk Leading the Green Economy - Maximising Funding and Investment Opportunities	60% reductions in carbon and green house gas emissions by 2025		- contribution to reducing greenhouse gas emissions - contribute to sustainable energy development and use - contribution to more

Document Title (and main reference point where appropriate)	Key Relevant Objectives	Key Relevant Targets and Indicators	Implications for Local Development Framework	Issues for Sustainability Appraisal
	 innovative, entrepreneurial and radical solutions to business challenges and opportunities Drive cost, resources and energy efficiency across all sectors Communicate effectively and share information to drive sustainable growth regionally and nationally 	Local Planning Authorities to require code for sustainable homes Lvl 4 at least 1 year ahead of central government targets Increase the share of low- carbon transport by 2015.	 aligning future local transport projects with the green economy. provision and accessibility of education facilities 	sustainable modes of transportation - necessary contributions to, and scope of infrastructure needed to support certain patterns of growth. - accessibility of development / location and links to jobs and services - develop skills and retain a skilled workforce - risks of flooding - impacts on water resource (supply and environment)

APPENDIX N: 2010/11 SUSTAINABILITY BASELINE DATA

Author: URS based on data supplied by GNDP
Preface:
Contains 2010/11 Sustainability Baseline Data.

Environment

Table 21 – Environmental indicators						
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
Percentage of residents who travel to work:						
a) by private motor vehicle	a) decrease	GNDP area	a) 64% b)	8% c) 17%	d) 9%	
b) by public transport	b) increase	Broadland	a) 70% b)	8% c) 9%	d) 10%	
c) by foot or cycle	c) increase	Norwich	a) 50% b)	9% c) 32%	d) 7%	
d) work at or mainly at home	d) increase	South Norfolk	a) 71% b)	5% c) 10%	d) 12%	
SOURCE: Census						
Percentage of river length assessed as:	National standards of	Broadland	No data	No data	a) 27%	No data
a) good biological quality	95% at good level	Rivers			b) 29%	
b) good chemical quality						
SOURCE: Environment Agency						
Development permissions granted contrary to	None	GNDP area	0	1	1	-
Environment Agency advice on water quality		Broadland	0	0	0	0
grounds		Norwich	0	1	1	No data
		South Norfolk	0	0	0	0
SOURCE: LPA						
Number of designated Air Quality Management	Decrease	GNDP area	4	4	4	4
Areas (AQMAs)		Broadland	1	1	0	0
		Norwich	3	3	4	4
SOURCE: Norfolk County Council		South Norfolk	0	0	0	0
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
Concentrations of selected air pollutants (µg/m³)	To decrease	GNDP area				

 a) annual average concentrations of Nitrogen Dioxide (NO²) b) annual average Particulate Matter levels (PM10) SOURCE: LPA		Broadland Norwich South Norfolk	No data	a) 9.7 ¹ b) 17.2 No data	a) 8.5 ² b) 16.7	a) 8.2 ⁴⁵ b) 16.6 No data
Net change in condition of SSSIs – percentage of SSSIs in favourable or unfavourable recovering condition a) favourable condition b) unfavourable recovering c) unfavourable no change d) unfavourable declining e) destroyed/part destroyed SOURCE: Natural England	95% of SSSIs in 'favourable' or 'unfavourable recovering' condition	GNDP area Broadland Norwich South Norfolk	46% 80% 34%	50% 80% 33%	77% 80% 40%	84% 100% 86%
Norfolk Bio-diversity Action Plan progress: a) habitats actions in progress/completed b) species actions in progress/completed	To increase	GNDP area Broadland Norwich South Norfolk	Options for other indicators are currently being explored with the Norfolk Biodiversity Partnership			
Net change in County Wildlife Sites in "Positive Conservation Management" – percentage of sites SOURCE: Norfolk Wildlife Trust	To increase Provisional targets for Norfolk: 2008/09: 51% 2009/10: 57% 2010/11: 64%	GNDP area Broadland Norwich South Norfolk	53% 74%	53% 74%	53% 78%	59% 81%
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
Heritage at risk – number and percentage of: a) Listed Buildings; and b) Scheduled Ancient Monuments on Buildings at Risk Register	To decrease	GNDP area Broadland	a) 51 b) 0	No data No data	No data No data	a) 31 b) 2

¹ Data from Sustainability Appraisal ² Calendar year

		Norwich	a) 30	a) 29	a) 33	a) 29
SOURCE: English Heritage (Buildings at Risk			b) 4	b) 5	b) 5	b) 5
2011) and LPA (Listed Buildings)		South Norfolk	a) 54	a) 53	a) 49	a) 47
			b) N/D	b) N/D	b) N/D	b) 3
Net change in number of Tree Preservation Orders	None to be lost as a	GNDP area				
(TPOs)	results of development	Broadland	20	35	48	95
		Norwich	No data	No data	No data	No data
SOURCE: LPA		South Norfolk	No data	No data	No data	No data
Total CO2 emissions per capita (million tonnes	To decrease	GNDP area				
carbon equivalent)		Broadland	6.2	6.1	5.7	Data not yet
-		Norwich	6.2	5.9	5.2	available
SOURCE: DECC		South Norfolk	8.3	8.2	7.5	
Renewable energy generating capacity permitted	Increase	GNDP area				
by type		Broadland				
		Norwich				
SOURCE: LPA		South Norfolk				
Number of planning permissions granted contrary	Zero	GNDP area	4	3	0	Data not yet
to the advice of the Environment Agency on flood		Broadland	0	0	0	available
defence grounds.		Norwich	1	1	0	
		South Norfolk	3	2	0	
SOURCE: LPA						
Number of dwellings permitted within the high risk	None	GNDP area				
flood areas (Environment Agency Flood Zones 2		Broadland	0	0	0	0
and 3)		Norwich	No data	No data	No data	No data
,		South Norfolk	0	0	0	0
SOURCE: LPA						
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
Daily domestic water use – per capita consumption	Decrease	GNDP area	141.0	148.1	142.7	144.5
		Broadland	Data not av	ailable at dist	rict level. Fi	gures refer to the
SOURCE: Anglian Water		Norwich	Norwich an	d Broads Wa	ter Resource	Zone which
-		South Norfolk	provides the	provides the most appropriate proxy area		
Percentage of dwellings built on previously	60%	Broadland	67%	75%	65%	45%
developed land		Norwich	93%	95%	99%	94%

SOURCE: LPA		South Norfolk	24%	38%	32%	29%
Percentage of new dwellings completed at:	100% above 30	Broadland			a) 39.7%	a) 47.3%
a) less than 30 per hectare	dwellings per hectare				b) 37.1%	b) 36.7%
b) 30-50 per hectare					c) 23.2%	c) 16.0%
c) More than 50 per hectare		Norwich	a) 0.4%	a) 1.9%	a) 2.7%	a) 0.6%
			b) 17%	b) 19%	b) 17%	b) 16%
SOURCE: LPA			c) 82%	c) 80%	c) 80%	c) 83%
		South Norfolk	a) 18%	a) 18%	a) 32%	a) 33%
			b) 64%	b) 78%	b) 51%	b) 55%
			c) 18%	c) 4%	c) 17%	c) 12%
Waste arising:	Decrease	Broadland	a) 410	a) 449	a) 448	a) 436
a) kilograms of waste produced per head of			b) -	b) +9%	b) 0%	b) -3%
population		Norwich	a) 379	a) 341	a) 328	a) 316
b) percentage change on previous year			b) 0%	b) -10%	b) -4%	b) -4%
		South Norfolk	a) 336	a) 335	a) 224	a) 200
SOURCE: LPA			b) -	b) 0%	b) -33%	b) -11%
Recycling – percentage of household waste:	Increase	Broadland	a) 33%	a) 32%	a) 30%	a) 28%
a) recycled			b) 14%	b) 18%	b) 18%	b) 22%
b) composted		Norwich	a) 23%	a) 28%	a) 28%	a) 28%
•			b) 1%	b) 6%	b) 6%	b) 10%
SOURCE: LPA			a) 32%	a) 30%	a) 28%	a) 28%
		South Norfolk	b) 7%	b) 9%	b) 10%	b) 11%

Social

Table 22 – Social indicators						
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
Income deprivation affecting children – percentage	Decrease	GNDP area	16.74%	No data	No data	16.67%
of children living in income deprived families –		Broadland	10.05%			10.29%
average LSOA score		Norwich	29.81%			29.18%
SOURCE: Index of Multiple Deprivation		South Norfolk	10.78%			10.95%
Income Deprivation – average LSOA scores from	Decrease	GNDP area	0.12	No data	No data	0.12
IMD		Broadland	0.08			0.08
		Norwich	0.19			0.19
SOURCE: Index of Multiple Deprivation		South Norfolk	0.09			0.09
Index of Multiple Deprivation – average LSOA	Decrease	GNDP area	16.27	No data	No data	15.80
score		Broadland	10.15			10.43
		Norwich	28.18			25.96
SOURCE: Index of Multiple Deprivation		South Norfolk	10.87			11.34
Total benefit claimants – percentage of working age	Decrease	GNDP area	11.0%	12.1%	12.1%	11.8%
population claiming benefits		Broadland	8.5%	9.8%	9.7%	9.5%
		Norwich	14.3%	15.2%	15.2%	15.1%
SOURCE: NOMIS		South Norfolk	8.5%	9.8%	10.0%	9.7%
Percentage of working age population receiving	Decrease	GNDP area	5.6%	5.5%	5.4%	5.5%
ESA and incapacity benefit		Broadland	4.6%	4.6%	4.6%	4.6%
		Norwich	7.1%	7.0%	6.7%	6.9%
SOURCE: NOMIS		South Norfolk	4.5%	4.5%	4.5%	4.5%
Life expectancy of residents (at birth)	Increase	GNDP area	2006-08	2007-09	2008-10	No data
a) males						
b) females		Broadland	a) 79.7	a) 79.7	a) 80.3	
			b) 83.4	b) 83.1	b) 83.2	
		Norwich	a) 77.8	a) 77.7	a) 77.8	
			b) 83.0	b) 83.2	b) 83.5	
		South Norfolk	a) 80.0	a) 80.3	a) 80.7	
SOURCE: ONS			b) 83.3	b) 83.3	b) 83.2	
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
Workforce qualifications – percentage of working	Increase	GNDP area	28.2%	26.7%	28.5%	32.6%

a) domestic burglariesb) violent offences against the person			C - 2,858	C - 2,341	C - 2,194	C - 1,651
Incidences of total crime committed:	Decrease	GNDP area	A - 1,145 B - 4,484	A - 815 B - 4,215	A - 829 B - 4,142	A - 940 B - 4,159
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
SOURCE: LPA		South Norfolk	2005 – 4,60	00 (9%) Curr	ently being a	ssessed
		Norwich	4,384	4,381	4,203	4,148
Total dwellings with Category 1 hazards	Decrease	Broadland	No data	No data	4,000	4,140
			c) 17%	c) 40%	c) 27%	c) 16%
			b) 202	b) 366	b) 175	b) 109
		South Norfolk	a) 12%	a) 12%	a) 13%	a) 13%
SOURCE: LPA			c) 28%	c) 45%	c) 23%	c) 30%
arrordaoic		1 TOT WICH	b) 291	b) 235	b) 92	b) 112
affordable		Norwich	a) N/D	a) 27%	a) 25%	a) 25%
past year c) Percentage of past year's dwellings that are			b) 39 c) 16%	b) 83 c) 27%	b) 55 c) 27%	b) 31 c) 19%
b) Total affordable housing units completed in		Broadland	a) -	a) -	a) 9%	a) 9%
affordable			c)	c)	c)	c)
a) percentage of housing stock that is			b)	b)	b)	b)
Affordable housing stock provision:	Increase	GNDP area	a)	a)	a)	a)
SOURCE: Norfolk County Council						
		South Norfolk	66.77%	72.78%	75.33%	
leavers with 5 of more Geses at A to e grades		Norwich	52.63%	55.64%	58.06%	
School leaver qualifications – percentage of school leavers with 5 or more GCSEs at A* to C grades	Increase	GNDP area Broadland	63.50% 69.62%	67.95% 73.79%	72.26% 78.15%	No data available
SOURCE: Annual Population Survey	T	CNIDD	(2.500/	(F.050/	72.2(0/	NI- 1-4 11-1-1-
01 u 00 (0		South Norfolk	28.9%	25.4%	29.4%	30.6%
age population with qualifications at NVQ level 4 or above		Broadland Norwich	23.1% 31.6%	25.4% 28.6%	24.8% 30.5%	26.0% 39.1%

(with/without injury)		Broadland	A - 185	A - 103	A - 171	A - 198
c) Offences against a vehicle		Dioadiand	B - 646	B - 595	B - 604	B - 651
c) Officiees against a venicle			C - 477	C - 358	C - 408	C - 308
		Norwich	A - 614	A - 537	A - 500	A - 577
		Notwich	B - 3,206	B - 3,008	B - 2,902	B - 2,864
			C - 1,831	C - 1,567	C - 1,318	C - 963
		South Norfolk	A - 161	A - 175	A - 158	A - 165
		South Nortolk	B - 632	B - 612	B - 636	B - 644
SOURCE: Home Office			C - 550	C - 416	C - 468	C - 380
Percentage of the economically active population	Decrease	GNDP area	2.7%	4.6%	7.2%	6.7%
who are unemployed	Declease	Broadland	3.3%	4.5%	6.2%	4.4%
who are unemployed		Norwich	2.3%	4.3%	9.7%	7.1%
		South Norfolk	2.5%	5.2%	5.0%	8.6%
SOURCE: Annual Population Survey		South Nortolk	2.5%	3.2%	3.0%	8.0%
Percentage of people claiming Job Seekers	Decrease	GNDP area	a) 10.8%	a) 7.6%	a) 18.6%	a) 16.1%
Allowance (JSA) who have been doing so for: a)	Declease	GNDF area	b) 3.8%	b) 1.0%	b) 3.4%	b) 5.6%
over 1 year; b) over 2 years		Broadland	a) 9.5%	a) 5.4%	a) 13.6%	a) 12.3%
over 1 year, b) over 2 years		Dioadiand	b) 3.8%	b) 0.9%	b) 2.7%	b) 4.0%
		Norwich	a) 11.4%	a) 9.7%	a) 21.1%	a) 18.0%
		Notwich	b) 3.6%	b) 1.2%	b) 4.0%	b) 6.4%
		South Norfolk	a) 9.3%	a) 4.8%	a) 16.2%	a) 14.3%
		South Nortolk	b) 4.4%	b) 0.6%	b) 2.6%	b) 4.7%
SOURCE: NOMIS			0) 4.470	0) 0.070	0) 2.0%	0) 4.7 /0
Unfit housing – percentage of overall housing stock	Decrease	GNDP area			1	
not meeting 'Decent Homes Standard'	Declease	Broadland	Last record	led in 2006 –	1.404	
not meeting. Decent Homes Standard		Norwich	7.4%	7.4%	6.6%	6.5%
		South Norfolk				1
SOURCE: LPA		South Morror	2005 – 15,4	450 (31.2%)	Currently bei	ing assessed
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual
Percentage of new public housing stock built to the	All new affordable	GNDP area	2007/00	2000/07	2007/10	2010/11 actual
standard of the Code for Sustainable Homes	homes should be built to	Broadland	No data	No data	36% - 3	87% - 3
standard of the Code for Sustamable Hollies	C4SH level 4	Dioadiand	110 data	140 data	14% - 4	13% - 5
SOURCE: LPA	C4511 ICVCI 4	Norwich	No data	28% - 1	80% - 3	12% - 1
BOUNCE, LI A		1 101 WICH	110 data	72% - 3	20% - 4	75% - 3
				1270 - 3	ZU70 - 4	1370 - 3

		South Norfolk	None	4 - lvl. 4	34 - Ivl. 4	13% - 4 42 - Ivl. 4
Percentage of residents who travel to work: a) by private motor vehicle	a) decrease	GNDP area		8% c) 17%		12 213
b) by public transport	b) increase	Broadland	a) 70% b)	8% c) 9%	d) 10%	
c) by foot or cycled) work at or mainly at home	c) increase d) increase	Norwich South Norfolk		9% c) 32% 5% c) 10%	*	
SOURCE: Census 2001				,	,	

Economic

Table 23 – Economic indicators							
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual	
Percentage change in total number of active	Increase	GNDP area	2.8%	0.2%	0.6%	Data not yet	
enterprises		Broadland	3.2%	0.1%	1.2%	available	
•		Norwich	2.6%	-0.3%	0.3%		
SOURCE: ONS Business Demography		South Norfolk	2.8%	0.7%	0.2%		
Median a) hourly; b) weekly; c) annual pay for	Increase	Broadland	a) £10.25	a) £10.74	a) £11.51	a) £ 12.00	
full-time employees			b) £425	b) £447	b) £475	b) £497	
			c) £22,026	c) £22,859	c) £24,113	c) £24,748	
		Norwich	a) £9.80	a) £10.00	a) £10.99	a) £11.95	
			b) £404	b) £413	b) £432	b) £461	
			c) £21,555	c) £22,641	c) £23,641	c) 23,748	
		South Norfolk	a) £10.73	a) £11.77	a) £12.41	a) £12.26	
SOURCE: Annual Survey of Hours and			b) £439	b) £465	b) £493	b) £510	
Earnings			c) £23,464	c) £24,435	c) £25,206	c) £26,470	
Number of small businesses	Increase	GNDP area	9,055	11,985	11,835	11,610	
		Broadland	3,000	3,940	3,915	3,885	
		Norwich	2,380	3,375	3,315	3,215	
SOURCE: ONS		South Norfolk	3,675	4,670	4,605	4,510	
Percentage of residents who travel to work:			CENSUS				
a) by private motor vehicle	a) decrease	GNDP area	a) 64% b) 8	% c) 17% d	9%		
b) by public transport	b) increase	Broadland	a) 70% b) 8% c) 9% d) 10%				
c) by foot or cycle	c) increase	Norwich	a) 50% b) 9% c) 32% d) 7%				
d) work at or mainly at home	d) increase	South Norfolk	a) 71% b) 5% c) 10% d) 12%				
Percentage of people employed who travel:	Decrease in distance		CENSUS				
a) less than 2km	travelled	GNDP area	a) 20.6% b) 21.8% c) 17.8% d) 14.7% e) 10.5%				
b) 2 to 5km		Broadland	a) 13.6% b) 21.3% c) 23.9% d) 17.0% e) 9.0%				
c) 5 to 10km		Norwich	,		% d) 4.7%		
d) 10 to 20km		South Norfolk	, ,		5% d) 22.4%	· ·	
e) More than 20km				,	,	,	
Indicator	Target		2007/08	2008/09	2009/10	2010/11 actual	
Amount of various employment developed on	60%	GNDP area					

previously developed land or conversions		Broadland	0%	48%	67%	45%
		Norwich				
SOURCE: LPA		South Norfolk	19%	95%	79%	
Unemployment benefit receipt: percentage of	Decrease	GNDP area	a) 2.8%	a) 4.7%	a) 5.0%	a) 4.5%
population in receipt of Job Seekers Allowance			b) 1.8%	b) 3.2%	b) 3.3%	b) 3.1%
(JSA); claimants of JSA by age range:			c) 1.1%	c) 1.7%	c) 1.7%	c) 1.6%
a) 16-24 years old		Broadland	a) 2.1%	a) 4.9%	a) 5.0%	a) 4.3%
b) 25-49 years old			b) 1.0%	b) 2.2%	b) 2.1%	b) 2.0%
c) 50+ years old			c) 0.7 %	c) 1.3%	c) 1.2%	c) 1.1%
		Norwich	a) 3.1%	a) 4.5%	a) 5.1%	a) 4.6%
			b) 3.0%	b) 4.4%	b) 4.8%	b) 4.5%
			c) 2.1%	c) 2.7%	c) 2.9%	c) 3.0%
		South Norfolk	a) 2.6%	a) 5.0%	a) 4.9%	a) 4.3%
			b) 0.9%	b) 2.4%	b) 2.4%	b) 2.0%
SOURCE: NOMIS			c) 0.7%	c) 1.3%	c) 1.3%	c) 1.2%

APPENDIX O: BACKGROUND DOCUMENTS

Author: GNDP
Preface:
Contains background documents of relevance to the SA.

Background documents

A pre-submission background and context document explaining the process:

http://www.gndp.org.uk/downloads/JCSBackgroundAndContext_v1.pdf

JCS highlighting the pre submission content:

http://www.gndp.org.uk/downloads/JCSpre-submissiontext_v1.pdf

Draft sustainability appraisal report:

http://www.gndp.org.uk/downloads/Greater-Norwich-SA-Report-DRAFT180712-w.pdf and appendices:

http://www.gndp.org.uk/downloads/SA-v3-Appendix_DraftFinal-1807-w.pdf

 Policies maps highlighting consequential changes to the adopted policies maps (formerly proposals maps):

Part one

http://www.gndp.org.uk/downloads/Changes-to-Broadland-Proposals-Maps-showing-pre-submission-content-1.pdf

Part two

• [Habitats Regulation Assessment] and a position statement from Natural England, Environment Agency and Anglian Water dealing with water issues.

http://www.gndp.org.uk/downloads/HRAStatement_July2012_v1.pdf

• [A statement of the previous regulation 25 consultation] and a position statement relating it to the requirements of the High Court Order

http://www.gndp.org.uk/downloads/StatementOfConsultation_DraftC.pdf

http://www.gndp.org.uk/downloads/GNDP-final-report-with-addendum-270510.pdf

http://www.gndp.org.uk/downloads/JCS-8-Summary-of-Issues-Raised-Reg-25-Technical-Consultation.pdf

http://www.gndp.org.uk/downloads/JCS-9-Summary-of-Issues-Raised-Reg-25-Public-Consultation.pdf

 [Statement of compliance with statements of community involvement] and a position statement relating it to the requirements of the High Court Order

http://www.gndp.org.uk/downloads/SCICompliance_Update_and-statement.pdf
http://www.gndp.org.uk/downloads/SCI_update_10_082.pdf
http://www.gndp.org.uk/downloads/Adopted_SCI_Jan_072.pdf
http://www.gndp.org.uk/downloads/SCI_Feb072.pdf

 Statement of compliance with the duty to co-operate http://www.gndp.org.uk/downloads/StatementOfCompliance_v1.pdf

[Diversity and equality impact assessment] and position statement relating it to the

requirements of the High Court Order

 $\underline{http://www.gndp.org.uk/downloads/DiversityImpactAssessmentStatement_Update_v1.}\\ \underline{pdf}$

• Statement of conformity with the national planning policy framework http://www.gndp.org.uk/downloads/NPPFCompatibility_v2.pdf

 Statement of Representations Procedure, and where and when documents can be inspected

http://www.gndp.org.uk/downloads/StatementOfRepsv1_w.pdf

Representation form and guidance notes
 http://www.gndp.org.uk/downloads/RepsFormAndGuidanceNote.pdf

Homes and Housing Topic paper – updated July 2012 http://www.gndp.org.uk/downloads/GNDPTopicPaperHomesHousingV3.pdf

Further to the meeting of the Broadland District Council Place Shaping Committee held on 25 July 2012, Broadland produced a background paper.

• Evaluation of the Scope for Delivery of 10,000 homes inside the route of the NNDR (Reasonable Alternative Two)

The paper was available to full Council Meetings of Broadland District Council and South Norfolk Council.