Greater Norwich Development Partnership

Topic Paper: Strategy to Accommodate Major Housing Growth in the Norwich Policy Area

Joint Core Strategy for Broadland, Norwich and South Norfolk November 2009

Jobs, homes, prosperity for local people









Contents

| 1. | Summary | 1 | | | | | | | | |
|-----|---|----|--|--|--|--|--|--|--|--|
| 2. | Purpose of this paper | 2 | | | | | | | | |
| 3. | The East of England Plan | 2 | | | | | | | | |
| 4. | Vision and objectives of the joint core strategy | | | | | | | | | |
| 5. | Factors shaping the spatial strategy | 4 | | | | | | | | |
| 6. | Evolution of the Favoured Option | 4 | | | | | | | | |
| 7. | Patterns and rates of growth across the NPA | | | | | | | | | |
| 7.1 | The historic pattern of growth and its influence on the Favoured Option | | | | | | | | | |
| 7.2 | Rates of past growth | 9 | | | | | | | | |
| 7.3 | Future delivery | 11 | | | | | | | | |
| 7.4 | Developing the elements of a Strategy | 14 | | | | | | | | |
| | 7.4.1 Urban intensification | | | | | | | | | |
| | 7.4.2 A Sustainable urban extension | | | | | | | | | |
| | 7.4.3 Extension to settlements | | | | | | | | | |
| | i) Large-scale allocations | | | | | | | | | |
| | ii) Smaller allocations through Site Specific DPDs | | | | | | | | | |

Appendices

- 1. Norwich
- 2. Northern part of the NPA
- 3. Southern part of the NPA
- 4. Evidence from implementation of new communities elsewhere
- 5. List of evidence studies
- 6. South Norfolk NPA previous and future growth in main settlements
- 7. NPA Favoured Option

1. Summary

This topic paper is part of a series that explains how key aspects of the Joint Core Strategy (JCS) for Broadland and South Norfolk districts and the City of Norwich have been developed. It explains the considerations that underlie the strategy to accommodate major development in the Norwich Policy Area (NPA), and briefly describes the range of considerations that have shaped it.

The first task of the spatial strategy is to distribute the development likely to be needed over the next fifteen years, but to do it in a way that respects the character of the area and offers the best prospects for delivery.

In order to do this it starts by accommodating as much within the urban area as possible, and seeks to make the maximum use of previously developed land, consistent with maintaining the environmental qualities of the area.

It also examines the environmental assets of the area, both within and outside the urban area. This includes the sharply contrasting nature of the urban fringe in different parts of the area, and the form and character of places selected for major growth.

It looks at the need to promote accessibility by non car modes, including the potential offered by currently successful public transport corridors in the south west, corridors prioritised for improvement in the west and, and the need for a more radical approach to public transport priorities in the north east. It also looks at the relationship between locations proposed for major housing, and those for employment, and how connections between them can be made.

Outside of the urban area of Norwich the resultant strategy focuses on a large-scale urban extension to the north east of the city, based around two or three centres either side of the proposed Northern Distributor Road (NDR). To the south of the city there is a more dispersed pattern to the growth, focusing on utilising the Norwich fringe where possible, sustainable expansion of the market town of Wymondham and growing larger villages to encompass a wider range of services, facilities and employment opportunities.

There will also be opportunities, both north and south of the city, for a range of smaller sites to meet the needs of village communities.

The Greater Norwich Development Partnership (GNDP) recognises that this is a strategy that has to try to achieve a number of objectives rather than a single one, and that inevitably there are tensions between some of these. The GNDP believes however that it has promoted a strategy which is the "best fit" given the challenges it faces.

2. Purpose of this topic paper

This topic paper is part of a series that explain how key aspects of the Joint Core Strategy (JCS) for Broadland, South Norfolk and Norwich have been developed. It explains the considerations that underlie the strategy to accommodate major housing development in the Norwich Policy Area (NPA).

The JCS strategy aims to implement the housing targets set by the East of England Plan to 2021, plus a projection forward at a slightly higher rate to 2026, in order to achieve a 15-year supply at the time of adopting the document. The Strategy demonstrates how this housing growth can be delivered in the best locations to meet other regional plan requirements whilst taking into account a number of local factors, including the evidence base (see Appendix 5 for details of the main documents that make up the evidence base), environment protection and local distinctiveness. Both the sustainability appraisal and consultation have played a key role in this process. Furthers details about the approach taken in each of the main areas, the City, and Northern and Southern sectors of the NPA, are given in Appendices 1, 2 and 3.

The resulting housing growth strategy in this plan consists of:

- 1. Urban intensification;
- 2. A new large-scale sustainable urban extension;
- 3. Expansion of some existing sustainable communities and those in the most sustainable locations.

The paper shows that the range of types of housing development identified above will aid, and limit risk to, delivery, while relating new residential areas to strategically important employment locations.

3. The East of England Plan

The East of England Plan requires 37,500 new dwellings in the three districts between 2001 and 2021, with 33,000 of these in the NPA. Planning Policy Statement 3 (Housing) requires a 15-year housing land supply at the time of adopting the JCS. Therefore, taking account of completions to between 2001 and 2008, plus existing commitments at 1st April 2008, the JCS allocates 21,000 new dwellings for the period to 2026. This is an over allocation on the actual requirement which is designed to aid consistent and robust delivery.

In parallel to the housing growth the East of England Plan (EEP) also requires 35,000 additional jobs to be created in Greater Norwich from 2001 to 2021.

Policy NR1 of the EEP covers the NPA and it:

promotes increased public transport use and cycling and walking.;

- supports development of the retail, leisure, educational and cultural role
 of Norwich, with particular emphasis on the city centre and its
 outstanding historic heritage;
- emphasises the need to address deprivation;
- promotes the area as a destination for tourists and visitors, and a gateway to the wider rural and coastal areas of Norfolk;
- places an emphasis on environmental protection, biodiversity and green infrastructure;
- identifies strategic employment locations and sectors to be promoted.

4. Vision and objectives of the Joint Core Strategy

These were drawn from common themes running through the Sustainable Community Strategies for Broadland, Norwich and South Norfolk, and the County Strategic Partnership.

The Spatial Planning Objectives of the JCS are:

- To minimise the contributors to climate change and address its impact;
- To allocate enough land for housing, and affordable housing, in the most sustainable settlements;
- To promote economic growth and diversity and provide a wide range of jobs;
- To promote regeneration and reduce deprivation;
- To allow people to develop to their full potential by providing education facilities to support the needs of a growing population;
- To make sure people have ready access to services;
- To enhance transport provision to meet the needs of existing and future populations while reducing the need and impact;
- To positively protect and enhance the individual character and culture of the area
- To protect, manage and enhance the natural, built and historic environment, including key landscapes, natural resources and areas of natural habitat or conservation value;
- To be a place where people feel safe in their communities;
- To encourage the development of healthy and active lifestyles; and
- To involve as many people as possible in the planning process.

The choice of growth locations for major housing development has been made in the light of these objectives and reflects the balances that need to be made between them. In addition, in order to achieve these objectives development will need to be of a very high quality, both aesthetically and functionally, and would need to incorporate a range of ancillary non-residential uses.

Factors shaping the spatial strategy

In meeting the challenges of providing for the scale of development needed, while meeting the aspirations set out above, the GNDP has had regard to a number of sources:

- A comprehensive evidence base of studies undertaken (listed in Appendix
 5)
- Sustainability appraisal (including strategic environmental assessment) and Appropriate Assessment in respect of internationally designated habitats.
- Previous consultation by Broadland and South Norfolk Councils on early stages of individual core strategies;
- Consultation on issues and options undertaken in November, 2007 under previous regulations.
- South Norfolk Council's public consultation exercise on development at Long Stratton to fund a bypass, in parallel with the Issues and Options consultation (January 2008)
- A technical consultation under new Regulation 25 (August 2008).
- A "critical friend" review from the Planning Inspectorate (February 2009)
- Public consultation under Regulation 25, including the "favoured option" for growth (March 2009).
- National guidance and policy
- Dialogue with service providers
- Other strategies of the partner authorities (Norwich Area Transportation Strategy, Norfolk Local Transport Plan, Sustainable Community Strategies, Economic Development Strategies, culture and leisure strategies)
- Other research reports

The responses to consultations on the JCS, the sustainability appraisal and Appropriate Assessment and the evidence base are available on www.gndp.org.uk.

6. Evolution of the Favoured Option

Following a series of stakeholder workshops centred on a set of topic papers in summer 2007, the first full-scale consultation on the JCS was the November 2007 Issues and Options. The Issues and Options presented 11 potential locations for 'large-scale essential growth'. A short 'context' and 'initial indications' summary was produced for each potential growth location. The initial analysis for the Issues and Options suggested that a pattern of development centred on an urban extension North East of Norwich, and new 'country town' South West of Norwich (Hethersett area) and extensions to Wymondham provided 'the better opportunities for larger-scale growth'. This pattern essentially formed the basis of Option 1.

Responses to the Issues and Options consultation, plus the results of the initial Sustainability Appraisal, resulted in a Preferred Option, which was presented to the **GNDP LDF Working Group on 21**st **April 2008**. The

Preferred Option, which is set out as Option 1 in the table below, sought to: maximise efficient provision of infrastructure, including high quality public transport; provide good links with strategic employment locations; achieve self containment; and provide opportunities for continued growth post-2026 at Wymondham, Hethersett and the North East.

The Working Group raised a number of concerns, including the choice of particular locations for large-scale housing growth in the Preferred Option. It was therefore agreed that a further Working Group meeting would be held, looking at alternatives to the Preferred Option.

For the **GNDP LDF Working Group meeting of 24th May 2008** a paper was presented which responded to the member's concerns by putting forward Options 1 to 5. A South Norfolk Council Member Briefing on 8th May 2008 resulted in a sixth option also being tabled at the meeting. The options were as follows:

Table 1

| Locations | (Original) Option 1 | Option 2 | Option 3 | Option 4 | Option 5 | Option 6 | | |
|-------------|---------------------|----------|----------|----------|----------|----------|--|--|
| City | | | 4000 | 4000 | 4000 | 4000 | | |
| SNDC | | | | | | | | |
| Fringe | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | | |
| Broadland | | | | • | | | | |
| Fringe | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | | |
| East | | | | 1000 | | | | |
| NE Inside | | | | | | | | |
| and Out | 6000 | 6000 | 4000 | 2000 | | 6000 | | |
| North | | | 4000 | 2000 | | 2000 | | |
| Hethersett | 4000 | 4000 | 4000 | 2000 | | | | |
| West | 2000 | 2000 | 2000 | 1000 | | | | |
| Long | | | | | | | | |
| Stratton | | 2000 | | 2000 | | 1500 | | |
| Poringland | | | | 2000 | | | | |
| North West | | | | 2000 | | | | |
| Wymondham | 4000 | 2000 | 2000 | 2000 | | 2000 | | |
| Stand Alone | | | | | 5000* | 4500 | | |
| City % | 17 | 17 | 17 | 17 | 17 | 17 | | |
| SNDC % | 50 | 50 | 42 | 54 | 8+ | 42 | | |
| Broadland % | 33 | 33 | 42 | 29 | 8+ | 42 | | |
| To 2026 | 24000 | 24000 | 24000 | 24000 | 13000 | 24000 | | |

^{*} Only 5000 in the plan period the remainder (approx 11000) would be beyond 2026.

Option 2 involved a redistribution from Wymondham and Hethersett to the West (Costessey/Easton) and Long Stratton, the latter specifically to address the long-standing issue of a bypass for the village; *Option 3* proposed to give an even split of development between Broadland and South Norfolk; *Option 4* involved a wider distribution, covering most of the 11 Issues and Options growth locations; *Option 5* centred around a new settlement in an unspecified location; and *Option 6* retained the stand alone settlement, but at a much

reduced scale, and focussed the growth in South Norfolk towards the A140 corridor by identifying Mangreen as the settlement location.

The advantages and disadvantages of the options were debated and particular concerns were raised about the prospect of delivering infrastructure under the wider dispersal in Option 4 and the fact that Option 5 failed to deliver sufficient housing in the JCS period; both of these options also performed poorly against the Sustainability Appraisal. It was concluded that further work be undertaken to appraise Options 1, 2 and 6, particularly as Option 6 had not been evaluated to the same degree as the others proposed. This further work would be considered by the GNDP Policy Group on 24th June 2008.

The **GNDP Policy Group on 24**th **June 2008** was advised that new Town and Country Planning Regulations governing LDFs would come into effect on 27th June. As such, the previously planned Preferred Options stage would no longer be applicable; however, this meant that there was now the opportunity to undertake wider consultation on the three options still under consideration. It was agreed that a draft document for consultation with 'specific and general consultation bodies', plus a newsletter for the wider public, be agreed by a meetings of the GNDP member Cabinets/Executives on 18th July 2008. In parallel the GNDP would continue to gather evidence about the three remaining options. The three options to be considered in this consultation were:

Table 2

| Location | Option 1 | Option 2 | Option 3 | | |
|-------------------------------|----------|--------------------|--------------------|--|--|
| Norwich | 4,000 | 4,000 | 4,000 | | |
| Broadland smaller sites | 2,000 | 2,000 | 3,000 | | |
| South Norfolk smaller sites | 2,000 | 2,000 | 2,000 | | |
| North East | 6,000 | 6,000 | 6,000 | | |
| (Sprowston/Rackheath area) | | | | | |
| South West (Hethersett/Little | 4,000 | 4,000 | | | |
| Melton area) | | | | | |
| South (Mangreen – | | | 4,500 | | |
| Swardeston/Mulbarton area) | | | | | |
| Wymondham | 4,000 | 2,000 | 2,000 | | |
| West (Costessey/Easton area) | 2,000 | 2,000 | 1,000 | | |
| Long Stratton | | 2,000 | 1,500 | | |
| | | (to help deliver a | (to help deliver a | | |
| | | bypass) | bypass) | | |
| TOTAL | 24,000 | 24,000 | 24,000 | | |

Option 3 (Table 2) evolved from the previous Option 6 as a result officer and leading member discussions concerning the lack of justification for including North of Norwich as a growth location; the 2,000 units being redistributed to smaller sites in Broadland and the West (Costessey/Easton).

Following the **GNDP Policy Group on 18th July 2008** and meetings of the Cabinets/Executives of the constituent authorities immediately following the Policy Group, the above Options were agreed for a Technical Consultation starting in August 2008.

During the autumn of 2008 the calculation of the housing requirement in the JCS (i.e. the amount for which allocations need to be made) was updated from a 1st April 2006 to 1st April 2008 base date. The result was a reduction in the size of the housing allocation in the NPA from 24,000 units to 21,000, including a reduction of the remaining capacity in Norwich from 4,000 to 3,000 units.

The **GNDP Policy Group of 18**th **December 2008** considered the outcomes of the Technical Consultation, which had involved 1,250 technical experts, developers, service providers and community groups, plus the further supporting evidence that had been gathered/received. The proposal at the meeting was for a *Favoured Option* for growth in the NPA to be distributed for wider public consultation, including re-consultation with the 'Technical' consultees, and for the public to also be given the opportunity to comment on the other issues in the earlier 'Technical Consultation' document.

At the meeting the officer recommendation was that the evidence suggested that Option 1 should be the Favoured Option. South Norfolk Council tabled a further Option, a hybrid of Options 2 and 3, labelled 2A, as set out below, which took on board the updated housing baseline:

Table 3

| Location | Option 2A | | | | | |
|---------------------------------------|-------------------------------------|--|--|--|--|--|
| Norwich | 3,000 | | | | | |
| Broadland smaller sites | 2,000 | | | | | |
| South Norfolk smaller sites | 1,800 | | | | | |
| North East (Sprowston/Rackheath area) | 7,000 | | | | | |
| South West: Hethersett/Cringleford) | 1,000/1,200 | | | | | |
| South (Mangreen) | 0 (2,000 additional allocation pre- | | | | | |
| | 2026) | | | | | |
| Wymondham | 2,200 | | | | | |
| West (Costessey/Easton area) | 1,000 | | | | | |
| Long Stratton | 1,800 | | | | | |
| TOTAL | 21,000 (plus 2,000 at Mangreen) | | | | | |

Advance notice of Option 2A had been given and a summary of the advantages and disadvantages was presented to the meeting; these concluded that the Option was a better fit with the existing settlement character and pattern of South Norfolk, but also that it presented significant challenges.

The meeting was also informed that the Planning Inspectorate (PINS) had offered to undertake a pre-submission review, which could be carried out in late January 2009. The meeting therefore resolved to agree Option 2A, subject to (a) endorsement by the constituent planning authorities, (b) the

results of the PINS review giving confidence about the evidence base and (c) a further meeting of the GNDP Policy Group following the PINS review.

The PINS Review was undertaken in late January 2009 and a report issued in February 2009.

The outcomes of the PINS Review were presented to the **GNDP Policy Group on 19**th **February 2009**. In response to the concerns raised about the evidence base used to support Option 2A, a further revision, Option 2+, was proposed. Option 2+ remained the same as Option 2A, above, but with the omission of Mangreen. Additional work would be undertaken to evaluate the potential of a new settlement to accommodate any further development in the NPA, beyond the current JCS requirements.

Option 2+ was consulted on as the Favoured Option in the Public Consultation between March and June 2009.

7. Patterns and rates of growth across the NPA

7.1 The historic pattern of growth and its influence on the Favoured Option

Norwich is, as the EEP recognises, the focal point for the area. As such the strategy aims to maximise access to the jobs, services and facilities in the city. As the following two sections explain, a focus on Norwich has and will capitalise on the opportunities for reuse of previously developed land and keep the loss of greenfield sites to the minimum necessary.

Over recent decades Norwich has expanded significantly beyond the historic and administrative boundaries of the city, consequently growth has been accommodated in Broadland and South Norfolk. Whilst the adjoining rural areas north and south of the city share a number of similarities and are both within close proximity of the city centre, there are a number of key differences too. These differences are clearly reflected in the strategy and are expressed in more detail in the Appendix 2 (Northern part of the NPA) and Appendix 3 (Southern part of the NPA)

Norwich is located at the confluence of the Rivers Wensum and Yare, and developed in this location as a crossing point of these navigable waterways. The Wensum flows from Taverham/Costessey in the north west, through the city to the Broads, whist the Yare skirts the southern boundary of the city.

With the Yare forming the southern boundary of the city, this has clearly limited urban expansion to the south, allowing greater protection of the historic setting of the city in this direction. The relatively few crossing points of the Yare have also kept large tracts of the countryside free from development, with settlements that have kept a greater degree of independence from Norwich.

In contrast, whilst the north and north-east are also marked by varying topography and important features, such as historic parklands and Mousehold Heath, there is not the same physical barrier between the city and the adjoining areas of Broadland. The lack of a particular geographic or topographic feature separating Norwich and Broadland also means the 'boundary' is much more permeable for transport connections. Consequently urban development has been more continuous, with a range of employment, retail and housing development, some of which span the boundary, creating a much more urban character around the northern ring road and a more extensive urban fringe beyond. There is also less distinction between the parishes within the Broadland fringe, where there is no longer physical separation to aid settlement identity.

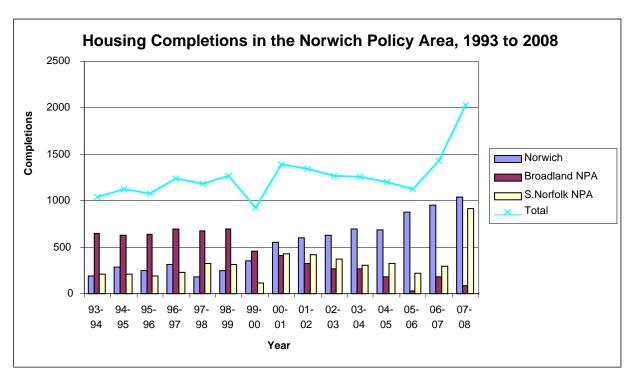
These historic differences in the way in which the areas to the north and south of Norwich have evolved are reflected in the choice of growth locations in the Preferred Option, which aims to enhance the distinctiveness of the area. To the south the presence of the Yare Valley, the A47 Norwich Southern Bypass and the Norwich-Cambridge railway mean that, other than at Costessey, direct urban extensions are not feasible. Flood risk, landscape considerations, wildlife sites, historic features and the opportunity to establish a green infrastructure corridor along the Yare limit the development capacity of the fringe in this area. Whilst the strategy for this area recognises that some settlements will need to grow to accommodate the levels of growth required by the EEP, protecting the individuality of settlements is still important.

To the north east the strategy aims to build on the permeability with the city. This is both in terms of creating sustainable transport links, but also increasing the green infrastructure of the area through heathland habitat recreation and making the most of the presence of historic parkland and ancient woodland.

Overall the approaches aim to make the most of the positive aspects of historic patterns of development, whether that be close ties with the city or fostering individual settlement identities.

7.2 Rates of Past Growth

The graph below shows that completions for the NPA as a whole have been relatively constant over the last 15 years, between 1,000 and 1,500 units per annum, with a jump to over 2,000 units in 2007/08. However, provisional figures for 2008/09 suggest that completions have fallen back to around 1200 as a result of the present recession.



Although performance over the NPA as a whole has been consistent, there has been a marked difference in the number of completions in the different districts through this period. There has been a steady rise in the number of completions in Norwich, a steady decline in Broadland and fluctuations in South Norfolk, with a rapid increase to 2007/8. These changes reflect:

- A. The increased emphasis on brownfield development in urban areas resulting from changes in government policy, positive planning by Norwich City Council, site availability and more positive perceptions of urban living. As a consequence, a large number of brownfield sites, often ex-industrial and large scale, have been redeveloped and 88% of housing development in Norwich since 2000 has been on brownfield sites.
- B. The completion of major greenfield developments in Broadland at Dussindale and Thorpe Marriot during the 1990s. Only one major allocation has been made since, at White House Farm, Sprowston, however this has not yet started and completions have dropped rapidly as a result.
- C. The increased amount of growth in South Norfolk has taken place through the expansion of the larger settlements and on the key transport routes, particularly in the A11 corridor settlements of Wymondham, Hethersett and Cringleford, as well as renewed growth at Costessey, Long Stratton, Mulbarton and Poringland. The increase in housing completions in recent years has thus been the result of a large number of South Norfolk Local Plan allocations being developed in tandem. Further information on previous development rates is set out in 6.

What is clear from these trends is that different housing markets have performed strongly at different times over the past 15 years

7.3 Future Delivery

As previously noted, at least 21,000 new dwellings need to be accommodated in NPA by 2026. Of these evidence shows that 3,000 units can be accommodated within Norwich. The Preferred Option divides the remaining dwellings equally between Broadland and South Norfolk; 9,000 dwellings each. If the distribution of houses between the partner authorities were to follow exactly that set out in the East of England Plan, the target provision for Broadland would increase slightly (by about 750) but could increase by more if the additional requirement for Norwich from 2021 to 2026 were assigned to Broadland as a consequence of capacity limitations in the city. South Norfolk has a similarly challenging target. Taking into account the need to safeguard sustainable locations in the city centre for office and retail uses, and the fact that maximum use of land for housing is already prioritised, the option of not accommodating major growth in Broadland and/or South Norfolk is not realistic.

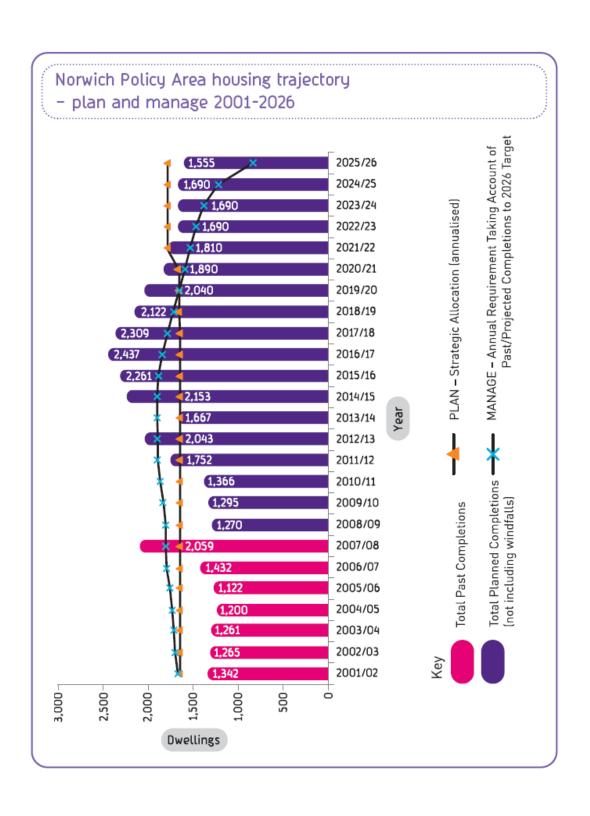
All of the short term need will be met through existing allocations and permissions, with both the current Broadland and Norwich City Local Plans having allocations to 2011, some of which are not started, and the South Norfolk Local Plan including a contingency reserve for beyond 2006.

The trajectory table below shows that:

- A. The earliest development on new allocations will not be completed until 2011/12:
- B. Sites in Norwich will provide 250 dwellings/year from 2014/5;
- C. Housing delivery at the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle will steadily increase to provide a 580 dwellings/year from 2015/16 onwards;
- D. The majority of growth locations in South Norfolk are likely to start delivering completions in 2014/15, and will be developed in parallel
- E. Additional smaller sites in Broadland and South Norfolk will provide 320 dwellings per year from 2014/15.

As a result, delivery will peak in the middle years of the plan period to enable housing growth requirements to be met. If these early delivery rates prove to be too challenging, there is scope for a flatter rate of delivery that would still meet the overall requirements for the NPA.

| District/ growth | Annual Completions from New Allocations (i.e. no existing commitments) | | | | | | | | | | | | | | | Total | Average Annual total | |
|------------------------------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------------|-----|
| alea | 2006 /11 | 2011 /12 | 2012 /13 | 2013 /14 | 2014 /15 | 2015 /16 | 2016 /17 | 2017 /18 | 2018 /19 | 2019 /20 | 2020 /21 | 2021 /22 | 2022 /23 | 2023/ 24 | 2024/ 25 | 2025/ 26 | | |
| Broadland | 0 | 180 | 230 | 230 | 525 | 625 | 750 | 750 | 750 | 750 | 750 | 750 | 750 | 750 | 750 | 710 | 9,250 | 544 |
| Rackheath Eco- | | | | | | | | | | | | | | | | | | |
| Community | | 180 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 3,400 | 227 |
| Remainder of Old | | | | | | | | | | | | | | | | | | |
| Catton, | | | | | | | | | | | | | | | | | | |
| Sprowston, | | | | | | | | | | | | | | | | | | |
| Rackheath, | | | | | | | | | | | | | | | | | | |
| Thorpe St Andrew | | | | | | | | | | | | | | | | | | |
| Growth Triangle (inside NDR) | | | | | 125 | 225 | 350 | 350 | 350 | 250 | 350 | 350 | 350 | 250 | 350 | 250 | 2 950 | 224 |
| Additional smaller | | | | | 125 | 225 | 350 | 350 | 330 | 350 | 350 | 330 | 330 | 350 | 350 | 350 | 3,850 | 321 |
| sites around | | | | | | | | | | | | | | | | | | |
| Broadland (2,000) | | | | | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 130 | 2,000 | 167 |
| Norwich | 0 | 0 | 0 | 0 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 3,000 | 176 |
| Norwich (3,000) | | | | | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 3,000 | 250 |
| South Norfolk | 0 | 0 | 0 | 0 | 435 | 565 | 785 | 860 | 950 | 1,040 | 890 | 810 | 690 | 690 | 690 | 595 | 9,000 | 529 |
| Wymondham | | | | | | | | | | | | | | | | | | |
| (2,200) | | | | | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 165 | 2,200 | 183 |
| Long Stratton | | | | | | | | | | | | | | | | | | |
| (1,800) | | | | | | | | 50 | 140 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 1,800 | 200 |
| Hethersett (1,000) | | | | | 50 | 90 | 175 | 175 | 175 | 175 | 100 | 60 | | | | | 1,000 | 125 |
| Cringleford | | | | | | | | | | | | | | | | | | |
| (1,200) | | | | | | 50 | 100 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 50 | 1,200 | 109 |
| Easton/Costessey | | | | | | | | | | | | | | | | | | |
| (1,000) | | | | | 50 | 90 | 175 | 175 | 175 | 175 | 100 | 60 | | | | | 1,000 | 125 |
| Additional smaller | | | | | | | | | | | | | | | | | | |
| sites around | | | | | | | | | | | | | | | | | | |
| South Norfolk (1,800) | | | | | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 1 000 | 150 |
| LL OUU) | ı | | 1 | 1 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 1,800 | 150 |



7.4 Developing the Elements of a Strategy

The choice of the approach to accommodating development formed part of the Issues and Options consultation exercise in 2007/2008. This included a full consultation document to which organisations and the public could respond, and a shorter questionnaire delivered to residential addresses throughout the area, as well as to a number of local organisations. The full document invited comments on the criteria for locating new housing, the merits of large-scale urban extensions, new towns, and a more dispersed approach, as well as inviting comments on a range of potential locations.

With regard to the locational principles for new development, the response from both documents gave priority to

- Good access by walking, cycling and public transport
- Infrastructure and service delivery
- Environmental impact

In terms of the strategy for provision of housing, the largest support (35%) was for large-scale urban extensions or a possible new settlement, though almost as many people (31%) were in favour of a more dispersed approach. While three options, (dispersal, medium sized concentration, large-scale urban extensions/new settlement) were offered, a number respondents spontaneously included the comment that the best outcome might be a mixture of these approaches.

(Appendix 5, Ref. 21 Pg 18 and Pg 93)

The future delivery can broadly be broken down into three main strands that have led to the Favoured Option set out in Appendix 7.

7.4.1 Urban intensification

Existing housing commitments are high in Norwich. Significant numbers of planning permissions for housing have not yet been developed and housing allocations from the current local plan also remain to be developed. Therefore brownfield sites will provide a significant proportion of the land available for development in the short term. This proportion will decline through the plan period as the supply of brownfield land decreases and greenfield allocations come on stream. Overall the JCS aims to maximise the level of development on previously developed land (PDL), however, the opportunities for new allocations on PDL are limited. Only a very limited proportion of new employment allocations and fewer than 20% of new housing allocations are likely to be on PDL. When added to existing commitments the proportion of total housing development on PDL is likely to be between 25% and 30%, with a target of 25% set in the JCS Monitoring Indicators.

Thus whilst further brownfield redevelopment opportunities are available, the present supply of housing land is reduced compared to a decade ago. As well as housing development within Norwich, there is also a need accommodate other uses, including central area uses, and the need to protect and enhance green infrastructure, see Appendix 1 for further details. Taking these factors

into account, further housing capacity beyond present commitments within Norwich has been identified as 3,000 units to 2026.

7.4.2 A Sustainable Urban extension

A significant element of the new housing development will be provided as a large-scale urban extension to the north east of Norwich. It will be sufficiently large to provide supporting facilities such as secondary education, primary health care, a district centre/high street, local energy generation and very high quality public transport, including a potential rail halt and bus rapid transit. Based on our understanding of the population needed to support the highest level of these facilities, a minimum of at least 7500 houses will be necessary. Such a scenario was tested as one of the options in first JCS Infrastructure and Funding study (Appendix 5, Ref. 5), but though the conclusion of this study was that such a scale of development might be delivered by 2021, it was extremely close to the limit of what might be achievable.

Another scenario tested was a completely free standing settlement, but the study concluded (paragraph 6.16) that this would be unlikely, on its own, to deliver development rapidly enough to meet the targets of the East of England plan up to 2021.

The GNDP has undertaken its own research into the rates of development achieved on large developments (Appendix 4, Ref. 18). This highlights two significant factors: For new settlements, the average time between initial proposals for a new settlement being agreed, including broad location, 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. For the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle it is anticipated that this will be considerably shortened, due to the main requirements for development being identified at an early stage and the efforts of the GNDP to secure delivery. For the eco-town element (outside the NDR) lead in is shortened to approximately two and a half years from confirmation of the eco-town status. For the remainder of the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle the first completions are anticipated approximately four years from adoption of the JCS, in parallel with a number of the other growth locations in South Norfolk.

The second point is that average build rates on large scale developments already in construction are up to 240 dwellings per year, probably representing the combined efforts of up to six developers. Table 2 in the research document shows some higher projections, but the reality of those developments in the course of implementation suggests that around 240 dwellings represents a realistic maximum over the longer term. To deliver 7,250 houses in the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle by March 2026 requires a gradual build up to a rate of 580 units/year from 2016 onwards. 230 units/year is assumed to be the peak rate for the eco-town (outside the NDR), and 350 units/year for the area inside the NDR, probably based around two centres.

Because the required rates of expansion in the Growth Triangle mean it is necessary for development to proceed in three locations simultaneously, the area selected for this growth needs to offer the potential to form three neighbourhoods. Even so, the development rates proposed are considerably below the peaks shown as deliverable in the evidence study (Appendix 5, Ref. 18) to allow for the fact that the three centres may be in relatively close proximity and therefore there will be some overlap in housing markets.

Appendix 2 identifies why the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle provides the best location for such development, meeting regional policy requirements and taking account of local environmental factors.

7.4.3 Extensions to Settlements

i) Large scale allocations

To the south of Norwich the main growth is focussed on five large-scale allocations ranging from 1,000 to 2,200 units. As well as respecting the historic growth and current form and character of the South Norfolk NPA, as noted above, this approach also aims to reduce the risks to the consistent delivery of new housing. Whilst considerable effort has gone into establishing the deliverability of all of the growth locations, unforeseen problems could potentially pose a greater risk the fewer locations that are progressed. Consequently the reliance on a second large concentration of development within the NPA, whether as an urban extension or the expansion/amalgamation of existing settlements, would raise concerns over whether this increases the risks to the overall delivery of housing.

As with the evidence on new settlements/large scale settlement extensions (Appendix 5, Ref.18), development on the largest sites within the South Norfolk NPA has shown a considerable lag between the allocation of the site and first completions; the Housing Trajectory table above shows that all of the growth locations are likely to start in 2014/15 at the earliest, and consequently will need to be developed in parallel in order to achieve sufficient completions by 2025/26. At the largest existing site within the NPA (Queens Hills, Costessey) developers with multiple phases have concentrated on one phase at a time; however the same developers have progressed in parallel with other sites/phases of sites in nearby settlements e.g. at Roundhouse Park, Cringleford. At this stage it is not known how many developers will be involved in each of the growth locations, but it is not inconceivable, looking at current examples around the Norwich area, that a site of 1,000+ units would be developed by as few as two or three developers. This suggests a build time in strong market conditions of 7+ years after the main site infrastructure is in place. Given the relatively small pool of national and regional builders involved in major developments and capable of building multiple sites in parallel at the necessary speed, the need to reduce risk by ensuring that developments are spread across a range of locations in South Norfolk, where much of the infrastructure is already in place, becomes more apparent.

The issue of the speed at which major developments can be progressed is exacerbated by the current slow housing market, which could result in some of these builders being engaged in completing existing commitments for longer than anticipated.

The majority of the growth locations, north and south of the city, fall within the overall Norwich housing market, whereas the Housing Market Assessment (Appendix 5, Ref. 1) recognises that Wymondham and Long Stratton have separate defined housing markets. Distribution of development to these locations also allows people greater choice within the housing market to suit their family, employment and social requirements. Greater market choice could aid quicker sales and therefore further enhance the potential for consistent delivery.

Overall, having different approaches to the distribution of development south and north of the city should give a more robust prospect of delivery for the Norwich Policy Area as a whole.

ii) Allocations through Site Allocation Plans

The Favoured Option also makes provision for 3,800 units on smaller sites, 2,000 in Broadland and 1,800 in South Norfolk, to be distributed on the basis of the settlement hierarchy through the Site Allocation Plans. These smaller sites offer the opportunity both to deliver some housing in a shorter timescale and also the choice of location could have an impact of the viability of infrastructure provision i.e. which school or doctors catchment do they fall into, ability to feed into enhanced public transport routes, shared new facilities with other smaller settlements etc.

Again, the great flexibility offered by these sites should help make the JCS more robust, particularly in terms of providing timely and consistent housing delivery.

Appendix 1 - Norwich

This appendix shows why the figure of 3,000 dwellings has been identified for housing growth in Norwich.

In compliance with national and regional policy, the strategy is urban focussed. It aims to provide a variety of housing to meet local need within Norwich, whilst also:

- Promoting office, cultural, tourism and retail development in the city centre as a major regional centre;
- Enabling regeneration of deprived parts of the city and other areas with growth potential, providing for high quality sustainable access to local employment and services;
- Protecting specific parts of the city allocated for other uses such as employment areas and open spaces from inappropriate housing development.

Recent housing development and existing plan allocations

Norwich has experienced unprecedented housing development this decade, rising annually and peaking at over 1000 dwellings in 2007/8 (see graph in 7.2 above). As a result, 5,484 dwellings were built in Norwich from 2001 to 2008, 57% of the dwellings built in the Norwich Policy Area (NPA). Efficient use of land was made, average densities rising steadily through the decade and peaking at 88 dwellings per hectare in 2007/8. Whilst there has been some greenfield development, notably at Three Score, Bowthorpe, 88% of housing development in Norwich since 2000 has been on brownfield sites. Many of the brownfield sites have been ex-industrial and large scale, reflecting the decline in manufacturing industry in the city. At the same time, employment on allocated sites has grown steadily, and other uses such as retailing and leisure have grown rapidly. Significant areas of land are protected from development for environmental reasons, approximately 20% of the area of the city is open space.

There have also been high rates of "windfall" development on housing sites not identified through plans. An average of 240 dwellings per year were developed on largely small scale windfall sites from 2001 to 2008. The high rates can be attributed to strong market conditions and to the large number of social housing schemes developed on council owned land. As a result of this and larger social housing regeneration schemes on allocated sites, delivery of affordable housing has risen. There were 291 affordable housing completions recorded in 2007-08, the highest figure in the East of England and in the top ten nationally.

The current housing commitment (sites with planning permission or allocated in the local plan at JCS the base of April 2008) in Norwich is for 5,911 dwellings, representing half of the committed sites for the NPA.

As a result, there is a diminishing supply of land available for further housing development within the tightly bounded council area.

Identifying further housing land

Since detailed SHLAA evidence on the capacity for future housing development within Norwich was not available during the early stages of plan making, an initial broad estimate for further growth potential was made to inform the Issues and Options consultation in November 2007 (paragraph 5.5). This suggested there was capacity for 5,000 further dwellings.

Further work undertaken for the regulation 25 Technical Consultation in August 2008 (policy 5) on the basis of monitoring, previous housing capacity work and professional knowledge of local sites reduced the figure to 4,000 dwellings.

Responses to the technical consultation, emerging evidence from studies and the adoption of the East of England Plan, emphasised the need for a significant land requirement for employment, retail and leisure uses, thus reducing housing capacity.

As further monitoring information became available showing the high level of completions between 2006 and 2008 (and therefore the reduced number of sites available for future development), it became clear that the estimate of 4,000 dwellings was too high. Thus estimates were reduced to 3,000 dwellings for Regulation 25 Public Consultation in March 2009 (policy 14).

Since then, completion of the SHLAA has provided a more robust evidence base to assess housing capacity. Taking account of the need to retain land for commercial uses, and the need to protect other uses such as green space as set out above, the SHLAA has undertaken a site-by-site analysis of housing development potential. It concluded that, from the sites identified, 3,242 dwellings could be developed in the city council area to 2026. This figure corroborates the revision to the estimate made for the Regulation 25 Public Consultation. It is appropriate to slightly discount this figure as it is unlikely that all these sites will come forward for housing development, therefore the figure of 3,000 dwellings previously consulted upon is carried forward to the submission version of the JCS as a minimum housing requirement.

In addition to allocations, relatively high "windfall" rates are likely to continue. Though the recent market downturn may reduce small scale private housing development in the short term, and government definitions may change, redevelopment of council owned land for social housing is planned to continue.

City Centre

Recent development

Until the 2009 recession, the city centre and adjoining areas experienced rapid regeneration, unprecedented in recent decades. A large proportion of the redevelopment was for flats at high densities, with an average density of development 135 dwellings per hectare in recent years. In the 5 years from 2004/5 to 2008/9, approximately 1200 dwellings were completed in the city centre, with a peak in 2007/8 of 524 dwellings, but this slowed to approximately 225 in 2008/9.

In addition, there was significant development of leisure facilities, mainly at Riverside and new cultural facilities were provided at the Forum. Large scale retail development took place at Chapelfield, specialist shopping areas have been promoted and the market has been renewed. Major office development is presently taking place at Whitefriars.

The strategy

1. Housing

The strategy's target for new dwellings, including mixed uses with housing and family housing, is a **minimum** of 2,750 dwellings 2008 to 2026, including existing permissions and allocations. Housing development is required to meet need and to ensure that the centre becomes increasingly vibrant both during the day and in the evening.

These **minimum** housing requirements are approximately 65% than those achieved in the last 5 years. These targets are based on a clear evidence base from the Strategic Housing Land Assessment as to the housing capacity of the remaining brownfield sites in the city centre likely to come forward for development in the plan period.

The housing numbers in the policy also take account of:

- the fact that many of the city centre brownfield sites have been developed in recent years;
- the need to ensure that sufficient land is available for regional services such as employment, retailing and leisure and for open spaces;
- the need to supply a variety of housing types and sizes to meet all needs. Whilst the majority of housing in the city centre will continue to be high density, there is also a need for family housing.

2. Employment

Regional policy, which requires a substantial growth in employment in the city centre as it is a regional centre. The The Employment Growth and Sites and Premises study shows that at least 1000 m² of new offices will be required in

the city centre and the wider central area by 2026, a land take of around ten hectares. Recent market trends support such an approach, showing a revival in demand for high quality offices, but with little demand for older, poorer quality offices and pressure in some cases for conversion to housing.

3. Retailing

The retail and town centres study concludes that there is the potential capacity for 40,000m² of comparison retailing in the city centre to 2016 and 68,000m² to 2021. This analysis was undertaken in October 2007, prior to the present recession. As a result of the increase in retail vacancies associated with the recession and of consultation, this figure is regarded as potentially being too high. Therefore the JCS has taken a flexible approach. It provides for 20,000 m² of comparison retail development in the city centre to 2016. It requires continued regular monitoring of retail vacancies and development to inform assessment of retail change. The GNDP will commission a further detailed retail assessment later in the plan period to ensure policy can be adapted to future needs. Much of this retail development could be achieved through intensification of uses in existing retail areas and through mixed-use development.

The study also identifies the potential for a new modern superstore of 3500 square metres net in the Norwich urban area by 2011, with the potential doubling by 2021 (Appendix 5, Ref. 9, Chapter 13). The report suggests (paragraph13.54) that in the short term, qualitative considerations suggest new food store development should take place in the city centre. Planning permissions granted for supermarkets at Anglia Square in the city centre and at Harford Place will, if implemented, meet this need.

4. Leisure

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 recommends new café, bar and restaurant development of approximately 3,000m².

City Centre Regeneration Areas

Three specific areas are identified for regeneration in the city centre through policy 11 of the JCS in line with the evidence base. All three areas have great potential, but are presently failing to achieve this, largely as a result of outmoded retailing and office facilities:

- The Northern City Area will be redeveloped through its Area Action Plan. As well as housing development (with x dwellings allocated), this involves transport improvements, the regeneration of the Large District Centre including a supermarket, office development and significant improvements to the public realm.
- The St. Stephens area will be redeveloped through its emerging masterplan. Redevelopment will include retail, office, leisure and housing development (approximately 500 units). The best mix of these uses, and their commercial viability, has been established through the masterplanning process.
- Rose Lane will be redeveloped, primarily for office uses as part of the improved commercial core of the city centre, through a Supplementary Planning Document.

Housing development outside the city centre

Based on the SHLAA, a variety of types of brownfield sites are likely to contribute to overall urban intensification, including commercial premises that are likely to be vacated, vacated school sites and existing low density housing sites suitable for redevelopment. The suitability of these sites for housing development will be considered through the Sire Allocation Plan.

Areas unsuitable for housing development

Many parts of the city can not be considered for urban housing intensification due to specific constraints:

Open Space: approximately twenty per cent of Norwich is identified as open space and is protected from development under Local Plan policies. This includes a variety of uses such as semi natural areas, parks, sports fields, allotments and play areas.

Employment land: extensive areas are also allocated for employment. Since the EEP sets a requirement for significant employment growth in the area, the Employment study recommends that existing employment sites should be retained, potentially with intensification of employment use on existing sites and thus do not provide potential for housing development..

Other protected areas: these include Health and Safety Executive exclusion zones, such as around Bayer Crop Science and Heigham Waterworks, environmental and heritage designations and areas at risk of flood.

Consultation

The consultation response at the issues and options stage was broadly supportive of a strategy that seeks to promote continued commercial and retail growth within the city centre. (Appendix 5, Ref. 21, page 22), and supportive of the overall approach to the approach proposed for the outer urban area (Appendix 5, Ref. 21, page 25).

Sustainability Appraisal (SA)

The SA supports the strategy for the city centre as the as it co-locates employment, services and housing, focussing employment growth on the most sustainable location in sub-region and providing housing and services to support vitality. This will both reduce the need to travel and ensure maximum use of sustainable transport modes.

Conclusion

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 in deprived areas of the city. Further housing allocations should ensure continued high affordable housing delivery.

Appendix 2 - Northern part of the NPA

1. Nature of the Urban Fringe, Impact of Growth and Service Delivery

In the north, the NPA includes a large urban fringe, continuously developed except where Norwich International Airport extends to meet open countryside. In the north west, this extends some way along the valley of the River Wensum. Of the remaining ten parishes in the Broadland part of the NPA, some have grown into large settlements, predominantly acting as dormitories for Norwich, (notably Horsford, Spixworth, Blofield and Brundall) while many other villages remain small.

For the 9,000 dwellings that need to be accommodated in the Broadland sector of the NPA. an equal distribution between the sixteen parishes would imply just over 560 dwellings in each. If three very small parishes were excluded, the share for the remaining thirteen would rise to just short of 700 newly allocated dwellings in each. Such a scale of growth would dramatically affect the form and character of all of the settlements concerned particularly taking into account the existing commitment at March, 2008 of over 1750 dwellings.

More recent 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. Experience elsewhere in the country paints a similar picture. Cambourne, in Cambridgeshire, has a current projected size of 4250 dwellings. An evaluation by Cambridge Architectural Research Limited for Inspire East (Lessons From Cambourne) notes (page five) "there is immense pressure from developers for Cambourne to grow, possibly to double its present size ... a doubling the size (sic) 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 to the website (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.

In parallel with, and guiding the preparation of the JCS, work has been undertaken on a **sustainability appraisal**. The SA covers individual policies, individual locations considered for major growth, and the growth locations packaged together as 'options'. Looking at the individual locations in Broadland, the north east inside the NDR appears to perform best, with the north east *outside* the NDR slightly ahead of (but very close to) the other alternatives. However many of the environmental and social disadvantages of the outside the NDR location, associated with a large development detached from Norwich both by distance and by the NDR itself, can be overcome if this

location is considered in combination with the inside the NDR location. Essentially, the potential for the two areas to share critical infrastructure such as secondary schools, public transport priorities and a wider range of facilities suggest the north east outside the NDR will perform better in combination with the north east inside the NDR than it would alone.

The large-scale growth forming the major part of the strategy for the northern part of the NPA is balanced by the requirement to find locations for 2000 dwellings on smaller sites north or Norwich. A number of sites within the urban fringe parishes and larger villages have been put forward through the consultation processes, and the GNDP is confident that this scale of development can be met on sites which align with the settlement hierarchy. These will add a degree of choice, and should enable some development to come forward early in the plan. It is recognised however that this is a limited component in the northern part of the NPA, and in terms of delivery, needs to be complemented by more sites in the City of Norwich and the southern part of the NPA which can also come forward early.

The flowing four sections look at the impact of dispersal or concentration on the provision of education, health care, shopping/commercial facilities and transport.

Education

Dialogue with Children's Services, and experience gained during the preparation of the current Broadland Local Plan, it is apparent that by spreading development the scale of growth would have a dramatic and detrimental effect on primary schools in the area, but without the critical mass, in any single location, to justify the provision of a new primary school. Clearly, a completely even spread would be improbable, but by way of illustration, 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.

There are four secondary schools in this part of Broadland, at Taverham, Hellesdon, Sprowston and Thorpe St Andrew, all of which have limited or no spare capacity, and in some cases, retain many dated buildings. Within the nearby areas of Norwich, there are two secondary schools, one of which has been awarded academy status. The other, Sewell Park College, lies some way from the urban edge. An even spread of development would present even more acute problems for the secondary sector. The newly created Open Academy has just been established and major expansion would present huge challenges. The impact on the remaining four schools in the Broadland part of the Norwich policy area would average over 2000 dwellings each, and would still be very significant even if secondary schools outside the Broadland part of the Norwich policy area were taken into account. The view of Children's Services is that to justify the building of a new secondary school a very significant concentration of housing is needed. While the precise amount will

vary according to the details of current capacities, forecast demographic change and impact on future capacity, and current thinking in terms of the curriculum, school configuration etc, a reasonable "rule of thumb" appears to be that around 7000 houses are the minimum that can be expected to support a new secondary school and sustain that support into the future.

Health Care

Another key factor in sustainable communities is the presence of primary health care. Looking at current capacities, at a district-by-district scale (within the confines of the Norwich policy area) the 2007 Growth Infrastructure and Funding Study (Appendix 5, Ref. 5) concluded that, in Greater Norwich, one general practitioner typically serves between 1350 and 1525 residents, while one dentist typically serves about 2000 residents. While individual practices may have the varying degrees of capacity at present, prospect of the population of the plan area growing by in excess of 40,000 people up to 2026 clearly implies a need for new facilities. The study suggests for one of the scenarios modelled, an additional 3 primary care centres and 2 GP surgeries may be needed by 2021 and a further primary care centre and 4 GP surgeries by 2031. These are global figures, across the entire NPA. The study (paragraph 2.24) notes the changing pattern of primary health care, with current government policy promoting primary and community services together, with social services co-located where possible. Primary care facilities can also accommodate a number of diagnostic and treatment services, and therefore reduce the level of demand for acute services. The primary supplier of acute services is the Norfolk and Norwich University Hospital at Colney. The study goes on to suggest that in the context of the Norwich area a "hub and spoke" model of provision may prove to be the most feasible with larger primary care centres in central urban areas supported by smaller centres located in outer residential areas. In order to provide the critical mass for primary care centres, some degree of concentration is clearly required. Even a practice consisting solely of four GPs is likely to require the support from some 5,400-6,100 patients, representing about 2500 dwellings. These figures will rise if a wider range of services or diagnostic facilities is to be offered.

Shopping and Commercial Facilities

While commercial facilities can be expected to flourish where there is sufficient demand, if the intention is to create a critical mass of commercial facilities to act, along with the community facilities, as a focal point for new development, a concentration of development is likely to be the best way to achieve this. Much of the urban fringe of Broadland grew in the past without such focal points. More recently focal points have been created through development, for example the district centres at Dussindale and Old Catton. At Sprowston, current strategies seek to add community facilities in the vicinity of the Tesco superstore to create a new district centre. The creation of further centres to cater for the scale of development proposed could best be achieved through a policy of concentration.

Transport and Accessibility

The East of England Plan requires the strategy to seek to achieve a step change in the share of journeys made without relying on the car. Achieving this will require a significantly more attractive public transport offer than has been the case in the past, and the strategy seeks to achieve this by promoting bus rapid transit (BRT) to achieve attractive frequencies, reliability and journey times. The study on public transport requirements of growth (Appendix 5, Ref. 13) notes, in the executive summary, that BRT will require "a more radical approach to bus priority including the reallocation to buses of some existing road space for general traffic". This is particularly true on the northern side of the urban area, where there are no corridors with comprehensive priorities comparable to those on Newmarket Road, in the south west. The study describes a vision for high quality public transport, involving significant investment in vehicles and infrastructure along routes. including new ticketing systems and waiting areas. While the report was looking at sample scenarios, it does offer the comment in the executive summary that developments "of 2000 to 3750 homes in scenarios A. and B. are well below the size that would support a dedicated express bus service to the city centre". Section 2.1.3 of the main report notes that if growth were lined up along a north east and south west corridor, the corridor would, under the growth assumptions tested, "need to provide capacity for a total of 3891 peak hour trips in 2031. This level of demand is still just within the maximum system capacity of a standard bus service, but sufficient to support a bus rapid transit service with a high level of segregation from general traffic". While it was not the remit of the study to specify a minimum threshold to justify a bus rapid transit service, there is clearly a critical mass required to underpin such a service, and this cannot be obtained through a strategy of dispersal.

The strategic employment sites identified in the East of England Plan include Thorpe St Andrew (St Andrews and Broadland Business Parks), the city centre and Norwich Airport. The development in the north east should be able to offer good connections to these locations; to the existing Airport industrial area and Broadland Business Park by existing footpath and cycle connections, to the city centre by existing cycle routes and also a dedicated bus rapid transit route, which would also serve an existing significant area of employment on the urban fringe at Sprowston. In addition, further employment growth is proposed within the eco community at Rackheath, and this too should be accessible by non-car modes from the major development in the north east.

It is noteworthy that the Employment Growth and Sites and Premises study undertaken by Arups confirmed the broad pattern of strategic employment sites (Appendix 5, Ref. 7, Para 1.17) and also supported the selection of the Airport as a location for a new employment allocation (Para 1.5.5).

2. Environmental considerations

Broadland exhibits a very high level of environmental quality throughout the district, and development inevitably raises environmental issues for which

there is rarely a simple solution. Selecting locations for major development inevitably involves some trade offs. Nowhere is this more acute than in the NPA where the scale of the development to be accommodated and the limited range of options compound the difficulty. Looking at the range of environmental assets, the position can be summarized as follows.

In the following descriptions, north west refers to the area west of the A140, north refers to the area between the A140 and Spixworth, north east refers to the area shown as the proposed area action plan location (the Old Catton, Sprowston, Rackheath, Thorpe St Andrew growth triangle), and east refers to the area outside the proposed Norwich northern distributor road, and south of Salhouse Road.

High quality agricultural land

There is a large area of grade1 and 2 agricultural land in the east part of the Norwich policy area around Great and Little Plumstead, Brundall, Blofield and Postwick. There is a small area of grade 2 land in the north east, to the west of Wroxham Road

Flood risk

Horsford Beck, which flows west to east through from the north west (Horsford) involves zones 2 and 3 on the Environment Agency's indicative maps, and through the north (Horsham and Newton St Faith and Spixworth). There are smaller watercourses associated with small areas of land in zones 2/3 west of Rackheath, in the north east, and west of Plumstead hospital in the east. The rivers Wensum and Yare are both bounded by areas of flood probability, but both are much larger watercourses than Horsford Beck. The areas of flood of probability around the river Yare are generally outside the plan area, and within the area of the Broads Authority.

International wildlife sites

The River Wensum in the north west is a Special Protection Area. There are similar SPA's, also designated as Ramsar sites in the area of the Broads and to the south of Brundall

Sites of Special Scientific Interest

There are SSSIs in the north west at Upgate Common and Alderford Common, although these are some way from the urban edge and the degree of any effect would depend on the scale of allocations made in this area. Similarly, Crostwick Common lies to the north, but just outside the Norwich policy area.

County wildlife sites

There are large areas of county wildlife sites comprising woodland and heathland to the north west, and woodland to the north. In the north east,

there is a significant area at Racecourse Plantation, and smaller County wildlife sites in the vicinity of Rackheath Park and the watercourse north of Rackheath.

Environmentally sensitive areas

These are located along the River Yare, and along Horsford Beck in the north

Historic parkland

Within the NPA, only Catton Park, and the associated Deer Park, is formally recorded on the English Heritage register, but locally recognised parkland exists at Spixworth Park (north) and in the north east at Sprowston Manor golf course, Beeston Park and Rackheath Park. In the north west, the grounds of Taverham Hall School are designated, though this occupies an area in the Wensum valley where further allocations for large scale development might well be resisted for other reasons

Conservation areas

The only conservation areas lie within the built-up urban edge at Old Catton and Thorpe St Andrew, and within the built-up part of Horsham St Faith, although it has been suggested in some quarters that Thorpe End should be considered as a potential conservation area

Scheduled Ancient Monuments

In the NPA, within Broadland, there are seven Scheduled Ancient Monuments. Of these, Drayton Lodge, Drayton Cross, Hellesdon Cross, a cross in St Mary's churchyard, Hellesdon, and Horsham St Faith Priory are all within existing built up areas, albeit Horsham St Faith is a modest sized village, and the Priory is adjacent to open countryside, but close to an established employment area. The remaining, rural Scheduled Ancient Monuments both lie within Horsford, and are Horsford Castle, a motte and bailey castle to the east of the village, and some tumuli to the north of the village, within woodland.

Ancient Woodland

There are a number of pockets of ancient woodland in the north east, principally close to Rackheath Park

Minerals

There is a large area of minerals, some of which has consent for extraction in the north, in the vicinity of Spixworth.

Impact of Norwich International Airport

There are public safety zones extending to the east and west of the runway, though these affect relatively limited areas. Areas in the vicinity of the airport, and particularly along the runway's east/west alignment are affected to some degree by Airport noise. These considerations affect parts of the north west, north and north east, though in all cases they are relatively localized.

Landscape character

The District Council had landscape character assessments prepared in 1999, and 2008, (the latter to take account of updated guidance). However, the 1999 assessment remains valid, as it is the foundation for the areas of landscape value shown in the local plan adopted in 2006, and which remain current policy.

North west

Within this area three character areas (B,E and I) as defined in the 1999 assessment are found:

B. consists of the Wensum valley slopes, and is small scale including a confined valley flood plain. It is an essentially rural landscape which has survived intact. All of this area is shown as being of high landscape of value

E. is a plateau with little topographical variation, but a distinctive character arising from the sandy soils overlaying sands and gravels. Large parts of the area were once heath, though now it is dominated by woodland, with small areas of remnant heath and sparse settlement. It is generally categorised as medium/high landscape value.

I is an area of sands and gravels, to the north of Norwich. Although semi-rural, it is affected in parts by the proximity of the Airport, which also has some more localised effect in the need to maintain the immediate takeoff and landing routes free from trees.

North

Within this area, three character areas are found. E and I are described above.

F, an area rising from the river Bure, and in this part of the district consisting of the very upper slopes of the valley is described as an "ordinary working arable landscape", and is generally considered to be of medium quality, though there is a small area of higher character where streams, including Horsford Beck form wooded incisions into the plateau. This localised area is shown in the assessment as a medium/high

North east

Within this area there are two landscape character areas. I is described above

J is an area of light sandy soils, with little topographical variety. Much of it was historically heathland but more recently it has been taken into agriculture and consists of agricultural land interspersed with copses, plantation and woodland. Some smaller estates have been developed with a parkland landscape. The north east urban edge of Norwich features a number of woodland blocks which contribute to its setting. An area of medium to high quality lies in the vicinity of Beeston and Rackheath Parks, though elsewhere this character area is of medium to low quality

East

Within this area there are two landscape character areas, J. as described above and L.

L. is an undulating landscape dissected by tributaries of the River Yare. In the western part in particular the land is of high agricultural quality where boulder clay overlays earlier geology, and is in predominantly arable use. The landscape is high to medium around Plumstead hospital, leading to Brundall and Blofield but of low quality closer to Norwich. The landscape character assessment notes however that the landscape has managed to absorb development well at the edge of the urban area.

Within the Landscape Character Assessment undertaken in 2008, a more broad brush approach has been adopted, and the only character areas defined around the urban edge are described within the overall category of "Wooded Estatelands", apart from a very small area of "Marshes Fringe" in the east, south of the original line of the A47, and an area of River Valley to the south and west of Taverham.

The Wooded Estatelands are typified by small manors and halls, some with parkland in a strongly ordered, human influenced landscape with copses, woods, and plantations punctuating a largely arable landscape, and in some areas giving a sense of enclosure. The same sub area, under the heading "Spixworth" includes all the land immediately adjacent to the urban fringe. The landscape character assessment notes that the eastern part has a mature landscape structure with more enclosure as a consequence of the trees in the landscape compared with the more open landscape in the west.

The guidelines for accommodating development suggest the rural character should be kept, and the landscape structure retained and enhanced, including restoration of hedgerows, and the setting of halls or houses and parkland. New development should also seek to respond to the historic settlement pattern, and the landscape setting of the villages, maintaining green spaces between the urban edge and villages. In some areas there is an opportunity to soften the urban edge. In places, this character area extends only a short distance from the urban edge, and in the north east gives way to another sub area under the heading "Rackheath/Salhouse".

In the Rackheath/Salhouse area the topography is generally flatter, away from rivers, and lighter sandy soils mean that much of it was historically heathland, although there are three Historic Parks at Rackheath, Beeston and Salhouse (none on the English Heritage register). Similar characteristics and planning guidelines are noted for this area, though they also refer to the need for caution in accommodating tall structures.

In the north west, the narrow urban edge area of Wooded Estatelands gives way to an area described as Woodland Heath Mosaic, which occupies an extensive area in the western and central part of Broadland. Topographically the ground is predominantly a plateau with relatively infertile soils many formerly occupied by heathland, but now extensively wooded. Again, the planning guidelines refer to the need for care in accommodating tall structures, and the need to consider the effect of development on wide expansive views. Any new development requires an intelligent landscape and urban design strategy.

West and south of Taverham, the landscape is dominated by the Wensum Valley where the prerequisites are to conserve the undeveloped rural tranquillity of the area, apply caution in accommodating tall structures and maintain space between villages and the Norwich urban area. There are also a number of mills, halls and churches which enjoy an attractive landscape setting. The sense of openness in the valley floor should be conserved, and the benefits of green corridors extending into the urban area protected.

The location of a major development in the north east will undoubtedly have an effect on the local environment, but some of this can be beneficial. One of the key strategic corridors the green infrastructure strategy seeks to promote links the north east of the urban area towards the Broads. It has been noted above that the north east includes a number of assets, in the form of historic parklands, ancient woodlands and county wildlife sites, and the disposition of these suggests they could form the basis for a striking element of green infrastructure connecting existing urban edge woodlands to the countryside beyond Rackheath. Rackheath Park and Beeston Park are relatively close, and the concentration of county wildlife sites and ancient Woodlands in the vicinity of Rackheath Park and to the north east of Beeston Park could be augmented by green infrastructure within the growth triangle and which could help to define the local neighbourhoods within it. Some of the historic parkland may also be made available for informal recreational areas as part of the development.

3. Public Consultation

A number of potential locations for major growth within Broadland were included in the initial Issues and Options consultation. These were to the north west of the urban area, to the north, to the north east inside the line of the northern distributor road, to the north east outside the line of the northern distributor road, and to the east of the urban area.

The most favoured location in Broadland, in responses to the full Issues and Options document was the north east sector inside the NDR. The north west was the least popular location in Broadland with the others grouped fairly closely, but mostly scoring less than options in South Norfolk. In the full questionnaire the north east outside the Norwich northern distributor road recorded a reasonable number in favour, but almost as many opposing. (Appendix 5, Ref. 21, Q12a, Pg 95). In contrast, in responses to the short questionnaire, the north east outside the Norwich northern distributor road was the fourth most favoured location from the 11 identified, though this dropped if only first preferences were counted. Interestingly, it received more support than the north east inside the NDR on either count. (Appendix 5, Ref. 21, Q6, Pg 76). Tables in the same reference (Pg 77) show the responses according to the district of residence of the respondent. These shows that, whether first preference only or first and second preference combined are taken into account the north is the most favoured location in Broadland. followed by north east outside the NDR and north east inside the NDR, for Broadland residents.

Before embarking on the JCS, Broadland District Council had undertaken some work on an individual core strategy, including a consultation on issues and options in 2006, which was reported to the Council in January 2007. This had suggested four possible approaches to the distribution of the major growth; urban fringe (in as many locations as required, but accepting this would require greenfield extensions); a focus on a major urban extension and inviting comment on whether the north west or the north east might be preferable (but inviting people to suggest alternatives for a concentrated form of development if they supported that approach, but favoured neither the north east nor the north west); urban dispersal (a combination of urban fringe parishes and the larger villages in the Norwich policy area). The pros and cons of each approach, as it appeared to the Council, were set out. While the total responses to the exercise were limited, 50% of all those responding supported an urban extension to the north east, with a 26% supporting urban dispersal, 16% an urban extension to the north west, and 8% a strategy of seeking to accommodate all development in or around the entire urban fringe.

4. Conclusion

Drawing the threads above together, the view of the GNDP is that EEP housing requirement for the area necessitates a large proportion of the housing being provided in a concentrated form through a major urban extension. The nature of the urban fringe in Broadland has been referred to above, and contrasts markedly with much of that in South Norfolk, as described in more detail below. Taking into account the full range of criteria (the public response to the Issues and Options consultation, and to the earlier Broadland core strategy consultation; sustainability appraisal work; and evidence studies, notably the water cycle study [Appendix 5, Ref. 11 and 12]), the views of the GNDP, and Broadland District Council are that such a major urban extension is best located to the north east of the urban area.

Taking into account likely rates of development and the need to deliver sufficient houses by the end of the plan period, the proposal is for a large urban extension spanning the NDR. The belief is that this will enable the creation of distinct communities which can nevertheless share some critical high level infrastructure. The reasons this is considered the best available location can be summarized as:

- The absence of a proposed NDR link across the Wensum Valley, coupled with the likelihood of Longwater, the Norwich Research Park and the NNUH attracting flows across the valley if major development were located in the north west:
- The water cycle study indicates that the sewerage system within the Norwich is generally at capacity. A location in the north west or north would be more difficult to connect to Whitlingham than the north east;
- The Airport public safety zone and noise issues affect the north west to a greater extent than the north east and would make an urban extension in the north difficult to achieve;
- The radial road serving the north west (the A1067) offers little scope for public transport priority, with limited choice of alternative routes for displaced traffic;
- Limited access to strategic employment locations from the north west (see access problems to Longwater and the NRP, above);
- Good access to a range of strategic employment locations at Rackheath, Broadland Business Park, Sprowston fringe, Airport and ring road sites from the north-east:
- Extensive high quality agricultural land to the east of the urban area;
- Limited choice of radial roads in the east, the difficulty of creating bus priorities on the Thorpe Road corridor, and the risk of encouraging the use of the A47 trunk road for local journeys, to avoid the Thorpe Road corridor.
- The north east has a choice of radial routes meaning that major bus priorities on one route would leave any unavoidably displaced traffic a choice of alternatives
- There is a potential public transport priority along Salhouse Road, Gurney Road, leading to Barrack Street and the established bus priority system from Anglia Square to Norwich city centre.
- Consistent advice from Children's Services expressing their preference for a concentrated solution, and favouring the north east, particularly for secondary education

With regard to environmental considerations, there is no sector where there is no constraint. The main constraints affecting the north east are historic parkland and ancient woodland. None of the historic parklands in the area feature on the English Heritage register, although all are, in varying degrees, of local importance. Sprowston Park is a golf course, and much changed, but clearly serves a valuable function as a green space, and for recreational purposes. Beeston and Rackheath Parks are not currently open to the public, and are less changed than Sprowston Park, but as designed landscapes intended to be viewed from within, their principal value must lie in protecting views from within, which may include vistas beyond the park. Much of the ancient woodland is close to historic parks. Provided development can be

accommodated outside these areas, and with due respect for them, they offer the opportunity to enhance development not only by providing appealing green spaces, but also by offering the beginnings of a framework for green infrastructure corridors linking habitats which can be enhanced as part of the development.

NOTE Proposal for an eco-community at Rackheath

During the preparation of the JCS, the Government developed its proposals for exemplar eco towns, and invited proposals for their implementation. Initially, such a proposal was made in respect of land at the former Coltishall air base. This was opposed by the local authorities in the area, including the authorities within the GNDP. One of the submissions made by a prospective developer at the issues and options stage was for development at Rackheath, and sought to espouse the highest environmental standards. The GNDP has been supportive of the efforts of the promoters of the scheme to be included within the government's eco-towns scheme. It should be emphasized, however, that the proposal to include an allocation outside the Norwich northern distributor road at Rackheath is independent of the Government's eco-towns programme. Therefore, if the proposal for an eco community at Rackheath should fall by the wayside, the allocation will remain. Equally, however, if the eco community proposal proceeds, it will contribute to meeting the housing provision in this area. The original proposal for an eco town at Coltishall has been dropped.

Appendix 3 - Southern part of the NPA

1 Introduction

This appendix aims to provide a rationale for the optimum pattern of growth in South Norfolk, set out in the Joint Core Strategy (JCS) Favoured Option, which protects the factors identified in the assessment of the area as important to the local character and distinctiveness. It will provide evidence that allows the Greater Norwich Development Partnership to demonstrate how the Favoured Option (Appendix 6) reinforces the attractiveness of existing settlement pattern and the settlements themselves, having regard to their form, characteristics and functions.

The initial JCS Issues and Options Consultation (November 2007) identified a number of possible growth locations in South Norfolk, as well as the capacity of the Norwich Fringe, consequently this appendix broadly covers:

- Norwich Fringe Parishes: Colney, Costessey, Cringleford, and Trowse;
- West: Costessey and Easton;
- South West: Hethersett and Little Melton;
- Wymondham;
- South/Mangreen: Mulbarton, Swardeston and Swainsthorpe;
- South East: Poringland; and
- Long Stratton

Section 5 of this appendix provides more detailed settlement assessment of the above, excluding Trowse and Poringland, which were not proposed locations for large-scale growth in any of the consultation options.

Initial Sustainability Appraisal and infrastructure work indicated that focussing on one or two major urban extensions was the most appropriate approach, both north and south of the Norwich, with the South West and Wymondham being the most suitable locations in South Norfolk. However, as referred to above, this appendix sets out why, in the light of local circumstances, a different approach is justified in South Norfolk to that in Broadland and how this approach complements development across Norwich and Broadland to produce a more robust overall strategy for delivering housing development across the NPA.

2 Character Overview of South Norfolk's sector of the Norwich Policy Area

2.1 Character Overview

The different approaches advanced north and south of Norwich reflect the fact that the South Norfolk element of the Norwich Policy Area (NPA) is distinctly different to Broadland. To the south there is currently very little contiguous

development with the city, New Costessey being the only built up area of South Norfolk that is not physically separated from Norwich. Features such as the Yare Valley, the A47 Norwich Southern Bypass and the Norwich-Cambridge rail line mark a break between the urban edge and the wider rural area.

Beyond the A47 there is a diverse range of settlements, with a higher number of freestanding large villages than to the north of the city and the NPAs only market town, Wymondham. These settlements have varying levels of service provision and facilities, detailed in the Settlement Evaluations below. Many, such as Wymondham, Hethersett and Long Stratton, retain a wide range of core features including shops, high school, doctors, libraries, community and religious buildings, local employment opportunities and leisure and recreation facilities. The presence of these facilities has been the focus around which these settlements have continued to expand over recent years. However, despite expansion, each of these places has retained an individual identity.

Beyond these larger settlements is a network of smaller villages and hamlets, some with a core of facilities (often a primary school, community hall and church), but which look to nearby larger neighbours for key day-to-day activities. Consequently, whilst growth in the South Norfolk sector of the NPA has been driven in part by the importance and proximity of Norwich as a regional focus for employment, retail, cultural and other key activities, the area has retained a rural settlement pattern rather than developing a suburban character.

2.2 Pattern of Past Growth

Despite the development pressures across the Norwich area, the dispersal of this growth amongst a number of settlements in South Norfolk, consolidating existing settlement forms, has allowed their physical separation to be maintained.

Studying historic maps of the settlements illustrates how recent development has reinforced past patterns. The maps studied illustrate the extent of development in: 1946, the start of the modern planning era; 1988, showing how the significant growth over the intervening 40 years has been accommodated; and 2008, showing how the South Norfolk Local Plan allocations, the largest planned allocations in district's history, have been incorporated

For the South Norfolk NPA settlements there has been a broad trend of consolidating development between extremities/parameters that were often evident in 1946. For settlements such as Hethersett and Wymondham the outlying development and features, including roads and railway lines, which still mark the extremities of the settlement were largely apparent on the 1946 maps. For example, in 1946 development at Wymondham clearly extended along Norwich Road, Tuttles Lane and Chapel Lane/Barnham Broom Road and much of the subsequent development to 1988 'infilled' this triangle, whilst growth from 1988 to 2008 was focussed on the area between Norwich Road

and the Norwich-Cambridge rail line. For Hethersett too the nucleus of the settlement around Lynch Green, Great Melton Road, Henstead Road was evident in 1946, with outlying development at New Road, Mill Road and Old Hall, which subsequently became part of the main development by 1988. Between 1988 and 2008 development was focussed on the area between the village and Shop Lane and at Myrtle Road. Similarly, more linear settlements, such as Long Stratton, Easton, Old Costessey and Little Melton, have tended to expand along side roads branching out from the main spine road, but without extending the linear form of the settlement beyond the 1946 extents.

Whilst some settlements have clearly grown more quickly and to a greater extent than others, the pattern of growth has very much been dispersed across a range of locations.

2.3 Landscape Character Assessment

In preparation for the current South Norfolk Local Plan, and in recognition of the continual pressures on the landscape surrounding the key settlements and the vulnerabilities to loss of settlement identity, a landscape character assessment was undertaken which focussed on the NPA (Land Use Consultants, 2001). The aim of the assessment was to ensure that further development respects and enhances the landscape and avoids detrimental impacts. As a result of the landscape character assessment a number of designations were included in the 2003 South Norfolk Local Plan to protect some of the key features of the NPA: specifically:

- River Valleys, these are considered to have their own special character and visual identity and/or make an important contribution to the urban form (the importance of river valleys are also picked up under the Green Infrastructure Strategy, see 2.3.3 B. i) below);
- The A47 Norwich southern bypass landscape protection zone, which
 is a planning tool intended to prevent adverse landscape impacts,
 protecting the landscape setting of the road (which itself was designed to
 fit into the landscape), views to and from the City (including long distance
 views), elements that contribute towards the historic setting of Norwich,
 such as the wooded slopes, and to help prevent the road becoming a hard
 boundary for development; and
- Open gaps between settlements, where these were considered to be particularly vulnerable to encroachment. Three settlement gaps were identified where openness was considered to be an important characteristic: Costessey to Easton, Cringleford to Hethersett and Hethersett to Wymondham. These gaps vary in size and character:
 - Costessey Easton: fragmented 2.5km gap which surrounds the existing and allocated employment and commercial areas at Longwater on both sides of the A47 Norwich Southern Bypass, and incorporates the Royal Norfolk Showground and various mineral extraction sites:
 - Cringleford Hethersett: 3.35km gap, which wraps around the eastern edge of Hethersett, includes large tracts of open land, but also covers a stretch of the A47 Norwich Southern Bypass, and the development at the Thickthorn interchange; and

 Hethersett – Wymondham: a relatively undisturbed 2.25km gap, with some fragmented frontage development to the B1172.

The JCS Issues and Option consultation showed significant support for a pattern of development that safeguarded existing locally protected landscape designations.

3 Alternative Development Patterns and Core Guiding Principles

3.1 Ensuring Strategic Gaps

As noted in 2.2.3 above (Landscape Character Assessment), protection of the setting of settlements in South Norfolk has been a key feature of the development of the area; balancing the need for new development in locations with good access to the facilities, services and opportunities in Norwich against retaining the rural character of the area.

The Settlement Evaluations (section 5, below) indicate some of the key characteristics of the areas considered for growth. Taking these characteristics into account the Favoured Option allows for the proposed levels of growth to be accommodated whilst maximising containment within existing features, whether these be environmental constraints, landscape features or existing manmade barriers such as roads and railway lines. Importantly, the Favoured Option should allow for a choice of sites through the Site Specific Policies DPD that retains the open gaps between settlements which have become a key part of both the character of the area and important in retaining the individual identity of settlements.

3.2 An Appropriate pattern of growth

3.2.1 Why an urban extension is not appropriate for South Norfolk

As noted in the *Character Overview* the scope for urban extensions to the south of Norwich are physically limited by a number of factors, principal amongst these being the River Yare and A47 trunk road. That none of the proposed growth options included an urban extension to the south of Norwich, in the literal sense, highlights the limited potential for this form of development south of the city; i.e. the largest growth proposals in the post-June 2008 options considered for South Norfolk represented a doubling in size of an existing market town, the amalgamation of two villages around a new centre, or a new stand alone settlement. In all cases these were clearly detached from the city itself.

Between the boundary with the Broads Authority at Trowse and Bawburgh/Colney Lakes the River Yare forms the administrative boundary between the City and South Norfolk. The GNDP Green Infrastructure Strategy identifies one of the key issues for the whole area as being the 'importance of riverscapes to the overall character of the Greater Norwich

Area generally, and their particular importance to the character, identity and setting of Norwich City'. The Green Infrastructure Strategy goes on to propose this part of the Yare Valley as a Sub-Regional Green Infrastructure Corridor. The Strategy highlights the existing public access to the valley (via the Yare Valley Walk) between Cringleford and Bowthorpe and identifies the potential to extend this access to Trowse, Whitlingham and beyond. The Valley is also identified as a Priority Wetland Habitat Enhancement and Creation Area. Consequently encroachment of development into the Valley could seriously impinge these elements of the Green Infrastructure Strategy.

Many of the areas immediately adjoining the river fall within Environment Agency flood risk Zone 3 and 2, again limiting the scope of development of urban extensions. The river valley also contains a number of SSSIs and County Wildlife Sites, which particularly constrain development around Cringleford and Colney.

Beyond the Yare Valley the A47 Norwich Southern Bypass trunk road forms a significant physical barrier, limiting the scope for large-scale growth even at those locations with potential (Cringleford and Costessey). Beyond the main road interchanges with the A146, A140, A11, B1108 and A1074, which are generally not pedestrian and cycle friendly environments, there are few physical crossing points from the Norwich fringe to the countryside beyond. The edge of the built-up area between Trowse and Keswick is also bounded by the mainline Norwich-Cambridge railway, again with limited physical crossing points, which reinforces the difficulty of creating an urban extension in this area.

Within these constraints the closest alternative to a direct urban extension is to consider the role and capacity of those sustainable locations in close physical proximity to the city, whilst recognising their individual characters. As such growth locations have been included at Cringleford and Costessey/Easton and further consideration will be given to the role of Trowse, as part of the settlement hierarchy, in accommodating part of the 1,800 houses on smaller sites.

It is considered that the distribution of development in the Favoured Option, including active consideration of sites in the Norwich fringe for part of the 1,800 dwellings on smaller sites, maximises the opportunities to balance the benefits of proximity to the city with the physical constraints that make a large scale urban extension unviable.

3.2.2 Links to Strategic Employment Locations

In addition to providing a sustainable location for housing, the Norwich fringe is also a key location for employment uses. In line with the requirements of Regional Spatial Strategy (RSS) Policy NR1, provision needs to be made for employment growth at both Colney/Cringleford (Norwich Research Park and the Norfolk and Norwich University Hospital) and Costessey (Longwater). The ultimate extent of the land requirement for the NRP, beyond that allocated in the current South Norfolk Local Plan, has yet to be established. However the

uniqueness of the opportunity for uses linked both conceptually and physically with the University of East Anglia (UEA), Norfolk and Norwich University and Spire Hospitals and the existing institutes that make up the NRP could mean that an over-concentration of housing in the Cringleford-Colney area prematurely limits the scope of the broader NRP.

Conversely, a strategy that promotes development at a range of locations offers the opportunity to link housing development to both of these strategic employment locations, along with the Hethel Engineering Centre, which falls within the Wymondham/A11 corridor, which is also identified in RSS Policy NR1. Further employment growth at Wymondham and/or Hethersett, particularly if high tech or rail related, would also be compatible with the RSS.

3.2.3 Developing Local Employment

Wymondham, in particular, has seen a steady take up of employment land, with less than 7% of the land allocated in the SNLP remaining uncommitted at 31st March 2008. This limits the opportunities remaining on the existing employment areas/allocations in the town, particularly for any users requiring a larger site. The strong take up of employment and the proximity of the Hethel Engineering Centre suggest that a balanced approach to delivering housing and employment at Wymondham could create an opportunity for a more self-contained settlement, whereas more substantial growth could create an over reliance on longer-distance commuting to Norwich.

Although not identified as a strategic employment location, Long Stratton also has a relatively strong employment base, including the offices of South Norfolk Council and Saffron Housing Trust. Within Long Stratton there is currently a policy of restraint in terms of future development in the village, due to the traffic congestion problems; conversely there is perceived to be a lack of scope for further expansion of the successful employment area at Tharston Industrial Estate, and during the early call for sites for the South Norfolk LDF a request was submitted to increase the size of this estate.

Other settlements with more limited employment bases, less direct access to strategic employment areas and less prospect of improved non-car access to Norwich, such as Mulbarton and Poringland have not been promoted through the growth options as significant locations for major development.

Initial consultation on the JCS Issues and Options indicated support for a development that 'sought to ensure that all sectors of the economy would have opportunities to expand' (GNDP Policy Group report, 24/06/08), consequently growth that relates to a range of locations and employments sites, as well as to Norwich, would support this aspiration.

4 Limited Growth

4.1 Relationship to infrastructure

It should be recognised that the combination of updating of the housing requirements (from a 2006 base date, used for the Issues and Options and Technical Consultations, to the 2008 base date used for choosing the Favoured Option for the Public Consultation) and balancing the growth north and south of the city, has resulted in a reduction of 3,000 units to be located in the South Norfolk part of the Norwich Policy Area (see section 6 of the main Topic Paper). This has significant impacts in terms of balancing the distribution of development across a variety of locations to limit the risks to delivery, provide choice within the housing market, match growth with the strategic employment locations etc., against the quantum of development needed to support infrastructure.

The Favoured Option has evolved from the options presented in the Technical Consultation. Option 1 performed strongest in the Sustainability Appraisal and provided for the most economic provision of infrastructure, but raised concerns in terms of local landscape impacts. Option 2 added Long Stratton as a growth location, in order to facilitate improvements to the A140 as a priority for the local authorities. The Favoured Option uses the same broad locations as Option 2, but reflects the overall reduction in the amount of development to be allocated¹.

4.1.1 Transport and Access

One of the key factors in meeting the requirements of the RSS will be achieving a significant change in travel mode from car to public transport, walking and cycling. Although each of the individual growth locations in the A11 corridor is considered unlikely to be large enough to support the goal of high-quality public transport, using Bus Rapid Transit, the overall concentration of development within the A11 corridor (a total of 4,400 units) 'gives an opportunity to sustain reasonable bus services' (SA of Favoured Option, 23/04/09) in order to promote a modal shift. In addition 4,000 units are proposed at Attleborough under the Breckland Core Strategy and there remains the potential for some further smaller sites within South Norfolk with access to this corridor, at villages such as Spooner Row, Morley, Wicklewood, Ashwellthorpe and Ketteringham², where further investigation is needed to assess to what extent these which could bolster the viability of services.

The 1,000 units proposed at Costessey/Easton is also considered to be of insufficient size to deliver radical improvements to public transport; however, a Bus Rapid Transit service is already proposed for the Dereham Road corridor as part of the current Norwich Area Transport Strategy (NATS) refresh. The Public Transport Assessment of the favoured option indicates that the

¹ The overall reduction in allocations reflects the increase in completions and commitments.

² Levels of development in smaller villages will be dependent on their classification in the overall settlement hierarchy.

business case for an incremental extension of a BRT service on the Dereham Road corridor to any further development at Costessey/Easton should be considered within a holistic approach to the design of a high quality public transport network to serve this corridor. The Assessment of the Favoured Option goes on to recommended that for Long Stratton the extension and improvement of existing services is going to be the most appropriate solution and recommends a number of interventions that would help maximise the public transport take up of the Favoured Option.

Consideration also needs to be given to the scope for walking and cycling. Direct non-car access between Hethersett, Cringleford and Norwich has been improved though the provision of a dedicated cycle path along the B1172, whilst development at Cringleford will be able to maximise the linkages with the Norwich Research Park, including the hospital and UEA. Beyond these links, the Bowthorpe perimeter road connects Colney with the Bowthorpe employment area and the proposed Bawburgh/Colney Lakes recreation area. Further investigation would be required to assess the potential for walking and cycling with, for example:

- a safer and more pleasant environment in Long Stratton village centre facilitated by the bypass;
- the improvement of the currently poor links between Easton and the services, facilities and employment at Longwater and Costessey; and/or
- improvements to Hethersett Lane to facilitate better access between Hethersett and the NRP

Overall the scope for increased walking and cycling should be improved by linking growth locations to a range of strategic employment sites and supporting the services and facilities in existing settlements.

In terms of highways capacity all of the proposed growth options present concerns, particularly with impacts on the Trunk Road network and the A47 Norwich Southern Bypass junction improvements. Essentially all of the growth option combinations raise concerns over the same junctions:

- A1074, Longwater the long-term capacity of the A47 Longwater interchange has already been a concern in relation to existing committed development in the area. Although an agreed solution exists to mitigate the impacts of the currently permitted development, this has yet to be implemented and may need to be reviewed in the light of the addition development proposed.
- A11, Thickthorn A range of solutions have also been proposed which vary widely in terms of the level of intervention and cost.
- A140 Harford a number of specific measures have been proposed to accommodate any additional traffic from growth in the A140 corridor, which would also incorporate measures to aid public transport prioritisation.

The potential for a growth location at Long Stratton is linked to the status of the A140 as a significant corridor connecting Norwich to Ipswich and the Haven Gateway, as well as locally important for settlements in South Norfolk, and the opportunity that this could be enhanced through the provision of a Long Stratton Bypass. The bypass, a route for which already has planning

approval, has been a long-term ambition of both the County and District Councils. The capacity for Long Stratton to accommodate growth is clearly linked to the provision of a bypass, without it the capacity is very limited due to the existing congestion in the heart of the village. The potential environmental improvements afforded by the bypass led to the conclusion in the Sustainability Appraisal that the consequent possibilities for local investment and economic development makes it a suitable location for growth.

At the Issues and Options stage there was clear support for growth related to a bypass in the main consultation document responses, with 68% of respondents supporting 'major mixed use growth at Long Stratton to improve that section of the A140'. In parallel a separate consultation was undertaken asking specifically about (a) whether the JCS should promote growth at Long Stratton in conjunction with improvements to the A140 and (b) what scale of development is appropriate for the settlement. The results were more equivocal, showing an almost even split in those supporting development and those not. Not surprisingly the respondents tended to favour the lowest level of growth needed in order to achieve the bypass.

The volume of traffic through the village causes a number of environmental and social impacts in terms of air quality, noise, degradation of the historic environment, severance of some services from residential areas etc. The allocation of 1,800 homes, the minimum needed to ensure delivery of the bypass, will help achieve the goal of improving the quality of the environment in the village whilst also complementing the overall strategy by providing greater choice in terms of housing markets.

4.1.2 Water Cycle

In terms of the Water Cycle Study, phasing of development in some locations may be necessary to enable improved infrastructure to be providede tio serve new development. The Costessey/Easton area and Hethersett/Cringleford will require new strategic sewers to link to Whitlingham for wastewater treatment. Upgrading will be required to the waste water treatment works to protect water quality to accommodate the proposed growth at Long Stratton.

4.1.3 Renewable Energy

In terms of renewable energy provision the scale of development proposed at each of the growth locations is still sufficient to facilitate onsite renewables, with 500 units being the likely threshold for an on-site renewables requirement in the JCS. Ultimately it will be the density, layout and specification of the specific schemes that will determine the actual provision. The issue of renewable energy will be particularly significant in the Costessey/Easton area and the A11 corridor where there are concerns over the capacity of the existing network to accommodate further development, particularly any employment uses that place significant electricity demands.

4.1.4 Education

The most significant concern identified through the current infrastructure and Sustainability Appraisal work has been the lack of a certain solution to secondary education provision. Previous options have proposed levels of growth that are significantly in excess of the preferred option, yet still proposed further development beyond the current JCS period to secure a secondary education solution. The loss of units from both the Wymondham and Hethersett High School catchments is broadly reflective of the loss of 3,000 units from the overall South Norfolk NPA requirement caused by increased commitments. The impact of the favoured option, which has smaller but still substantial allocations in the catchments of Costessey, Hethersett, Long Stratton and Wymondham High Schools are still being assessed in conjunctions with the schools and the governing bodies.

4.1.5 Spreading the Benefits

Overall, although the cost of providing infrastructure is a crucial consideration, a balance needs to be struck between the potential additional cost of providing infrastructure across a wider range of growth locations and the greater spread of the potential benefits from new development to a wider range of existing communities.

4.2 Capacity of settlements to absorb growth

As historic growth patterns have indicated, the growth location settlements in South Norfolk have experienced sustained growth over a number of years. In many cases this growth has been accompanied by improvements to key infrastructure, such as new and improved schools, community buildings, recreation and open space provision, health care facilities etc. However it has often been difficult for settlements to absorb the levels of development they have faced, with criticisms in public consultation responses that the benefits of development arrived after the impacts of development and the occupants of new developments have not integrated with the existing community. If any delays do occur with infrastructure provision, these issues are likely to be felt more acutely with a strategy for the NPA that solely promotes accelerated growth in a few locations.

The main infrastructure issues are covered above, however there are also issues relating to physical capacity of these settlements. Particularly significant is the historic fabric of Wymondham, where the impact of increasing numbers of users on the town centre may make higher levels of growth difficult to absorb. There is no doubt that 2,200 additional properties will have an impact, however the opportunities for expanding the town centre functions beyond the core Market Place are more likely to be sufficient to cope with this more moderate expansion than the doubling of the settlement proposed under earlier growth options. Specifically, the Retail Study already identifies Wymondham as being potentially deficient in terms of convenience and comparison goods floorspace, consequently there is already pressure to

make more use of town centre and nearby sites; however, should an even greater level of development be proposed, requiring a 'rival' centre to be established (due to lack of suitable expansion sites in/around the town centre, lack of parking, restricted access etc.), the study also identifies that this could undermine the existing centre. Hence a balance needs to be struck between a level of growth that supports the town centre and can be accommodated by development that enhances the centre against greater growth that would overheat the town and undermine it by necessitating a 'rival' focus.

It will be more difficult to assess the capability of the growth locations to both establish a community identity and integrate with the existing communities. Although these problems would be common to both the Favoured Option and the other suggested patterns of development, the Favoured Option would allow for a more gradual delivery of development across locations that already have individual identities rather than swamping communities or attempting to forge completely new identities. The potential spread of new/improved facilities across a wider range of locations may also aid community integration, with a number of the favoured growth locations also having a 'catchment' of smaller rural settlements that could also benefit.

5. Settlement Evaluations

5.1 Colney and Cringleford

Form, character, scale, local distinctiveness

Colney is situated mainly within the Yare Valley and although dispersed in nature, forms an attractive identifiable settlement with the main nucleus of housing focused around the church. Colney Hall and its parkland form an important and significant feature to the north of the B1108 Watton Road, beyond which lie the Colney/Bawburgh Lakes County Wildlife Sites.

Cringleford is a large, attractive village located south of Norwich, either side of the A11, separated from the City by the Yare Valley. The River Yare and its floodplain form the eastern limit to the built-up area. There are many trees throughout the village, contributing in some parts to a spacious, 'green' outlook. The quality of the environment in the core of the village is also reflected by the designation of a Conservation Area.

The A47 Norwich Southern Bypass has a major impact on the landscape west of the village, and severs some smaller areas of farmland adjoining the village from the surrounding countryside. The railway line forms a physical barrier to the south of the village, with areas of very attractive landscape between the built-up area and the line. These include the floodplains of the River Yare and the Intwood Stream along Keswick Road, the valley of Cantley Stream to the west, and the grounds of Cringleford Hall. The Yare Valley and those of the Intwood and Cantley Stream tributaries include a number of County Wildlife Sites, particularly to the south and east of the village. Not surprisingly flood risk is a constraint to development within these valleys.

The more recent development, to the north of the A11, built at the higher densities characteristic of current housing, is bounded by Roundhouse Way, which connects the A11 to Colney Lane and the NNUH and NRP.

Function

The village possesses a good range of social and community facilities including a shop/post office, village hall, medical centre and primary school, plus local employment at the Intwood Road complex. Additional facilities are due to be provided as part of the Roundhouse Park development, currently under construction, which will incorporate a primary school, community hall and new district centre. The village also has access to the facilities in Eaton, including the district centre immediately to the north of the river; however, the capacity to improve access is limited by Cringleford Bridge, which is an Ancient Monument.

One of the principal advantages of this location is the proximity of residential areas to the existing and future research, health and education opportunities at the NRP, NNUH and UEA, as well as the high quality public transport and cycle links to the city centre.

Conclusion

The scope for large-scale development is broadly confined by environmental constraints to the area north of Cringleford and south of the NRP, bounded by the A47 and Colney Lane. Currently the extent of the further land required for the NRP has not yet been finalised, and scope will need to be given to potential further expansion of this flagship employment site. Given that the existing commitment at Cringleford is likely to rise to over 800 units with intensification of the current allocation, the proposed 1,200 units in the Favoured Option will result in approximately 2,000 units to be delivered by 2026. Further work would be needed to establish both the capacity of local infrastructure to accommodate development beyond these 2,000 units, and the landscape/character implications of concentrating development into this location. Education issues to be resolved, as section 4.1.4 above.

5.2 Costessey and Easton

Form, character, scale, local distinctiveness

Costessey is situated west of Norwich in the valleys of the Rivers Wensum and Tud. There are three main residential parts of the parish: Old Costessey, which developed along The Street south of a loop in the Wensum; New Costessey, a densely built up area of 20th century housing contiguous with the built up area of Norwich; and Queens Hills, which is currently under construction in a former minerals extraction/processing site, west of the existing settlements, between the Rivers Tud and Wensum. The Tud Valley provides an attractive open break between Old and New Costessey, with the break along Norwich Road/Townhouse Road being particularly significant.

Costessey has experienced considerable residential development since the 1960s, comprising both estate scale development and smaller sites within the built-up area. The intensity of development potentially masks the numerous environment and heritage designations in the area. Most significantly the River Wensum to the north (which forms the administrative boundary with Broadland) is afforded international SAC status. Beyond the river itself, the floodplain and valley sides of the Wensum at the western end of the village have numerous SSSIs and County Wildlife Sites. There are further CWSs in the Tud Valley, close to the Queens Hills development. Within Old Costessey itself, there are numerous Listed Buildings, two Conservation Areas and two significant areas of heavily wooded, low-density development, which help give the village its character.

The Longwater area of Costessey lies either site of the A47 trunk road, close to the A47/A1074 junction, using semi-derelict land and former minerals workings. A number of high profiles uses (supermarket, retail warehouses, car showrooms) are prominent from the A47, whilst the remainder of the site (along Dereham Road and between the retail park and the valley of the River Tud) is a mix of industrial and commercial uses along with continued mineral extraction. To the east is the Norfolk Environmental Waste Services waste

disposal and recycling facility, which acts as a constraint to further residential development in the immediate vicinity.

Easton originated as a 'street village' with development along the main road; more recent estate scale development has taken place south of the old A47. The village has developed on a 'plateau' with the open landscape to the north and south falling away to the Tud and Yare Valleys respectively. To the north the boundary of the village is formed largely by the line of the A47 Norwich Southern Bypass, to the west are the visually important wooded grounds of the Vicarage; whilst to the east is the open landscape of the Royal Norfolk Showground. To the south of the village is Easton College, which has continued to expand over recent years and will play an important part in achieving the JCS policy of promoting Norwich 'as a "learning city" ... (where an) expansion of existing further and higher education opportunities will be encouraged'. The College also provides meeting and conference facilities as well as local sports and recreation opportunities.

Function

The two traditional residential areas of Old and New Costessey offer a wide range of social and community facilities. New Costessey effectively functions as a suburb of Norwich, with the local centre at Norwich Road and facilities such as the high school, medical centre, library and a range of community buildings. Old Costessey has similar facilities to a large rural village (local shop, parish room, primary sector schools etc.), but benefits from good access to the higher order facilities in New Costessey.

The new development at Queens Hills is intended to be largely 'self sufficient' in terms of local facilities such as convenience shops, primary school, community hall etc., but integration with the existing community will partly come about through the use of higher order facilities in New Costessey and the sharing of some new recreational facilities with Old Costessey.

As a Norwich fringe parish Costessey has consistently been seen as a sustainable location for further residential and commercial development. As at 1st April 2009 the remaining commitment of residential development stood at 1,452 units. This alone represents approximately 50% more development than has occurred over the past 15 years.

The Longwater area presently contains a variety of commercial uses including a supermarket, retail warehouses, restaurants, car showrooms, gym, waste disposal site, general industry, storage uses and mineral workings. These provide both local employment opportunities and facilities that serve a wider catchment as a strategic employment location, as identified in the RSS. Although take up of land at Longwater has been steady, particularly in terms of the retail, restaurant and car showroom uses close to the A47, there is still approximately 19.5 hectares of employment land available.

Although Easton has a primary school and village hall, other facilities are limited. Bypassing of the village has resulted former service/employment sites

along the old A47 being reused for housing. The availability of employment, retail, high school, medical and other facilities at Costessey is an advantage, however the very proximity of these facilities means that without significant further development the scope for substantially improved facilities within the village itself are limited. This problem is exacerbated by the current lack of safe foot and cycle links and direct public transport access between Costessey and Easton.

Conclusion

With the largest outstanding commitment in the South Norfolk NPA at Costessey/Easton, this sector already needs to absorb more development than is proposed in most of the growth locations. This commitment is concentrated in the two uncompleted housing allocations at Costessey. Environmental, landscape and character constraints make accommodating significant development around Old Costessey undesirable. Consequently the options for large-scale growth are focussed on extensions to Lodge Farm/Bowthorpe and at Easton. Given the limited number of settlements in which to locate the unallocated smaller sites in the South Norfolk NPA, and depending on the final choice of site(s) to accommodate the 1,000 units in Costessey/Easton, it is likely this area will need to absorb some of the unallocated 1,800 units. Although access to the city centre will be significantly improved by Bus Rapid Transit on the Dereham Road, concerns over wastewater treatment, secondary school provision .and the Longwater interchange would suggest that a higher growth option figure would be difficult to accommodate.

5.3 Hethersett and Little Melton

Form, character, scale, local distinctiveness

Hethersett is located on the B1172 on an elevated area of land, which falls away towards the north west and south east. There are attractive long distance views from the village in both directions; with particularly fine views towards the south east where there are several mature trees and mixed plantation woodlands. Views back towards the village from this area and from the B1172 are also noteworthy. The village has clearly defined boundaries on three sides; to the north east by Shop Lane/Back Lane, to the south-east by the B1172 (including attractive wooded areas and undeveloped spaces) and to the west by New Road. Hethersett has experienced significant growth since the 1960s with both estate scale development and smaller infill plots within the built-up area. Despite the extensive growth of the village over the last four decades, the village still has an historic core containing a number of listed buildings.

South of the B1172 the landscape includes the setting of listed buildings at Park Farm Hotel, Old Hall School, St Remigius' Church and Thickthorn Hall, whilst the grounds of both Hethersett Hall and Thickthorn Hall are also protected as Historic Parklands.

Little Melton is a broadly linear village with small-scale estate development behind the main road frontages. The landscape, particular to the north is very open, with views to/from the village from the B1108. Breaks in frontage have helped retain the rural character of the settlement and despite the proximity of the village to Norwich, the NNUH, NRP and UEA, allocations have been limited to 77 houses over the past 15 years in order to avoid swamping the character of the village. The A47 Norwich Southern Bypass forms a distinct barrier to the east.

Function

Hethersett has a wide range of facilities and services, including a modern village hall/community centre, plus small-scale local employment opportunities. However the retail and employment facilities are clearly not what would normally associated with a settlement of this size and the village is reliant on the relatively easy access to nearby opportunities at the NRP, UEA and the city centre.

Little Melton functions as a smaller rural village, with a range of local facilities that have been the basis for supporting modest growth, but relying on proximity to Hethersett and Norwich for the most day-to-day activities.

Conclusions

If the separation of settlements in the A11 corridor is to be maintained as an important feature of the pattern and character of South Norfolk, the scope for expansion of Hethersett is effectively limited to north/north-east. However, development to the north will itself be constrained by the need to maintain sufficient distance from Little Melton to allow the village to retain its role and character as a small rural community. Whilst the physical capacity to accommodate more development and maintain settlement separation may exist, the capacity of secondary education in Hethersett is unlikely to support development in excess of 1,000 units proposed (particularly when taking into account the associated development in Cringleford that affects Hethersett High School), without jumping to a much higher level of development which would not respect the local character and settlement pattern.

5.4 Long Stratton

Form, character, scale, local distinctiveness

Long Stratton has developed from its linear origins as a street village located on the Norwich to Ipswich Road. To the west of the A140, estate scale development has taken place in four distinct areas, from the 1960s onwards. This has considerably altered the original historic form of the settlement. Development to the east of the A140 has been limited to the more recent Churchfields development.

The historic core of the village has a concentration of Listed Buildings and a Conservation Area that reflects the quality of the built environment.

Congestion through the centre of the village is likely to see it become the first air quality management zone in South Norfolk, which gives an indication of the potential health and environmental impacts of continued traffic through the village.

Function

Long Stratton has a wide range of retail and community facilities. The number of shops and services is already high for a settlement of this size, making it closer in function to a market town than most villages. With South Norfolk Council and Saffron Housing located in the village the employment base is also considerably larger than would normally be expected in a village of this size.

Conclusion

Provision of a bypass at Long Stratton is a priority and the 1,800 homes proposed is considered to be the appropriate amount needed to deliver a bypass plus the other necessary infrastructure, such as improvements to school provision, affordable housing, recreation facilities etc. The range of shops, services and employment in the village could be further enhanced with the removal of much of the through traffic, particularly the high proportion of commercial vehicles. However, an even higher level of development at Long Stratton would place an increased burden on other infrastructure in the village, such as secondary school provision, and on the remaining unimproved parts of the A140, which would be more complex/expensive to resolve.

5.5 Mulbarton, Swainsthorpe and Swardeston

Form, character, scale, local distinctiveness

Historically Mulbarton has developed around the triangle of roads that bound The Common. This part of the village retains the core of village facilities, such as the school, medical centre, village hall complex, church and public house. Important gaps in the frontage have been retained, preserving the rural character of this part of the village. The Common, has a range of Listed Buildings and is designated a Conservation Area. The northern entrance to the village is marked by the listed buildings at Paddock Farm, whilst views of the church are prominent throughout the Conservation Area.

More recently significant estate-scale development has taken place to the south of the village, which has had a considerable impact on the form and character of the settlement. The most recent element of this, at Cuckoofield Lane, is still under construction. Further significant development to the north and south would potentially create coalescence with Swardeston and Bracon Ash.

Swainsthorpe is a small rural community concentrated between the A140 to the east and the Norwich-London railway line to the west and centres around

the church. The frontage to the A140 is marked by the public house and the former filling station, currently used by Framingham Tractors.

Swardeston has developed as a street village along the B1113. To the east of the B1113 is some small-scale estate development, beyond which the landscape is relatively open. To the west the more sporadic development around The Common gives the settlement a very rural character.

Function

Despite Mulbarton having grown extensively over recent years, there is only a limited employment base, primarily as part of the existing services in the village. Relatively poor links to Wymondham means that Mulbarton is reliant on Norwich for both higher order functions and the majority of employment. Swainsthorpe has very few facilities and has shown a gradual decline in population over the last 40 years, whilst Swardeston also has relatively few facilities; most noticeably there is no school provision within the parish.

Conclusions

Further work will be undertaken to establish the suitability and infrastructure needs of a new settlement in this location to accommodate future housing requirements. In the meantime these settlements will be considered for appropriate smaller scale development as part of the unallocated 1,800 units on smaller sites in the South Norfolk sector of the Norwich Policy Area.

5.6 Wymondham

Form, character, scale, local distinctiveness

The origins and importance of Wymondham as a market town are clearly reflected in its layout and fabric. The Market Place is the focal point of roads from all directions and it is one of the highest points in the town centre.

The building of the Abbey after the Norman Conquest prevented westward development. The best views of the town are from the north west and south west. From the north west the splendour of the Abbey lying in the river valley can be seen from some considerable distance. From the south west the Abbey is glimpsed through trees and hedges that line the approach roads. From the north, the gently rolling countryside rises up to Tuttles Lane with some notable tree groups around Downham. Views from the northern side of the town looking outwards are extensive, particularly towards the west.

Wymondham's central area is densely packed with historic buildings. Within the Conservation Area some 203 buildings are listed as being of special architectural or historic interest, including the iconic Market Cross. To fully appreciate the character of the town it is necessary to look behind the facades, and between and beyond the buildings on the street fronts. Long narrow 'burgage' plots running back from the street still clearly predominate in the central area. A second Conservation Area exists at The Lizard, the large

green area fronted by terraced properties that forms an important feature between the railway line and the A11 bypass.

Function

Wymondham clearly functions as a successful market town, boasting a range of retail facilities, local services, community groups and employment opportunities; this is particularly noteworthy given the proximity of the town to Norwich. Although at the time of producing the South Norfolk Local Plan the take up of employment land in Wymondham had been considered relatively slow, subsequent permissions mean that there is now less than 1.5ha of the almost 22ha allocated land. Indeed the attractiveness of Wymondham's location, with its good road and rail links, has attracted a number of high profile employers, including the headquarters of the Norfolk Constabulary. Community facilities, such as the new library, Central Hall, Ketts Park etc. are already well used due to the on-going growth of the town. Wymondham also acts as a focus for a range of surrounding rural settlements, offering an alternative to both Norwich and the nearby market town of Attleborough for key day-to-day activities.

Conclusion

The outstanding housing commitment plus the allocation of 2,200 new homes makes Wymondham the largest growth location in South Norfolk yet, other than Long Stratton, it is the furthest from Norwich. The proximity of Hethel Engineering Centre and the release of further employment land as part of the LDF process could help Wymondham become more self contained; however, a push for a higher level of housing growth would make this increasingly difficult to achieve. The draw of Wymondham has been as a successful and attractive market town, focussed on its appealing historic core. However, the twin concerns of excessive new development are that the historic centre cannot physically accommodate significantly more activity without diminishing its appeal, whilst there remains the potential to undermine the existing centre with a new 'district' centre promoted as part of significantly larger growth. Secondary education issues remain to be resolved, as section 4.1.4 above.

6. Key outcomes for South Norfolk

The favoured growth option retains the broad pattern of growth from Option 2 of the Technical Consultation document, which itself was derived from Option 1, the option that performed strongest in the Sustainability Appraisal, but with the addition of Long Stratton as a locally important element. The quantum of growth at particular locations has been varied in order to better reflect the character of the NPA in South Norfolk and to help retain the identity of the settlements in this area.

The historic pattern of development in the South Norfolk sector of the NPA has been characterised by the expansion of clearly identifiable settlements of varying sizes and functions, the only urban extension being New Costessey.

The growth of settlements has, in some cases, been significant, but the retention of clear settlement boundaries and distinct gaps between settlements has helped retain the character of the area.

Although there may be some economies for infrastructure provision from larger growth proposals, distributing development to a number of growth locations could make delivery of housing more reliable and less vulnerable to unforeseen problems than concentration in a few locations.

Taking into account the existing housing commitments at 1st April 2009, even the smallest of the growth locations (Hethersett) will need to deliver at least 90 units every year by 2026, assuming development commences in 2014/15.

Distributing growth can relate the housing to the range of Strategic Employment locations identified in the RSS, as well as local employment locations such as Long Stratton.

Given the reduced level of overall housing post-1st April 2008, concentration of development in fewer growth locations could lead to the reduction in size/deletion of other locations; any further reduction in the size of growth locations could severely compromise outcomes such as delivery of the Long Stratton Bypass, a shift to sustainable transport patterns in the A11 corridor and the use of on-site renewable energy.

Appendix 4 – Evidence from implementation of new communities elsewhere

Introduction

The concept of building a new settlement as a way of managing large scale growth is not new to planning. In the past at different times theories have been put forward that advocated a large degree of separation so that the new communities were largely self-contained. This was a key principle in the development of the New Towns in the post war period. The greatly increased mobility that the vast number of people currently experience means that it is virtually impossible for a new settlement to be self-contained within the United Kingdom.

The current ideas for the creation of new communities hark back to the ideas of the Garden City movement, that of creating a series of new communities that are self-contained for lower level activities but that have fast and efficient forms of public transport linking them to an older more established town or city for higher order functions. This has been an underlying design principle in the planning of The Wixams, a new settlement in Bedfordshire.

The provision of employment areas, district level retail functions and community facilities which are accessible to the residents of a new community by means other than the private car is a key principle.

Local Context

The Regional Spatial Strategy, The East of England Plan, has set housing targets from 2001 to 2021. The target for Norfolk in this period is 78,700 new dwellings. The current position is that between April 2001 and 31st March 2007, 19,962 dwellings have been completed against a target for this period of 23,610 dwellings.

The Greater Norwich Development Partnership area, is made up of the local authority areas of Broadland, Norwich, and South Norfolk, including those areas within them under the control of the Broads Authority. The RSS target for this area is 37,500 new dwellings to 2021. The current position is that between April 2001 and 31st March 2007, 9,284 dwellings have been completed within the GNDP area compared with a target for this period of 11,250 dwellings.

A further factor that must be taken into account is that the Planning Policy Statement 3: Housing indicates that in preparing plans, planning authorities should ensure that the level of growth indicated by the RSS is maintained for at least five years after the end of the plan period, this means that a target of housing growth to 2026 is 46,875 new dwellings.

The level of growth that is expected means that in order to produce sustainable communities, a principle of concentrating the majority of growth into a number of new settlements is necessary. It is necessary because in

order to provide public transport and community infrastructure, growth densities need to reach a tipping point so as to provide a sufficient market for these services. As will be seen in the case studies there are different points when various services become viable.

Jobs growth is another key part of the growth strategy in the RSS, The GNDP area has a target for 27,000 new jobs by up to 2026. (see Employment and Town Centre Uses Topic Paper).

The GNDP published in November the Issues and Options stage of a Joint Core Strategy to cover the administrative areas of Broadland, Norwich and South Norfolk. The JCS has been produced in partnership by the three authorities and Norfolk County Council. In this document it indicated various options and locations for Strategic Growth. This paper covers some of the issues regarding the development of larger scale urban Extensions and New settlements, these are likely to be in the range of 5,000 -10,000; although it is not envisaged that this upper figure would be reached until perhaps 2031.

Case Studies

There have been a number of urban extensions and new settlements built over the last 20-25 years. This paper examines sites developed in this period, as these are most likely to have lessons from which we can learn. Developments that took place earlier would have been subject to a radically different system of planning, and infrastructure provision.

The research carried out has 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 that have been examined are:

- Cambourne, Cambridgeshire
- Newcastle Great Park
- Hampton, Peterborough
- Upton, Northamptonshire
- Northstowe, Cambridgeshire
- The Wixams, Bedfordshire
- Sherford, Plymouth
- Cranbrook, Exeter
- Dickens Heath, Solihull

These communities have been examined as they provide a variety of scales and locations in relation to the established city or town to which they are linked.

Timescales for delivery

Time is the key issue in regard to developing new settlements; from the evidence of the case studies the lead-time required for master planning and the planning process is significant.

- The average time between the initial proposals for a new settlement being agreed including broad location, and construction commencing is just over six and half years based on the case studies.
- Once construction has commenced the time before occupation of homes by the first residents is an average of a year.

The average build rates achieved by large scale developments that are already under construction are just under 240 dwellings per year. The majority of the case studies had multiple house builders per site. This is important as 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 site³. Homes built for a Registered Social Landlord as affordable dwellings are an important addition to these figures. Andrew Whitaker suggests 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 housing⁴. If we take this into account we can see that a maximum of 65-70 completions is likely on each individual site by a single housebuilder. However as the target for affordable housing is 40% of all dwellings in the GNDP, there will come a point within the development process where all of the affordable dwellings have been built out and the total number of completions will be purely that relating to market dwellings, as shown in Table 1.

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

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

| Construction Years | Market completions pa | Residual Market dwellings | Affordable completions pa | Residual Affordable dwellings | Total completions pa | Total build |
|-----------------------|-----------------------------|---------------------------------|---------------------------|-------------------------------------|----------------------|----------------|
| Total dwellings | | 600 | | 400 | | |
| 1 | 35 | 565 | 35 | 365 | 70 | 70 |
| 2 | 35 | 530 | 35 | 330 | 70 | 140 |
| 3 | 35 | 495 | 35 | 295 | 70 | 210 |
| 4 | 35 | 460 | 35 | 260 | 70 | 280 |
| 5 | 35 | 425 | 35 | 225 | 70 | 350 |
| 6 | 35 | 390 | 35 | 190 | 70 | 420 |
| 7 | 35 | 355 | 35 | 155 | 70 | 490 |
| 8 | 35 | 320 | 35 | 120 | 70 | 560 |
| 9 | 35 | 285 | 35 | 85 | 70 | 630 |
| 10 | 35 | 250 | 35 | 50 | 70 | 700 |
| 11 | 35 | 215 | 35 | 15 | 70 | 770 |
| 12 | 35 | 190 | 15 | 0 | 50 | 820 |
| 13 | 35 | 155 | | | 35 | 855 |
| 14 | 35 | 120 | | | 35 | 880 |
| 15 | 35 | 85 | | | 35 | 915 |
| 16 | 35 | 50 | | | 35 | 950 |
| 17 | 35 | 15 | | | 35 | 985 |
| 18 | 15 | 0 | | | 15 | 1000 |

Table 1: completion rates for 1,000 dwelling site assuming 40% affordable element

Table 1 shows the completion rates for a 1,000 dwelling site. If a new settlement of 5,000 dwellings is being planned it is likely that a maximum of 5-6 individual development companies would be involved, so approximately 1,000 dwellings each.

One of the big questions with regard to the major growth expected within the GNDP is the extent to which major developers will consider the sites to be individual rather than linked. The Greater Norwich Housing Market assessment identified a number of different housing markets within Norfolk. However Norwich and it environs is covered by a single market into which all the options for major housing growth would fall⁵. This is important because if a major home builder is involved in a number of these sites, they may consider some at least to be linked in so far as it will be appealing to the same market. For example if a single developer is involved in two sites in adjacent sectors the extent to which these are competing for the same clients may limit the sales on each site. More research is needed, with discussion among the major home builders to discover the extent to which they consider the Greater Norwich area to be one housing market. We need to identify how much this is likely to affect the phasing of development across different sectors, as this will have a relationship with the number of completions likely from these sites.

 $^{^{\}mbox{\scriptsize 5}}$ Greater Norwich Development Partnership, Issues and Options, Strategic Growth.

Table 2: Major milestones for new settlements developed in the last twenty years

Table 2 shows a breakdown of the progress made on a number of sites currently under development and some sites that are in the advanced stages of master planning. It is interesting to note that Northstowe and Sherford are both projecting growth figures far in excess of that which has been achieved historically.

If these projects achieve this level of growth they will provide a new model for delivering new settlements in shorter timescales than has previously been the case.

| Site | Initial proposal year | Outline permission granted | Construction commenced year | First homes occupied | Total number of dwellings | Total number completed | Average annual completion rate | Brownfield/ Greenfield |
|-------------------------------|-----------------------------|----------------------------|-----------------------------|----------------------|---------------------------|---|--|---------------------------|
| Cambourne, Cambridgeshire | 1989 | 1994 | June 1998 | Mid 1999 | 3,700 | 2,000 (April 2006) | 244 dwellings | Greenfield |
| Newcastle Great Park | 1998 | October 2000 | May 2001 | 2003 | 2,500 | 1,004 (54 dwellings completed 2006-2007) | 250 dwellings maximum (2,500 dwellings over 12 years) | Greenfield |
| Hampton, Peterborough | 1987 | 1993 | 1997 | 1997 | 7,200 | 3,000 (2,232 2001-2007) | 300 dwellings | Brownfield |
| Northstowe, Cambridgeshire | 2003 | Expected late 2007 | Early 2008 | Mid 2008 | 8,000 | 4,800 (projected to 2016) | 600 dwellings (projected) | Mixed |
| Dickens Heath, Solihull | 1989 | 1996 | 1998 | 1999 | 1,672 | 1,300 (April 2007) | 160 dwellings | Greenfield |

| Site | Initial proposal year | Outline permission granted | Construction commenced year | First homes occupied | Total number of dwellings | Total number completed | Average annual completion rate | Brownfield/ Greenfield |
|-----------------------------|-----------------------------|--|-----------------------------|--------------------------|---------------------------|------------------------|---|---------------------------|
| The Wixams, Bedfordshire | 1996 | October 2004 | Nov 2007 | Late 2008 (projected) | 4,500 | None completed | 200-300 dwellings (projected) | Mixed |
| Sherford, Devon | 1995 | Under consideration January 2008 | mid 2008 (projected) | 2009 (projected) | 5,500 | None completed | 500 dwellings (projected) | Greenfield |

Infrastructure

Transport

The need to provide sustainable transport links is a key part of the principles of a new community. At the local level walking and cycling provision can place a significant part in this strategy; however public transport is important at the local level and vital in ensuring links at greater distances are sustainable. The provision of public transport in the long term is inextricably linked to viability. Research has indicated that certain levels of housing density are required to ensure various public transport systems are viable; an average density of 40 dwellings per hectare is required to provide a high quality express bus service, and 60 dwellings per hectare are needed if a light rail system is envisaged as part of the scheme.

Integrated Public Transport is a important part of creating sustainable communities. Walking, cycling, buses including mini buses and rail travel need to be planned together. In the plans for The Wixams, it is envisaged that the housing will be placed within a maximum of 300 metres of a neighbourhood centre to encourage walking and cycling. This will link to a network of buses to provide transit between different areas of the settlement, including the new rail station which is a key part of the development. The provision of new rail stations is starting to become a feature of the latest round of new settlement plans. At Cranbrook in Devon the location of a planned new settlement has been influenced by the close proximity of the West coast mainline on which a new station will be built in the second phase of the settlement. In Northstowe the proposal is that a guided bus route running along the line of the old railway should provide the link to the established settlement in this case Cambridge. An alternative could be that a tram-train system be provided, These are light rail vehicles that can provide tram type facilities in an urban area including street running. They can however run on heavy rail infrastructure at speeds of up to 70mph for inter-urban journeys making them suitable for high quality commuting journeys of 10-15 miles, typically carrying around 100-130 passengers.



Figure 1: Example of Tram-train

These options are popular within continental Europe and interest in the UK has been shown in the Leeds City region and the Tees Valley.

Tram-trains benefit from lower running costs than traditional heavy rail units, although capital costs are broadly similar, there are opportunities to reduce

station cost through the reduced running height of the rolling stock leading to lower platform heights and less substantial infrastructure requirements⁶. A further advantage with tram-trains is that they can be specified with hybrid electric-diesel power plants that allow electric propulsion in street use creating no pollution, while allowing for rapid movement on inter-urban routes through diesel engines, or through overhead electrified rail lines.

Education

Schools are a vital part of any sustainable community, it is important that the children living within it can be educated up to 16 without the need to travel. This has been identified in a number of studies and research. To provide all statutory education means that a minimum size of approximately 5,000 dwellings is necessary to support a standard 825 place secondary school.

The timing of infrastructure is an issue, it is important that schools especially are provided early in the scheme, this is because if children who move into the new settlement early in its life have to start going to schools outside they are likely to remain there. This will reduce the viability of the secondary school and will lead to unsustainable travel patterns.

In Cambourne the first primary school was provided in a temporary building while the permanent building was under construction.

It should be remembered that Cambourne does not fit the classification of a sustainable community as it is too small to support secondary education on site.

Sherford is a planned new urban extension to the south-east of Plymouth. One of its key phasing principles is the construction of primary and secondary schools at an early stage.

One possibility to achieve this is to create the schools on a modular basis so that they can grow as the community grows. Another way of organising the scheme is that buildings may have different uses in the early stages of development to their intended final use; so once again in the Sherford AAP the town centre is to be built early in the scheme in order to provide focus; although it is envisaged that they will be occupied by a range of services prior to the population rising to a point where it is economically viable for Retail uses to move in.

Health Services

An examination of the case studies has shown that the provision of Primary Health care services within the development is an important part of ensuring sustainability and a sense of community.

⁶ R Thomas, Can tram-trains become a force in a country with very few trams?, Local Transport Today, Issue 482, 5 December 2007

Settlements over 3,000 dwellings are providing health care of some description typically a small GP practice, based on the evidence gathered from the case studies. Settlements of around 5,000 are able to support a larger Health Centre, which may well include a dental practice and a range of community health facilities.

There may be opportunities to improve the efficiency, availability and range of health provision in an area surrounding the proposed development, through relocation.

It is important to note that GP services are provided in what is essentially a free market. A Primary Care Trust may identify the need for an additional practice, but this is then tendered out for invitations of interest and there is no power to compel a particular practice to serve a locality.

Strategic design and form

An evolving notion of design is apparent in a significant number of these new settlements that of a number of neighbourhood settlements which contain the majority of local services which are linked to a higher order settlement centre by a variety of sustainable transport methods such as foot/cycle paths and bus routes.

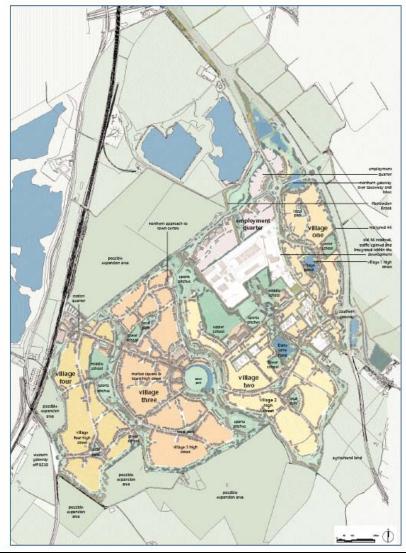


Figure 2: Strategic Masterplan of The Wixams showing a typical cluster design.

This form is a modern interpretation of the Garden City Principles of Town and Country. A typical neighbourhood centre contains a small range of shops, services and a primary school this is surrounded by housing totalling around 1,000 dwellings which are interspersed with open space and community sports and play areas. The Residential area is surrounded by an area of open space/parkland which provides a stop for development and a separation between neighbourhoods. These neighbourhoods form a cluster linked as detailed above, normally with the most accessible centre having a larger shopping area which is in part supported by the custom of the other neighbourhoods. The whole cluster is then linked by a high quality public transport route to a larger settlement for which people travel for high order functions.

Land Use and Site Specification

The implementation of new settlements requires a significant land take in order to provide the necessary infrastructure and green space to make a settlement sustainable.

Table 3 shows the key statistics for a number of the new settlements examined in this report.

| Settlement | Total | No of | Area for | Area for | Area for | No of | No of |
|------------------|-----------|------------|----------------------------|-------------------|------------------|-----------------|-------------|
| | site | House | housing | employment | green | Primary | Secondary |
| | area | S | | | space | Schools | Schools |
| The Wixams | 303 ha | 4,500 | | >1,000,000 | 49 ha | 3 (5-9) and | 1(13-18) |
| | | | | sq feet | | 2 (9-13) | |
| | | | | office space | | | |
| Other facilities | Primary I | Healthcar | e centre, libra | ary, shopping, s | sports hall, tra | ain station | |
| Sherford | 415 ha | 5,500 | 40-50 | 25 ha with | 207 ha | 3 x 420 | 1 x 825 |
| | | | dwellings | 17 ha | | pupils(1.9h | pupils(7.2 |
| | | | per | extension | | a each) | ha) |
| | | | hectare | | | | |
| | | | (122ha) | | | | |
| Other facilities | | | | onsite renewal | | , | |
| | | • | • | es at schools, li | • • • | | • |
| | stations, | theatre/ci | nema, churcl | n, health and so | ocial care inc | luding GP and | l dentist |
| Newcastle Great | 311 ha | 2,500 | 83.3ha net | 80ha | Approx | 1 new and | Expansion |
| Park | | | | | 100 ha | expansion | to existing |
| | | | | | | to existing | facilities |
| | | | | | | facilities | |
| Other facilities | Shops, c | ommunity | [,] building, lan | d for church, la | ind for PCT, i | ndoor sports h | nall |
| | 417 ha | 3300 | 131 ha | 20ha | 140 ha | 2 | Nil |
| Cambourne | | | | | | | |
| Other facilities | | | | e, health centre | | | |
| | | • | entre, land fo | or church (total | 12ha), and sp | ports land incl | uding golf |
| | course(1 | 11 ha) | | | | | |

Housing takes approximately a quarter of the total site area. The Wixams takes the highest percentage land take of any of the sites examined. This may be linked to the fact that it also has the lowest percentage take for employment. Much of this is due to the fact that it is being built adjacent to an existing employment area, this area has a shortage of available office space, which will be addressed by the proposal.

A settlement of 5,000 dwellings is likely to require a footprint of approximately 400 hectares gross, if it is also to provide a significant amount of new employment land. Green space in all its forms accounts for approximately half of the gross footprint, shared access of school playing fields is a common feature of these developments.

There are opportunities by locating new settlements in close proximity to employment and or existing open space to reduce this footprint area, as in the case of Sherford and The Wixams.

An important point is that new settlements should not be landlocked. There should at the masterplanning stage be provision made in terms of land allocation for expansion in the future, with all infrastructure being designed with this in mind, in particular transport and utilities provision.

In order to prevent delays in land formation, Local Authorities need to make a statement within the DPD covering the development, that they will make use of compulsory purchase legislation if necessary. An example of this is contained within the Sherford AAP.

Conclusions

Time

- In order for new settlements to make a significant contribution to the housing targets required by the East of England Plan no time can afford to be lost.
- The period needed to successfully master plan a new settlement is considerable. With an average of 6 1/2 years required for this stage, it is vital that the broad locations suitable for this level of growth are identified as early as possible. Every attempt should be made to move through the master planning process as efficiently as possible.
- Following site identification, a partnership between Local authorities, developers and stakeholders needs to be set up as early as possible, to begin the land formation and master planning.
- The Enquiry by Design method used by the Prince's Foundation provides an independent and highly respected way of engaging people in order to arrive at a comprehensive vision on which to build, and has been highly effective in building consensus. The partners in the Sherford AAP utilised their services during its production.

Infrastructure

- The lesson from the case studies is that those new settlements that are most effective at producing a sense of community and sustainability are those where infrastructure is front-loaded.
- Education and healthcare provision together with community facilities
 are vital to building a sense of community. These need to be provided
 on-site as early as possible in the phasing of the project. One
 possibility exists through the construction of buildings which can be
 adapted for a number of different uses through out their lifetimes. This
 means that a core can be constructed early in the development which
 might well provide community facilities during the early phases, before
 becoming a retail centre once there is sufficient demand.
- Transport infrastructure should be seen as one of the foundation stones of a new development, rather than being "bolted-on" at a later date. The need to provide high quality public transport from day one is important if sustainable travel is to be promoted, as travel behaviour is difficult to change.
- The end result of this front loading is that resources will need to be found before the traditional funding streams begin flowing from Section 106 agreements. There may be opportunities for forward funding emerging from the Community Infrastructure Levy proposals.

Design and land use

An overarching principle seen in the case studies was the breakdown
of a settlement into a number of smaller units, with a degree of selfcontainment provided by a neighbourhood centre with some shops and
community facilities.

- Green space amounting approximately planned throughout the settlement providing both buffers between uses and access within walking distance from homes.
- A sustainable settlement of 5,000 dwellings will require a footprint of around 400 hectares, in addition provision should be made for future expansion. This can be reduced if it is located in close proximity to existing employment or community green space.

Background document list

Town and Country Planning Association, Best Practice in Urban Extensions and New Settlements: A report on emerging good practice, Department of Communities and Local Government, March 2007

South Hams District Council, Sherford New Community Area Action Plan, August 2007

Plymouth City Council, North Plymstock Area Action Plan, August 2007

Newcastle City Council, Revised Masterplan and SPD for Newcastle Great Park, May 2006

South Cambridgeshire District Council, Northstowe Area Action Plan, July 2007

South Cambridgeshire District Council, Cambourne: a sustainable community?, Nov 2005

Appendix 5

List of evidence studies

- Greater Norwich Housing Market Assessment Greater Norwich Housing Partnership (2007)
- 2. Evidence Base for Housing Market Assessment (Greater Norwich Housing Need and Stock Condition Survey) Opinion Research Services (2006)
- 3. Strategic Housing Land Availability Assessment Greater Norwich Development Partnership, with input from Nathaniel Lichfield and Partners (awaiting completion, Autumn 2009)
- 4. Strategic Flood Risk Assessment T.A. Millard (2008)
- 5. Infrastructure Need and Funding Study EDAW (2007)
- Infrastructure and funding study based on proposed distribution of development – EDAW (2009)
- 7. Employment Growth and Sites and Premises study Arup and Oxford Economics (2008)
- 8. Green infrastructure study Chris Blandford associates (2007)
- 9. Greater Norwich retail and Town Centres study GVA Grimley (2007)
- 10. Integrated Water Cycle Study: Stage 1 Scott Wilson (2007)
- 11. Integrated Water Cycle Study: Stage 2a Scott Wilson (2008)
- 12. Integrated Water Cycle Study: Stage 2b Scott Wilson (2009)
- 13. Greater Norwich Joint Core Strategy Public Transport Requirements of Growth Mott MacDonald (2008)
- 14. Public transport assessment option2+ (favoured option)- Mott MacDonald (2009)
- 15. A 47 Southern Bypass Junctions study -- Mott MacDonald (2008)
- 16. A 140 Bus lane study –Scott Wilson (2008) and GNDP assessment of study
- 17. Greater Norwich Conference Centre Feasibility Study Tourism UK (2009)
- 18. Greater Norwich study of development rates on large scale developments (unpublished, for further information contact the GNDP)
- 19. Norfolk Economic Growth Study Roger Tym and partners (2005)
- 20. Lessons From Cambourne Cambridge Architectural Research Limited for Inspire East
- 21. Report of consultations undertaken at issues and options stage Greater Norwich Development Partnership (2008)
- 22. Landscape Character assessments for Broadland (1999 and 2008)
- 23. Constraints mapping on existing local plan proposals maps
- 24. Parish Plans for a number of parishes in the area

Appendix 6:

| | Dwelling Stock at 1 st April 2009 | Completions 1 st Jan 1994 to 31 st March 2009 | Completions 1 st Jan 1994 to 31 st March 2009 - annualised | | Proposed growth in the JCS | Minimum % increase in dwellings 1 st April 2009 – 31 st March 2026 (JCS and commitments) | Minimum proposed Growth 1 st April 2009 – 31 st March 2026 (JCS and commitments) – annualised |
|---|---|---|---|--------------------------|----------------------------|---|--|
| Colney/ Cringleford | 1165 (65/1100) | 289 (3/286) | 19 | 835 ⁷ (0/835) | 1,200 | 175% | 120 |
| Costessey/ Easton | 5764 (5156/608) | 1,251 (1,026/225) | 82 | 1,459 (1,452/7) | 1,000 | 43% | 145 |
| Hethersett/ Little Melton | 2906 (2534/372) | 596 (485/111) | 39 | 59 (51/8) | 1,000 | 41% (Hethersett only) 36% (Hethersett & Little Melton) | 62 |
| Long Stratton/ Tharston | 2154 (1855/299) | 566 (423/143) | 37 | 95 (75/20) | 1,800 | 88% | 111 |
| Mulbarton/ Swardeston/ Swainsthorpe | 1888 (1445/280/163) | 356 (311/39/6) | 23 | 111 (97/7/7) | Unknown | | n/a |
| Poringland/ Framingham Earl | 2017 (1643/374) | 301 (275/26) | 20 | 680 (659/21) | Up to 200 | 44% | 52 |
| Trowse | 388 | 151 ⁸ | 10 | 1 | Unknown | | n/a |

 $^{^7}$ Includes increase in density at Roundhouse Park to a total of 1,065 units 8 Includes 56 units at Whitlingham Hospital

| Wymondham | 6318 | 85 | 458 | 2,200 | 42% | 156 |
|-----------|------|----|-----|-------|-----|-----|
| - | | | | | | |

Appendix 7

| Location for new housing allocations up to 2026 | Number of homes | | |
|---|--|--|--|
| Norwich | 3,000 | | |
| Old Catton, Sprowston, Rackheath and Thorpe St Andrew growth triangle | 7,000 – (Rising to 10,000 after 2026) | | |
| South West: Hethersett Cringleford | 1,000 1,200 | | |
| Wymondham | 2,200 | | |
| Costessey/Easton | 1,000 | | |
| Long Stratton | 1,800 | | |
| Broadland smaller sites | 2,000 | | |
| South Norfolk smaller sites | 1,800 | | |
| Other rural areas: Acle Hingham Aylsham Loddon/Chedgrave Blofield Reepham Brundall Wroxham Diss Other smaller villages Harleston | Rural area growth 1,600 | | |
| Total | 22,600 | | |

For more information or if you require this document in another format or language, please phone:

01603 431133 for Broadland District Council

0344 980 3333 for Norwich City Council

01508 533805 for South Norfolk Council

Topic Paper: Settlement Strategy – Strategy to Accommodate Major Housing Growth in the Norwich Policy Area

Joint Core Strategy for Broadland, Norwich and South Norfolk November 2009

