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1 Introduction

- 1.1 A Strategic Housing Market Assessment (SHMA) was originally published for Waveney District Council as a Sub-regional assessment with Great Yarmouth Borough Council in 2007. It is based on secondary data available at the time and examines the local housing market. It sets out the level of housing need and the requirements of particular groups of the population. It also identifies the most appropriate way to meet future housing needs.
- 1.2 The National Planning Policy Framework (NPPF), published in March 2012, sets out revised requirements of a SHMA. The age of the existing SHMA, notable changes in market conditions since the publication of the 2007 SHMA and the review of the Waveney Local Plan in addition to the revised requirements have led the Council to reassess housing need for the District.
- 1.3 The new SHMA report will reflect Government Guidance. The NPPF sets out the role of a SHMA and states: -

'Local planning authorities should have a clear understanding of housing requirements in their area. They should: -

Prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The Strategic Housing Market Assessment should identify the scale and mix of housing and the range of tenures that the local population is likely to require over the plan period which:

- Meets household and population projections, taking account of migration and demographic change;
- Addresses the need for all types of housing, including affordable housing and the needs of different groups in the community (such as families with children, older people, disabled people, service families and people wishing to build their own homes); and
- Caters for housing demand and the scale of housing supply necessary to meet this demand.
- 1.4 Whilst the NPPF outlines how a SHMA fits into the wider housing policy framework, the National Planning Practice Guidance (NPPG) 'Housing and Economic Development Needs Assessments' (Updated March 2014) sets out how local planning authorities should objectively assess all their housing needs.

- 1.5 The NPPF and NPPG also require housing needs assessments to cover a wider area than individual local authorities where housing market areas (HMAs) extend beyond administrative boundaries. The first step is therefore to establish if and to what extent the Waveney HMA goes beyond the District boundaries. The evidence set out in Chapter 2 concludes that Waveney is relatively self-contained and will therefore be assessed as a single authority HMA. This will form the basis to establish Waveney's housing requirement.
- 1.6 The second step is to set out the housing target for the district over the Local Plan period, the objectively assessed need (OAN). As a starting point this method requires that the latest official household projections are used, which are then applied to a series of tests to establish the OAN. Adjustments to the projections are made using past delivery and market signals and other local circumstances not captured by past trends, such as future employment growth.
- 1.7 This Preliminary Report has been produced by Waveney District Council to provide an initial assessment of the housing requirement for Waveney for the period 2011 2036. As required by national planning policy and guidance, the information set out in this report will be used to help inform the housing targets in the new Local Plan. This Preliminary Report establishes the extent of the Housing Market Area and provides a baseline figure for the amount of new housing required for the plan period.
- 1.8 The SHMA covers all of the Waveney District Council area including the part of the District that is also within the Broads Authority administrative area. The Broads Authority is however required to set out its own objectively assessed need for housing. The Broads housing requirement has already been assessed as part of the Central Norfolk Strategic Housing Market Assessment (ORS, Jan 2016). The ORS assessment will be used in the Waveney assessment to define the amount of housing that should be attributable to the Waveney part of the Broads area.

2 Housing Market Area

Overview

- A housing market area is a geographical area defined by household demand and preferences for all types of housing, reflecting the key functional linkages between places where people live and work. Sometimes housing market areas will overlap. Local planning authorities are required to work with all the other constituent authorities under the duty to cooperate and where there is a joint plan, housing requirements and the need to identify a five year supply of sites can apply across the joint plan area.
- 2.2 Local planning authorities are required to have a clear understanding of their housing needs in their area. In order to do this the housing market area must be defined. There is no single preferred method for defining the housing market area but most methodologies use house price and rates of change in house price, travel to work patterns and household migration patterns as a basis for determining the housing market area.
- 2.3 Housing market areas can be identified by assessing patterns in the relationship between housing demand and supply across different locations. This analysis uses house prices to provide a market-based reflection of housing market area boundaries. It enables the identification of areas which have clearly different price levels compared with surrounding areas. The findings provide information about differences across the area in terms of the price people pay for similar housing, market hotspots, low demand areas and volatility.
- 2.4 Migration flows and housing search patterns reflect preferences and the trade-offs made when choosing housing with different characteristics. Analysis of migration flow patterns can help identify these relationships and the extent to which people move home within an area. The findings can identify the areas within which a relatively high proportion of household moves are contained.
- 2.5 Contextual data, such as travel to work boundaries, retail and school catchment areas can provide information about commuting flows and the spatial structure of the labour market, which will influence household price and location. They can also provide information about the areas within which people move without changing other aspects of their lives (e.g. work or service use).
- 2.6 Demand or need for housing is not tied to local authority areas as people's decisions about where to live are influenced by access to jobs, schools, family connections etc. rather than administrative boundaries. An HMA is an area of search that brings all these elements together.
- 2.7 To help identify the HMA, the NPPG suggests a list of indicators including house prices, migration, travel-to-work areas and school and retail catchments to be used. The guidance

does not prescribe how the indicators should be analysed, except for migration, which says that 70% of house moves should be contained within the area. Travel-to-work areas are based on the idea of commuting containment.

2.8 To identify the HMA boundary in this study, the starting point is the national geography of housing market areas developed for the NHPAU (National Housing and Planning Advisory Unit). The latest data available and key indicators recommended in the NPPG are then used to update that geography.

The NHPAU Geography

- 2.9 This HMA geography was produced in 2010 for the former NHPAU by a group of academics using data from the 2001 Census. The NHPAU research defines a hierarchy of HMAs based primarily on migration and commuting containment following the same process as the NPPG. This is useful as a starting point as it provides a national geography maximising containment across England as a whole and prevents any overlapping of HMAs.
- 2.10 As shown in Figure 1 the NHPAU geography indicates that Waveney is relatively selfcontained with only small areas of the District affected by neighbouring authority boundaries.
- 2.11 This Strategic HMA is tested on the same key indicators, migration and commuting, using the latest available data from the 2011 Census.



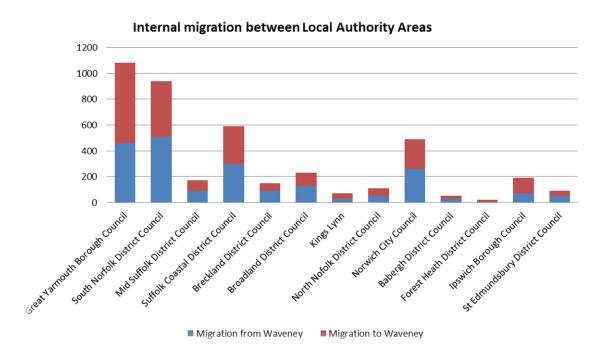
Figure 1 NHPAU Strategic Housing Market Areas – Suffolk and Norfolk Authorities

Migration

Main origins and destinations

- 2.12 The chart below (Figure 2) shows which authorities in Suffolk and Norfolk have the largest combined migration flows with Waveney. Using these combined migration flows (in and out) to measure the strength of links with other districts:
 - Waveney's strongest links are with Great Yarmouth Borough Council, South Norfolk District Council and Suffolk Coastal District Council.

Figure 2 Internal migration between Norfolk and Suffolk authority areas



- 2.13 For Waveney, the strongest migration links are with the adjoining authorities of Suffolk Coastal District Council, Great Yarmouth Borough Council and South Norfolk District Council. The exception is that of the Norwich City Council area.
- 2.14 The analysis so far suggests that the area identified in the NHPAU's strategic HMA for Waveney is correctly defined. Only small areas of Waveney and that of neighbouring authorities are affected by any cross boundary migration and in very limited numbers.

70% self-containment test

2.15 The NPPG criterion for containment requires that typically 70% or more of all house moves either begin or end in the HMA. This test is specified in more detail in an earlier CLG publication, on which the NPPG is based and states: -

'Identifying suitable thresholds for self containment: The typical threshold for self-containment is around 70 per cent of all movers in a given time period. This threshold applies

to both the supply side (70 per cent of all those moving out of a dwelling move within that same area) and the demand side (70 per cent of all those moving into a dwelling have moved from that same area).'1

- 2.16 Table 1 below shows these measures of containment for the Waveney Strategic HMA.
 - The overall containment equals the sum of origins and destination of moves within the HMA to the sum of origins and destination of moves that cross the HMA boundary.
 - Migration data is taken from the latest ONS data and relates to people moving house in the year ending June 2015.
 - The analysis includes moves within authorities that were excluded from the internal migration figures above.
 - Total moves comprise moves within the UK but excludes moves with overseas origins and destinations. By definition these are long-distance moves, which according to the PPG should be excluded from the total.
- 2.17 The measure of total moves is larger as it does not exclude long-distance moves within the UK as the NPPG intends. The resulting containment ratios will therefore be underestimated and because the NPPG contains no definition of long distance moves, it is not possible to determine how much the underestimate is.

Table 1 Migration containment, Waveney Housing Market Area, 2014 -15

Moves from	Moves to	Moves to			
	Waveney HMA	Rest of UK	Total		
Waveney HMA	7722	3525	11247		
Rest of UK	3567				
Total	11289				
Origin Containment	68%				
Destination Containment	69%				

Source ONS

- 2.18 As shown in Table 1 above, containment ratios are almost equal for in migration and out migration at 68% and 69%, marginally less than the NPPG threshold. These figures assume that over 30% of migration to and from the rest of the UK is long-distance migration and this seems to be unrealistically high. In order to test this more thoroughly more local authorities with a greater association to Waveney have been added.
- 2.19 The areas that have been looked at are those with the greatest flows to or from the Waveney Strategic HMA. The figures below show those areas with the greatest outflow (Figure 3) and greatest inflow (Figure 4) to the Waveney Strategic HMA.

¹ Communities and Local Government, Identifying sub-regional housing market areas. Advice note, March 2007.

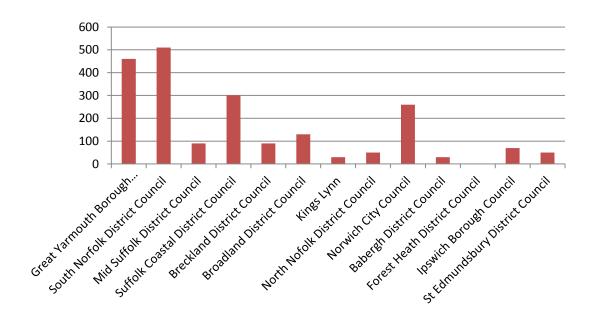
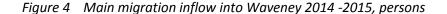
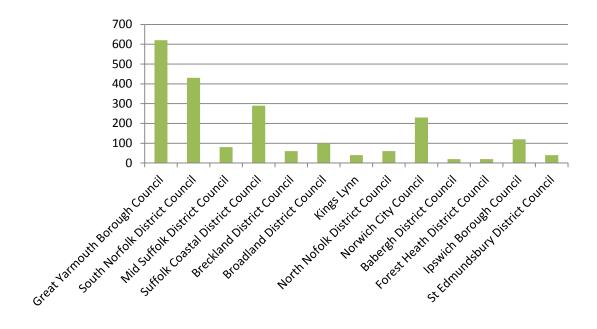


Figure 3 Main migration outflow from Waveney 2014 – 2015, persons





2.20 The four authorities with the strongest links to the Waveney Strategic HMA are, Great Yarmouth, South Norfolk, Suffolk Coastal and Norwich. Table 2 below shows that adding these authorities migration into and from Waveney would make very little difference to the areas overall migration containment rate.

Table 2 Migration containment including authorities with the strongest links to Waveney

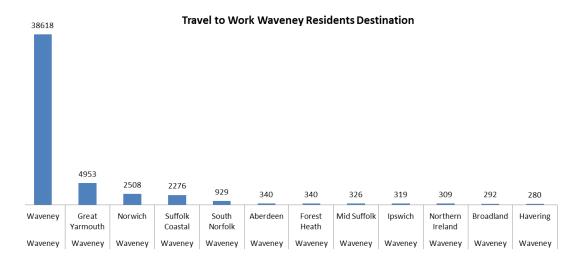
Area	Total (inflow/outflow)	Overall containment
Waveney HMA + Great	7722 + 620 -460 = 7882	70%
Yarmouth BC		
Waveney HMA + South Norfolk	7722 + 430 – 510 = 7642	68%
DC		
Waveney HMA + Suffolk Coastal	7722 + 290 – 300 = 7712	68%
DC		
Waveney HMA + Norwich City	7722 + 230 – 260 = 7692	68%
Council		
Waveney HMA + All	7722 + 1570 -1530 = 7762	69%

Travel to Work

Main origins and destinations

2.21 The charts below (Figures 5 and 6) show the main origins and destinations of commuting to and from Waveney for work.

Figure 5 Waveney residents commuting destinations



Source: Nomis

Origins of people that travel to work in Waveney 4361 2308 1681 0 Waveney Suffolk coastal South Norfolk Forest Heath Mid suffolk Northern Great Aberdeen Havering Yarmouth Ireland

Figure 6 Non residents commuting to Waveney to work

Source: Nomis

- 2.23 Travel to work patterns for Waveney show a high level of self containment, with approximately 76% (38618) of all those that live in Waveney also working in Waveney. This can be demonstrated by the low levels of travel from the district for employment and from outside the district for work purposes. Waveney and Great Yarmouth are closely related on socio-economic issues and have a linked employment offer, however only 4953 of Waveney residents travel to Great Yarmouth to work. The reverse relationship indicates that 4361 of Great Yarmouth residents travel to the Waveney area for employment. Travel from Waveney to other neighbouring districts is much smaller, ranging from 4.4% to Suffolk Coastal and only 1.8% to the South Norfolk district areas. From these districts the percent that travel to Waveney to work is 2.6% and 4.1% respectively.
- 2.24 The NPPG does not identify a threshold to help define housing market areas in relation to commuting. But a threshold is provided in the ONS definition of Travel to Work Areas, which is mentioned in the NPPG and states: -

'The current criterion for defining TTWAs is that generally at least 75% of an area's resident workforce work in the area and at least 75% of the people who work in the area also live in the area. However, for a working population in excess of 25,000, containment rates as low as 66.7% are accepted.

The containment test

Table 3 Commuting containment patterns to and from Waveney

Commute from	Commute to				
	Waveney	Great Yarmouth	South Norfolk	Rest of	Total
	HMA			UK	
Waveney HMA	38618	4953	929	6990	51490
Great Yarmouth	4361				
South Norfolk	2308				
Rest of UK	1681				
Total	46968				
Origin	75%				
Containment					
Destination	82%				
Containment					
Overall	79%				
Containment					

Source: Nomis

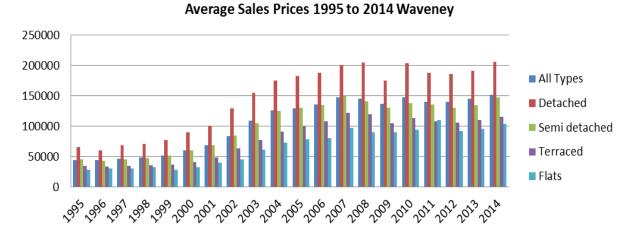
- 2.25 The Waveney HMA's containment ratios for commuting (Table 3) are 82% for destination and 75% for origin with an overall containment of 79% with is higher percentage than origin and destination migration rates.
- 2.26 The analysis of the Waveney HMA more than meets the 66.7% requirement for considering the authority as self contained for the purposes of defining the housing market area. Adding the authorities with the strongest commuting links to the Waveney HMA has not altered the overall containment rate and no further analysis is considered necessary.

House Prices

- 2.27 To add to the assessment of migration and commuting patterns set out above, evidence relating to house prices has been analysed to see if this could help define the housing market area.
- 2.28 The most recent house price data is available from the ONS and was released in 2015. It provides up to date data on median house prices and sales dating back to 1995 (Figure 7). The Land Registry publishes quarterly data that can be used to assess the changes recorded in Waveney against regional and national figures.
- 2.29 ONS data published in December 2015 indicates that the average house price in Waveney is £151,250. Following a decrease in average house prices after the economic downturn in 2008 house prices have continued to rise to a point where average house prices are at a new high. However, house sales have not recovered to the same levels seen between 2001 and

2008 remaining consistently low over the last 8 years, which suggests that affordability is a factor keeping house sales low.

Figure 7 Average house prices Waveney 1995 - 2014



Source ONS

Zoopla produce a heat map of UK property values and Figure 8 below indicates how prices across Waveney and neighbouring authorities are distributed. There is no pattern that could be used to define the boundary of the HMA based on this information. Lowestoft has lower average property prices as would be expected largely due to the amount of smaller terraced properties that make up the housing stock in the centre of the town. The anomaly in property prices for Waveney is in Southwold where the average cost of a home is significantly higher than the rest of the District. This can be attributed to the attractiveness of the town as a tourist destination and the resulting high proportion of second home ownership in the town.

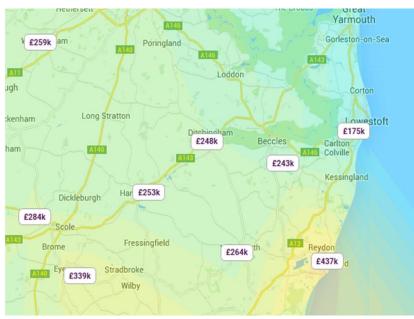


Figure 8 Average property value distribution

Source Zoopla

2.31 Figure 9 shows average house prices at 2000 and 2012 for Waveney plus the authorities with the strongest links to Waveney in relation to travel to work patterns and migration rates.

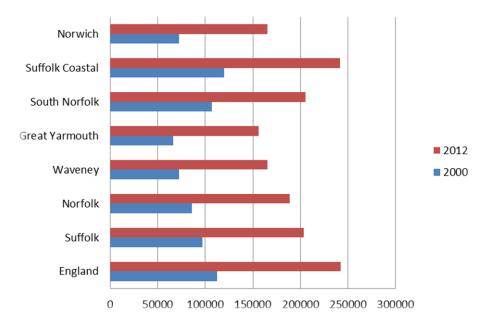


Figure 9 Average house prices, 2000 - 2012

Source CLG Live table 581 (mean house prices based on Land Registry data)

2.32 Table 4 below show house price percentage change between 2000 and 2012 for all Norfolk and Suffolk authority areas.

Table 4 House price change between 2000 and 2012

Local authority area	% increase
Babergh	74%
Forest Heath	60%
Ipswich	71%
Mid Suffolk	66%
St Edmundsbury	69%
Suffolk Coastal	67%
Waveney	79%
Breckland	72%
Broadland	74%
Great Yarmouth	81%
Kings Lynn	79%
North Norfolk	78%
Norwich	79%
South Norfolk	63%

Source CLG Live table 581 (mean house prices based on Land Registry data)

Conclusions

- 2.33 Evidence from the 2011 Census has been used to test the Waveney HMA as defined by the NHPAU housing market area geography. The analysis indicates that the area falls just short of the 70% migration containment rate set out in the NPPG. Alternative definitions of the HMA were therefore tested using additional local authority areas. Although this increased the overall migration containment rate, this was still just short at 69%.
- 2.34 The commuting patterns for Waveney residents are more conclusive, with 75% of all people who live in Waveney also working in Waveney. The number of people who travel to Waveney to work is low with less than a quarter of all workers in Waveney travelling from outside the District and most of those that do live in neighbouring Great Yarmouth.
- 2.35 House price evidence has not added or removed to the conclusion that Waveney is self-contained for the purposes of the HMA. Waveney shares broadly similar average property prices with Great Yarmouth and Norwich. House prices in Suffolk Coastal and South Norfolk are significantly above those in Waveney and more aligned to the average house price across Norfolk and Suffolk as a whole. House prices have risen relatively consistently across all areas of the two counties and have not provided any defined boundary for the HMA based on property prices.

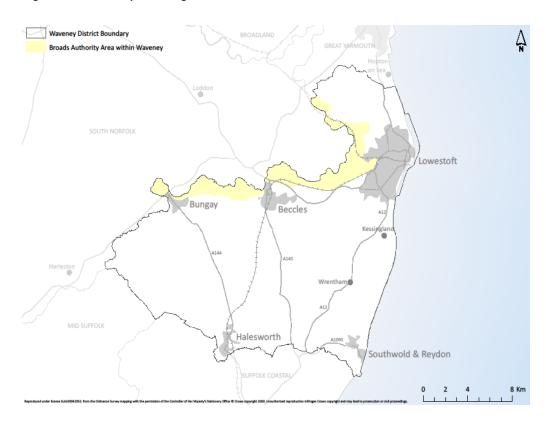


Figure 10 Waveney Housing Market Area

2.36 From the evidence above the final conclusion is that it is appropriate to define the Waveney District² as a self contained housing market area, see Figure 10 above.

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² For the purpose of defining the Housing Market Area the whole of the Waveney area has been included. For clarification this also includes that part of the Broads Authority administrative area where it is within the Waveney boundary. The Broads Authority is required to assess housing need independently and this will be acknowledged when assessing the Waveney objectively assessed housing need later in this report.

3 Household Projections

Introduction

- 3.1 The National Planning Policy Framework (NPPF) requires the Council to assess the need for housing. To obtain an accurate, realistic figure for the objectively assessed need in Waveney.
- Paragraph 152 of the NPPF states that the objectively assessed need for housing must be based on household projections that take account of migration and demographic change. Paragraph 154 goes on to say that the objectively assessed need is not necessarily the requirement for housing as local plans should be aspirational but realistic.
- 3.3 Paragraph 182 of the NPPF indicates that in accordance with the Duty to Cooperate, Local Plans should be prepared 'based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development.
- 3.4 Paragraph 152 of the NPPF states that nationally derived population and household projections should be the starting point for determining objectively assessed need.
- 3.5 The ONS produces population projections at a Local Authority level every 2 years that are converted to household projections by DCLG in the following 6 months. The most recent population projections from the DCLG are based on the 2012-based sub-national population projections (SNPP) published by ONS on 29th May 2014. Subnational population projections provide estimates of the future population of local authorities, assuming a continuation of recent local trends in fertility, mortality and migration which are constrained to the assumptions made for the 2012-based national population projections.
- 3.6 The population projections are not forecasts and do not attempt to predict the impact that future government or local policies, changing economic circumstances or other factors might have on demographic behaviour. The primary purpose of the subnational projections is to provide an estimate of the future size and age structure of the population of local authorities in England. These are used as a common framework for informing local level policy and planning as they are produced in a consistent way.
- 3.7 The analysis in this report uses the 2012-based SNPP under other scenarios to assess the implications for household growth and housing needs in Waveney. Government Planning Practice Guidance on Housing and Economic Development Needs Assessment (NPPG) is clear that the latest projections should be the starting point for assessing overall housing need.

The 2012-based Population Projections

3.8 Tables below show the 2012-based official population and household projections for the Waveney area. The methodology for the 2012-based household projections uses the latest sub-national population projections. It incorporates information from the 2011 Census on household population and numbers down to local authority level and some data on household formation rates at a national level. These projections are the most up to date at present. The current data provides a summary of population and household numbers based on long-term demographic trends.

Table 6 Projected Population Growth 2012 – 2036, ONS

Projected Population Growth 2012 – 2036						
	Population at 2011	Population 2012	Population 2036	Change in Population 2011 - 2036	% Change from 2011	
Waveney	115254	115700	123900	8646	7.5%	

Source ONS

- 3.9 Table 6 above shows the population figure from the 2011 Census and the projected population growth from 2011 to 2036 in Waveney using the 2012 SNPP data. The figures show that the population of Waveney is expected to grow by 8646 people between 2011 and 2036; this is a 7.5% increase.
- 3.10 In Waveney the projected increase in population from 2012 to 2036 can be all attributed to net migration into the District (Table 7). It is predicted that the amount of deaths compared to births creates a natural decrease in population by 6400 people over this same 24 year period, with more deaths than births currently predicted (Figure 10).

Table 7 Predicted Births, Deaths and Migration 2012 – 2036, ONS

Components of Change mid-2012 to mid-2036					
	2012-17	2017-22	2022-27	2027-32	2032-36
Population at start	115700	116900	119000	120800	122600
Births	6000	6000	5600	5500	4400
Deaths	6600	6600	7000	7300	6200
Natural Change	-600	-600	-1400	-1800	-1800
Net Migration	1800	2700	3200	3600	3200
Total Change	1200	2100	1800	1800	1400
Population at end	116900	119000	120800	122600	124000

Source: ONS

Projected Components of Population Change 2012 -2036

1000
800
400
200
0
-200
-400
-600

Net Migration Natural Change

Figure 11 Components of Population Change Migration and Natural Change 2012 – 2036

The 2012-based Household Projections

Table 8 Projected Household Growth 2011 - 2036, CLG

	CLG 2012-Bas	sed Household	Projections	Increase in Households	Per annum increase in	% Change from 2012
	Households	Households	Households	2011-2036	households	
	at 2011	2012	2036		2011 – 2036	
Waveney	50919	50116	58621	7702	308	15.1%

Source ONS/CLG

- 3.11 The CLG household projections (Table 8) indicate that over the period 2011 to 2036 the number of households will increase by 7702 in Waveney. This will result in the formation of around 308 new households per year over this time frame.
- 3.12 The CLG 2012-based projections assume that demographic change and future policy will be the same as past rates of change and policy. For this reason there are limitations of accurately predicting household growth when using the CLG projections and they should only be used as a baseline position for setting the authority's housing target.
- 3.13 ONS produces the Sub-National Population Projections (SNPP), which show population by age and sex, based on rolling forward past rates of natural change (births minus deaths) and migration for each demographic group. These are then converted into household projections. The SNPP 2012 is based on 2008-2012 migration trends, recession and post recession, and therefore looking back further to see migration trends over the longer term i.e. pre-recession period is appropriate. The 2008-based projection has the highest annual growth figure and they contain the most favourable economic conditions within the trend used to generate future projection. It should be noted that the 2011 Census results indicate

that they are inaccurate. The household total in 2011 according to the Census was around 51,000 compared to the 2008-based household projections of around 54,000. In February 2015 CLG finally produced 2012-based household projections, which supersede earlier versions. They are derived from the 2012-based sub national population projections published in 2014 and model future household formation rates using revised estimates of actual household formation rates. These can therefore be viewed as the suitable starting point for determining the objectively assessed need in Waveney.

- 3.14 Whilst, some of the difference between the estimates are a consequence of behaviour change resulting from the economic downturn, it is clear that population growth set out in the 2008-based projections was an overestimate. This suggests that the 2008-based projections should be viewed as the absolute upper boundary of objectively assessed need. The inflow of people moving into the District from outside the country recorded in the 2008-based projections was based on a time when there was significant immigration of Eastern European economic migrants (an average of 766 per annum over the period 2003 to 2006, compared with an average of 309 per annum in the following years 2006 to 2014). Projections are therefore only useful if the long-term trends used are relatively stable. This will not be the case if the base period is marked by unusual events such as a significant increase in net international migration during the period 2002 2006. This coincides with the 2004 EU enlargement and the opening of UK labour markets to workers from A8³ countries, an anomaly that has not been experienced since.
- 3.14 To provide a full assessment of the objectively assessed level of need for housing it will also be necessary to consider other factors, such as market signals, anticipated jobs growth and affordable housing need. However, the analysis of the 2012-based projections provide a firm starting point with an indication of the level of housing need emerging from this up to date source of information.

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³ The A8 countries are a group of eight of the 10 countries that joined the European Union during its 2004 enlargement. They are commonly grouped together separately from the other two states that joined in 2004, Cyprus and Malta, because of their relatively lower per capita income levels in comparison to the EU average.

4 Testing Scenarios - Alternative Population Forecast and Household Projections

Introduction

- 4.1 The official projections should be tested at the local level before being accepted as a measure of housing need. For Waveney this is done by using past economic trends and economic projections to predict labour demand and migration impacts upon population growth.
- 4.2 Cambridgeshire Research Group (CRG) has provided an economy-led population forecast for the Suffolk local authorities of Babergh District Council, Ipswich Borough Council, Mid Suffolk District Council, Suffolk Coastal District Council, Waveney District Council and Suffolk County Council. The brief was to constrain the forecast to the East of England Forecasting Model⁴ total and working age populations. The population forecast was then used to produce two sets of projected household growth over the period 2011 to 2031⁵.
- 4.3 The East of England Forecasting Model (EEFM) was developed by Oxford Economics and provides forecasts of jobs and resulting housing demand, currently up to 2031. The model brings together key variables such as economic productivity and outputs, employment, population and productivity (see Appendix A). The employment forecasts take account of the supply and demand for labour with the demographic forecasts reflecting labour market trends.
- 4.4 The forecast and projections for 2011 to 2031 were undertaken for five of the districts within Suffolk Babergh, Ipswich, Mid Suffolk, Suffolk Coastal and Waveney. The first four of these districts comprise of the Ipswich Housing Market Area.

CRG EEFM Baseline Population Forecast and Household Projections

4.5 CRG used a two-stage modelling process. The first stage used POPGROUP⁶ to produce the population forecast constrained by to the EEFM baseline total population. CRG then

⁴ EEFM – East of England Forecasting Model, forecasts employment, population and housing trends.

⁵ EEFM forecasting and CRG projections extend to 2031, until revised figures are available, housing targets for the period to 2036 use the annual average increase carried forward with no adjustments.

⁶ POPGROUP is a Population Estimation and Forecasting System produced by Edge Analytics Ltd.

constrained the POPGROUP population forecast to the EEFM baseline working age population.

4.6 The population forecast provided a single year of age by sex population forecast by year to 2031, along with the population forecast by five year age bands. Table 9 below provides a summary of the population forecast for Waveney.

Table 9 CRG Population Forecasts for Waveney 2011-2031

	Population 2011	Population Forecast 2031	Population Growth 2011-31	Population Growth % 2011-31
Waveney	115360	124250	8890	7.7%

(Data rounded to nearest 10)

Source CRG, EEFM

- 4.7 Special populations (used by POPGROUP to allow for static populations) were established for the armed forces for the District, based on the 2011 Census data. Limiting the special population to the armed forces only reflects the methodology used by ONS in its population projections. The overall number of armed forces used as special population in Waveney and held constant over the forecast period is 157.
- 4.8 To further constrain the forecast to the EEFM working age population, CRG applied spreadsheet modelling to the POPGROUP output population forecast. This involved realigning the working age (16-64 years) and the older (65+ years) sectors of the population forecast, whilst maintaining their single year of age and sex structures. The output of the modelling was used to build up the final population by single year of age and sex, which were then aggregated to five year age bands and applied to the model. Table 10 provides a summary of the population forecast for Waveney by broad age group.

Table 10 Summary of CRG Population Change by Broad Age Group 2011-2031

	Total Population	Working Age (16-	Younger (0-15yrs)	Older (65+yrs)
	Change, 2011-2031	64yrs) Population	Population Change	Population
		Change 2011-2031	2011-2031	Change 2011-31
Waveney	8890	-2290	220	10970

Source: CRG, EEFM, POPGROUP (Data rounded to nearest 10, values may not sum as a result)

4.9 Table 11 provides a comparison of CRG's economy-led population forecast with ONS' 2012-based subnational population projections (SNPP). ONS' subnational population projections are based on a continuation of recent demographic trends, using data for up to six preceding years. Total population growth within CRG's economic-led population forecast, constrained to the EEFM's total population growth, is higher than the population growth within the 2012-based demographic projections of ONS. The working age population within the CRG population forecast, constrained to the EEFM working age population, is also higher than that within the ONS 2012-based subnational population projections in the District.

Table 11 Comparison of CRG Population Forecast with ONS 2012-Based Population Projection

		ONS 2012-b	ONS 2012-based SNPP			CRG EEFM Baseline Population Forecast		
	Population 2011	Population Forecast 2031	Population Growth 2011-31	Population Growth % 2011-31	Population Forecast 2031	Population Growth 2011-31	Population Growth % 2011-31	
Waveney	115360	122010	6650	5.8%	124250	8890	7.7%	

Source: CRG, ONS, POPGROUP (Data rounded to nearest 10, values may not sum as a result)

4.10 With the POPGROUP derived forecast model, CRG produced a household projection based on POPGROUP's data module for DCLG's 2012-based Stage 1 household projections. Table 12 below shows the size of the population not in households, i.e. in halls of residence or care homes as used by POPGROUP in the household projections.

Table 12 Size of Population not in Households 2011 and 2031

	Total Non-Household Population 2011	Total Non-Household Population 2031
Waveney	1748	2267

Source: CRG, POPGROUP

4.11 The POPGROUP data module for the DCLG 2012-based Stage 1 household projections was applied with no adjustments. A summary table of the household projection is provided below, along with DCLG's 2012-based household projections for comparison.

Table 13 DCLG 2012-Based Household Projections Using ONS 2012-Based Population Projections

	Households 2011	Households 2031	Change 2011-31	Change 2011-31 %	Annual Average Increase 2011-31
Waveney	50919	57071	6152	11.4%	308

Source: DCLG

Table 13 above shows the DCLG 2012-based household projections. Table 14 below provides CRG's household projection applying the DCLG 2012-based household representative rates to CRG's population forecast.

Table 14 DCLG 2012-Based Household Representative Rates Using CRG Population Forecast

	Households 2011	Households 2031	Change 2011-31	Change 2011-31 %	Annual Average Increase 2011-31
Waveney	50919	57758	6839	12.6%	342

Source: CRG, POPGROUP

4.12 The table above shows that the economy-led population forecast projects a higher level of household growth than the DCLG 2012-based household projections which use the 2012-based demographic population forecast of ONS.

Waveney Offshore Economic Scenario

- 4.14 The effects of applying employment-led population forecasts using the EEFM model have already been discussed above. This has shown that household growth is predicted to have a higher growth rate than that projected by the DCLG 2012-based forecasts. Waveney is expected to experience additional jobs growth due to the offshore wind sector. This is now examined in more detail to establish the additional demand there might be for new housing in the District as a result of increased jobs numbers.
- 4.15 Increasing employment opportunities that could arise from the construction and ongoing maintenance of a number of new offshore wind developments in Lowestoft and Great Yarmouth will have an impact for population growth in the areas and result in an increased demand for housing. An alternative scenario has been developed to specifically assess the employment impacts associated with the offshore wind farm development over the period to 2031. Table 15 below shows that the number of additional jobs in the Waveney Economic Area as a result of the impact of the offshore wind projects is calculated to be 1207 above the EEFM baseline scenario in Waveney.

Table 15 Offshore Wind Jobs Growth

Economic	District	Number of Jobs		Change	Number of Jobs		Change
Area		EEFM Baseline		2011-2031	Wind Energy Scenario		2011-2031
		2011	2031		2011	2031	
Waveney Economic Area	Waveney	46220	49420	+3200 (7%)	46220	50627	+4407 (10%)

Source: EEFM, NLP

- 4.16 This scenario focuses on the employment benefits that could arise from the construction and ongoing maintenance of a number of new offshore wind developments that are planned to take place off the coast of East Anglia over the period to 2031. Direct and indirect jobs were used to calculate total offshore wind development employment impacts and represent a best estimate following the level of growth expected to occur under the baseline (EEFM) growth scenario.
- 4.17 As indicated in the preceding paragraph the number of additional new jobs anticipated as a result of the expansion of offshore opportunities will be approximately 1200 over the period to 2031. Additional jobs will have an effect on forecasted population growth for the area and therefore household growth figures. Table 16 below shows total revised population forecast resulting from the EEFM offshore economic scenario constrained to both the working age and total population figures.

Table 16 Offshore Economic Scenario – Population Forecast

		CRG EEFM Baseline Population			CRG EEFM Population Forecast Offshore			
	Population	Forecast			Jobs Growth Scenario Applied			
	2011	Population Population Population			Population	Population	Population	
		Forecast Growth Growth %		Forecast	Growth	Growth %		
		2031 2011-31 2011-31			2031	2011-31	2011-31	
Waveney	115360	124250	8890	7.7%	126052	10691	8.9%	

Source: CRG, POPGROUP

4.18 The revised household forecast in Table 17 below predicts that as a result of additional jobs expected up to 2031 and increasing population growth attributed to this, the number of new households in Waveney is expected to rise from 7365 to 7612 (247) over the same period.

Table 17 Offshore Economic Scenario – DCLG 2012-Based Household Representative Rates using CRG Population Forecast

	Households 2011	Households 2031	Change 2011-31	Change 2011-31 %	Annual Average Increase 2011-31
Waveney	50919	58531	7612	13.9%	381

5 Market Signals

Introduction

- 5.1 The NPPG deals with past provision and market signals in two separate sections. Paragraph 15 explains that trend-based demographic projections will understate future housing need if household growth has been suppressed by undersupply in the past, and where this is the case the projections that roll forward that past should be adjusted upwards.
- 5.2 The housing need number suggested by household and economic led projections should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between the demand for and supply of dwellings. Prices or rents rising faster than the national/local average may well indicate particular market undersupply relative to demand. Paragraph 19 lists a number of market signals, or indicators that may be used to identify such undersupply which are; land prices; house prices; rents; affordability; rate of development; and overcrowding.
- 5.3 Set out below, is the analysis of past provision and market signals. This is assessed for the HMA as a whole. Historical housing delivery is first looked at to see if there is evidence that restrictive planning has constrained land supply and hence housing development. Market signals are then looked at, beginning with house prices.
- 5.4 An analysis of the housing stock allows assessment of the range of properties currently available within the District and using the Census and other data provides an overview of how the housing stock has changed.

The Housing Market Area

Housing Delivery

- 5.5 Figure 12 below compares house building in Waveney with England starting in 2001.
- 5.6 Waveney has experienced the same peaks and troughs that national house building has seen for housing delivery. The main similarity occurs around 2007-08 where house building increases significantly in Waveney and England as a whole. The decline in house building that followed this period has not been as sharp in Waveney as the England figures indicate. But improvement in housing delivery is not following the national trend and at the last data point is still in decline in the District.

140
120
100
80
60
40
20
-20
-40

-20
-40

England Waveney

Figure 12 Housing completions in Waveney indexed 2001 = 100

Source CLG and Waveney AMRs

5.7 Figure 13 below shows housing completions in Waveney from 2001 onwards. It shows that although the rate of completions has been slower than the national average, overall strategic housing targets have been met for Waveney, with an average of 292 new dwellings completed over this period.

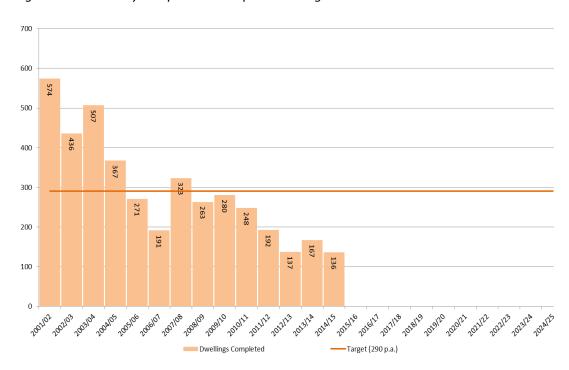


Figure 13 Waveney completions compared to targets 2001 - 2015

Source Waveney District Council AMR 2014/15

5.8 From 2008 planning targets for housing delivery as set out in the Core Strategy have not been met. The fall in delivery coincides with the timing of the recession. The recession also

had implications in relation to a reduced demand for housing and the lack of viability of development sites.

House Prices

- 5.9 An effective HMA is based on a detailed understanding of the local housing market in terms of what it costs and how this varies. This part of the report assesses the changes in the housing market that have been recorded for Waveney.
- 5.10 Across the Waveney District area the mean house price (Dec 2014) is £176,852 whilst the median is £151,250. On average prices in Waveney are much lower than the Eastern Region where the mean house price is £265,523 and the median is £215,000. By comparison the mean house price across England as a whole is £260,870 and the median is £198,000.
- 5.11 Figure 14 below profiles house prices from 1995 to 2007 (i.e. the pre-recession period). It shows values for Waveney and the East of England as well as national trends. The median house prices for Waveney increased by £103,000 (107%) over this period. This is slightly higher than the national average increase over the same period of 104% but the same as the East of England also seeing price increases of 107%. Overall, however the median house prices for Waveney are well below comparator areas throughout this time.

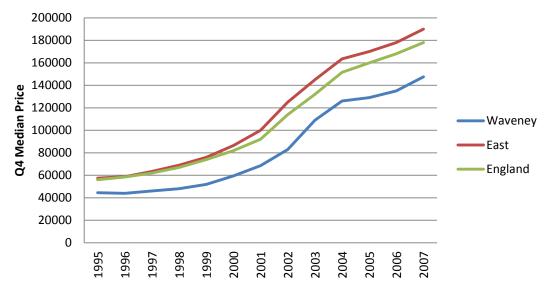


Figure 14 Pre-recession Median House Prices up to 2007

Source ONS

5.12 Since 2011, trends in house prices in Waveney have been very different due to the economic backdrop, experiencing notable price falls in late 2008/09 at the onset of the recession, as was the case both regionally and nationally. House prices rose again throughout 2009 before levelling out and remaining roughly level since.

5.13 What Figure 15 shows is that house prices have been relatively static over the last 5 years. Taking account of inflation the value of housing in real terms has declined. This would suggest that there have been no supply issues over the past few years.

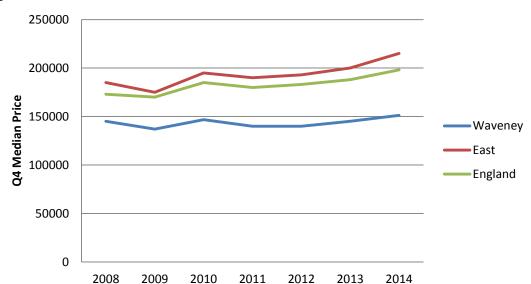


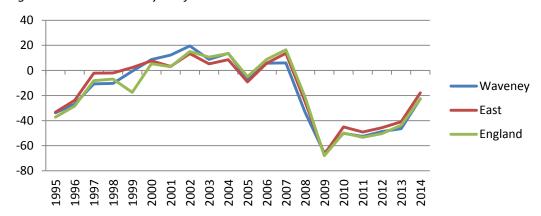
Figure 15 Post -recession Median House Prices 2008-2014

Source ONS

Sales Volumes and Demand

- 5.14 Sales volumes are an indicator of demand for market housing and Figure 16 benchmarks annual sales over the period 1995 to 2014. It uses an index where 0 is the average annual sales over the 1995-2007 pre-recession period.
- 5.15 As illustrated in Figure 16, the impact of the 2008 recession on sales volumes was experienced across Waveney, the Eastern Region and nationally with sales volumes experiencing a significant drop between 2007 and 2008. Following the recessionary slump, sales volumes remained well below pre-recession levels until 2013 and 2014 where sales appear to have strengthened.

Figure 16 Indexed analysis of sales trends 1995 to 2014



Source ONS

5.16 House prices achieved over the past two years (January 2013 to December 2014) have been analysed in more detail to gain an understanding of the latest dynamics for different property types.

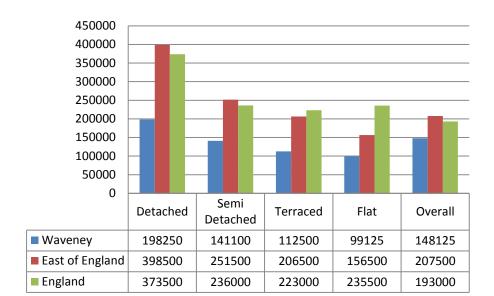
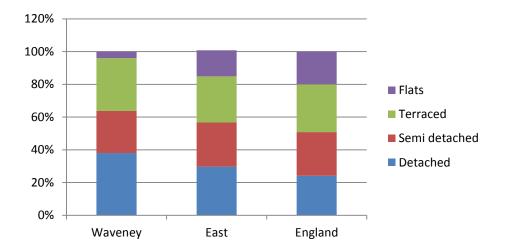


Figure 17 Median House Prices (Jan 2013 to Dec 2014)

- 5.17 Figure 17 above shows median house prices by different dwellings type. The median house price for a detached house in Waveney is £198,250 which is 67% of the median price of housing in the East of £398,500. The median price of a semi-detached property in Waveney is £141,100 83% of the East of England value; and the price of a terrace house in Waveney is £112,500 60% of the East of England value. For each of these property types the East of England figure is very similar to the England values.
- 5.18 Overall house price figures are shown in Figure 18 below for the proportion of dwelling types being sold in each area. Waveney has a higher proportion of detached dwelling sales than any other and in relation to the other areas but significantly lower sales of flats.

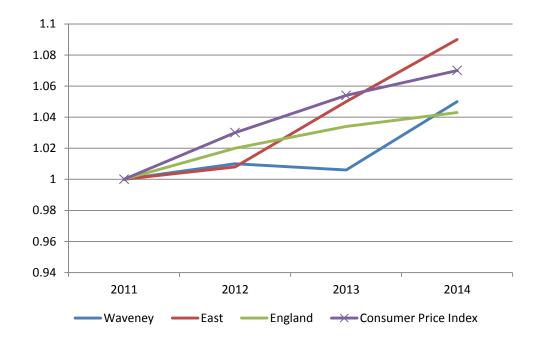
Figure 18 Proportion of Sales by Dwelling Type (Jan 2013 – Dec 2014)



Rental Trends

- 5.19 The most recent VOA private rental data (March 2015) shows the median rental price across all property types in Waveney is £524pcm. This is well below both the regional median value of £650pcm and the national value of £600pcm.
- 5.20 Figure 19 below shows the average rental values benchmarked to September 2011 values and shows that there has been a general positive trend across all of the comparator areas. The median rental values for Waveney have been increasing faster over the 2013/14 period and now rental rates are higher than the national average but not as high as the regions rental values which have overtaken the consumer price index increase.

Figure 19 Benchmarked trend in average private rental values (2011-2014)



Source VOA Private Rental Data/ONS

5.21 Figure 20 shows trends in the number of private rental lettings recorded by the VOA benchmarked against the September 2011 figures. This shows a general downward trend in the number of rental transactions in Waveney, with rental volumes falling by approximately 38% over this period. This is broadly in line with the regional trend and may be an indication of households returning to owner occupation as a result of improved mortgage availability and the impact of Government schemes such as Help to Buy.

1.2
1
0.8
0.6
0.6
0.2
0
2011
2012
2013
2014

Waveney East England

Figure 20 Trend in private rental transactions (2011-2014)

Source VOA Private Rental Data/ONS

Affordability of Market Housing

- 5.22 Evidence of affordability has been specifically looked at using the relationship between lower quartile house prices and lower quartile earnings (Figure 21). As of 2013 the lower quartile house prices in Waveney are 6.44 times higher than lower quartile earnings. This is just slightly lower than the ratio seen in England at this time (6.45). But Waveney has seen large fluctuations over the last 5 or 6 years where at times the ratio of cost of housing compared to earnings has been much higher and significantly lower than national ratios.
- 5.23 In Waveney, as with the national tend, the ratio of affordability peaked around 2007/08 before experiencing a post-recession trough in 2009. Affordability ratios have since increased but still below the 2007/08 peak.
- 5.24 As a general observation, across all areas the affordability of property has worsened over the last 16 years. In Waveney the lower quartile affordability ratio has increased 66% over this period more than 57% increase nationally.

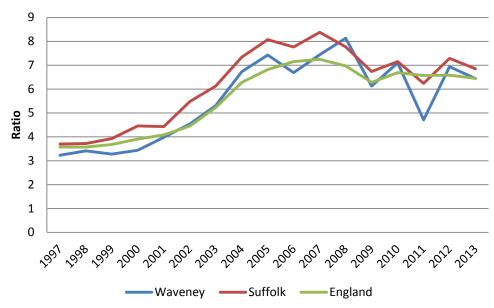


Figure 21 Lower Quartile Affordability Trend (1997-2013)

Source DCLG Housing Market Live Tables

5.25 The lower quartile ratios have been compared to the median price-earnings to identify whether affordability is an issue across the market or within a particular segment. In Waveney the median ratio and lower quartile ratio are very close indicating that affordability at the lower end of the market is no more constrained than other segments (Table 19).

Table 18 Comparison of lower quartile and median affordability

	Lower Quartile Ratio	Median Ratio	Difference
Waveney	6.44	6.72	-0.28
Suffolk	6.85	6.82	-0.03
England	6.45	6.37	-0.25

Source DCLG Housing Market Live Tables

5.26 Affordability is influenced by house prices and earnings. Figure 22 compares the median and lower quartile gross annual earnings by residence. Median earnings in Waveney are £24415 per annum which is lower than Suffolk (£26000) and England (£27500). Lower quartile earnings in Waveney are £17858 per annum which is again lower than comparator areas. This emphasises that the relatively low property prices in Waveney, which are more affordable than in the comparator areas, is a reflection of low property prices rather than high wages.

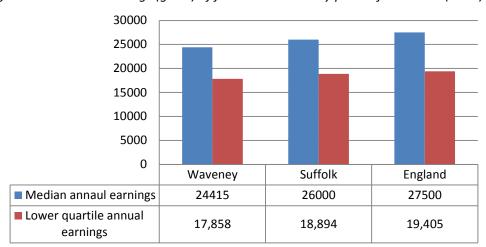
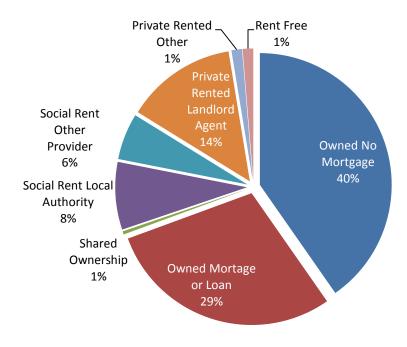


Figure 22 Annual earnings (gross) of full time workers by place of residence (2014)

5.27 Figure 23 below shows the tenure of households in Waveney in 2011. The data indicates that 40% of households in the District are owner occupied without a mortgage, which is higher than both the eastern region (32.9%) and nationally (30.6%). However, the proportion of owner occupiers with a mortgage at 29% is lower than the regional figure (35.4%) and national figure (33.6%). 14% of households in Waveney are resident in the social rented sector, which is lower than both the region (15.7%) and national (17.7%. The private rented sector at 15% sits between both regional (14.7%) and national figures (16.8%).





Source 2011 Census

5.28 Nationally, a combination of the deteriorating affordability of market homes, restricted access to mortgage products and a lack of social housing supply over the 2001-11 decade has resulted in fewer households being able to buy and increased pressures on the existing

affordable housing stock. This has resulted in growth in the private rented sector as households are being forced to rent longer.

5.29 Over this period Waveney as a whole has not changed significantly. The small decrease in owner occupied properties of just 3% has been taken up in the private rental market (Figure 24). The social rented sector has remained static at 15% of the housing market.

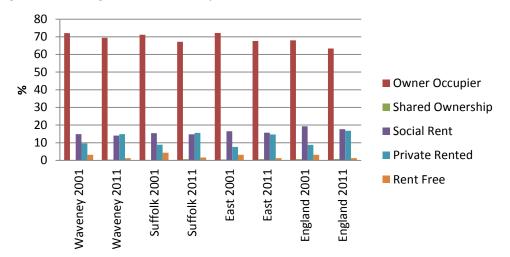


Figure 24 Change in Households by Tenure 2001 to 2011

Source ONS Census 2001 and 2011

Housing Market Research Summary

- 5.30 Analysis of market signals indicates that within Waveney house prices increased over the 2001 to 2011 decade and affordability of market housing decreased. There was also a modest decline (3%) in home ownership. Private rental costs have increased sharply in Waveney and correspondingly the number of people renting from private landlords has declined steeply in the last year although long term trends show that private renting has increased. Comparing Waveney's current housing market with historic market trends does point to some degree of constraint increasing over the 2001-2011 decade. However, the wider analysis and comparison of the housing market in Waveney with neighbouring and wider markets, the data does not indicate that there is any substantial supply-demand imbalance in Waveney. House prices in Waveney are lower than neighbouring areas but still not affordable with lower quartile house prices 6.44 times lower quartile incomes.
- 5.31 Local Estate Agents and Letting Agents confirm that there is an insufficient quantity of affordable homes for first time buyers or younger people who want to rent. The cost of buying is cheaper than renting however inability to secure mortgages prevents many people doing so. Private renting is less affordable, however there is perceived to be a lack of social rented properties, which is more affordable, that allows people to move into their own homes. Larger properties are harder and take longer to sell, which suggests that there is either a lack of demand or that the local housing market does not meet local demand.

- 5.32 There is no evidence that housing supply has been undersupplied or that planning has been particularly restrictive. The rate of house building in Waveney fell behind the England rate in the mid-2000's but Waveney was exceeding plan targets before the recession took hold and overall has met plan targets. However since 2009 housebuilding in Waveney has lagged behind national trends indicating a gradual decline.
- 5.33 There is no indication of undersupply when considering the rate of house price change. Any divergence in house prices since the early 2000's has been eroded. As is the case across England, houses have become less affordable, although this has not been as severe in Waveney as in many other parts of the region.

6 The Broads Authority

Objectively Assessed Need for the Broads Authority Area

Op to this point this report has covered the housing requirement for the whole of the Waveney area including the Broads Authority area. Opinion Research Services have recently completed the Central Norfolk Strategic Housing Market Assessment, in which the Broads objective housing need has been assessed. The total housing need for the Broads area has been calculated and then broken down into District wide figures for the period 2012 to 2036. Table 20 and Table 21 provide details of projected population growth, household and dwelling numbers over this period. The figures shown are the total, not an annual rate. As can be seen the figures are very small (equating to approximately 2 dwellings per annum for Waveney) and will have only a marginal impact on meeting the needs of local authorities in the area.

Table 19 Projected population growth, households and dwellings 2012-2036 for the Broads Area

	2012-2036 Population Change	Household Increase	Concealed Households	Dwellings
ORS Model Using Long-	594	229	7	296
term migration trends				
Jobs led growth	638	248	7	320

Source: ORS 2016

Table 20 Projected Dwellings needed for the Broads by Local Authority 2012-2036

	Breckland	Broadland	North Norfolk	Norwich	South Norfolk	Great Yarmouth	Waveney
ORS Model Using Long- term migration trends	0	53	95	3	34	63	47
Jobs led growth	0	57	103	3	37	69	51

Source: ORS 2016

7 Conclusions

The Housing Market Area

- 7.1 Evidence from the 2011 Census has been used to test the strategic HMA as defined by the NHPAU housing market area geography. The containment ratio for migration of 70% as set in the PPG has not quite been met, with the Waveney rate at an average of 68.5%. Other local authority areas were added to test this further however there was no alternative that had a higher containment rate.
- 7.2 Travel to work patterns show a high level of containment and although the PPG does not set a threshold for this, levels above 75% are suggested as appropriate for determining self containment. Waveney has an overall travel to work containment rate of 79%.
- 7.3 Average house prices were also tested to establish whether the housing market area could be refined through price ranges. However, the findings were inconclusive and did not add any further determinate factor to defining the Waveney HMA.
- 7.4 It is therefore concluded that for the purposes of setting a housing target for the district for the period up to 2036 Waveney is self contained.

Demographic Starting Point

7.5 In accordance with the PPG the most recent projections have been used as a starting point for assessing housing need. The 2012-based official demographic projections have been used for this report. These indicate that in 2036 the population in Waveney will be 123,900 and the number of households will increase to 58,621.

Adjustments

- 7.6 In line with national guidance, before they are used to establish objectively assessed housing need, the demographic projections may be adjusted to take account of two factors. The first is to consider future employment growth and the second are market signals.
- 7.7 Demographic projections carry forward past trends so any constraints to housing delivery that have affected where people live must be taken into account. If this is the case, housing provision should be lifted above the projections so that this position is not replicated in the future. This also helps to ensure that if employment opportunities increase in the area, there will be people already available to fill newly created jobs.

- 7.8 Adjustments have been made to the baseline position using the East of England Forecasting Model (EEFM) and additional scenarios to the DCLG forecasts using CRG population forecasts.
 - CRG applied DCLG's 2012-based household representative rates to the population forecast derived from POPGROUP and constrained EEFM total population. This scenario indicated that there would be uplift in figures to 342 dwellings per annum requirement.
 - CRG carried out further work taking account of potential jobs growth as a result of
 offshore wind development, operations and maintenance. The Waveney Offshore
 economic scenario was also applied using DCLG 2012-based data. As a result of this
 scenario the dwelling requirement has increased to 381 per annum.
- 7.9 Increasing employment opportunities as a result of the offshore wind development has the potential to add an additional requirement to housing targets.
- 7.10 In relation to market signals, there are two pieces of evidence that suggest uplift to the demographic projections could be justified. The first is affordability and the second is delivery. There is no evidence to suggest that house prices in Waveney are less affordable than other areas but poor wages and lack of finance are likely may be key constraints to both privately renting and buying property in the District. Following the economic downturn in 2008, housing delivery has been slow to improve and although overall plan targets are being met the current rate of delivery is falling below the annual dwelling requirement in the Local Plan.
- 7.11 Whether market signals justify uplift to the projections is a matter of judgement, however the NPPF advises that in these circumstances uplift is required. Further work will assess whether there is a requirement to increase the housing target and if so by how much.
- 7.12 The Housing Market Area Objectively Assessed Need has been preliminarily assessed as 381 per annum over the period 2011 2036. For the HMA this is a 41 per annum uplift on the most recent household projections from CLG, taking account of the results of the Offshore Wind employment scenario.
- 7.13 As well as objectively assessed need, development capacity of the area and whether there is any cross-boundary unmet need must to be taken into account. Affordable housing need should also form part of the housing requirement assessment.
- 7.14 Paragraph 9.29 of the PPG, requires plan makers to estimate how many affordable units could be delivered if overall housebuilding is in line with the objectively assessed need, given viable rates of development contributions. If the deliverable number of affordable units is less than the affordable need that has been calculated separately, overall housing targets may have to be increased above the OAN. Further assessment will be undertaken to establish whether any adjustment will be needed for Waveney.

Appendix A

East of England Forecasting Model Overview⁷

The East of England Forecasting Model was developed by the former regional development agency and assembly in response to the need to align economic, labour, demographic and housing evidence for regional strategies. A leading international economic forecasting firm – Oxford Economic – designed the model and the first results were published in 2007. Ownership of the Forecasting model transferred to the East of England Local Government Association (EELGA) in April 2011, with the operation being managed by Cambridgeshire County Council.

The overall structure of the model has been formed around the interdependencies between the economy, demographic change and housing at a local level. The principle focus of the model is the labour market and the structure allows scenarios which test the impact of variables upon each other – for example, the impact of housing supply on economic variables. The EEFM is a large model, with over 12,000 economic, labour markets, demographic and housing variables that are used to forecast local economic conditions. These local forecasts are influenced by broader national and then regional economic trends. Essentially, there is an economic hierarchy from national-regional-local. The diagram below shows the main internal relationships between variables within the model.

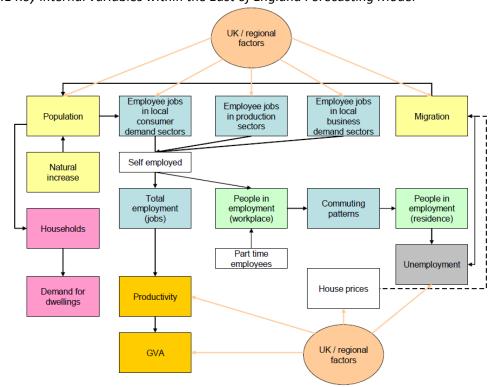


Figure A3:1 Key internal variables within the East of England Forecasting Model

Source: Oxford Economics, East of England Forecasting Model, Technical Report: Model description and data sources, January 2015

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⁷ East of England Forecasting Model Overview taken from Appendix 3 of the Ipswich and Waveney Economic Areas Employment Land Needs Assessment Final Report

In this way, the model provides a vital means to address the following requirements of the NPPF:

"Local planning authorities should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals."

NPPF, para. 158

Historical data over 20 year period is used for most variables to estimate the relationships between variable and for forecasting future trends. The interactions between economic (in terms of Gross Value Added) and labour market data (e.g. employees and self-employed) are fundamental mechanisms to then forecast local economic conditions.

Regional Gross Value Added (GVA) data is scaled to match the national accounts, as published in the "Blue Book". The national accounts record and describe economic activity for different areas of the economy (e.g. production, income and financial transactions). The scaling to the national accounts is important because this mechanism provides the supply chain linkages between each economic sector: inputs from one sector have outputs in another.

Employment data is the combination of employee-derived from the ONS Workforce Jobs (WFJ) series scaled to Business Register and Employment Survey (BRES) data for 2009-13, self-employed (ONS WFJ and Census) and employees in armed forces (ONS WFJ and Defence Analytical Services and Advice). These different sources are used because accurate and updated employment data is not available for local areas (apart from the census results).

Whilst the model uses these long-term trends, more recent changes can alter forecasts at a local level. This is particularly relevant for considering local employment in different sectors. Local employment is one of the model's most important components because the local interpretation of the national and regional economic change is based on the changes to local employment.

The model uses trends in the Location Quotient (LQ) of each sector for each local area as a means of forecasting the future amount of local employment from multi-regional employment forecasts (which are forecasted separately).

There are two ways that levels of local employment can change: (1) through changes from the multiregional model or (2) the local LQ. If the regional trend is for a 10% change (increase or decrease) over time and the local LQ remains the same, the 10% change will apply locally. The local LQ may change if the trend has been for an area to become more (or less) specialised the model assumes this trend will continue.

The employment forecasts also take account of the supply and demand for labour. The EEFM and the multi-regional model incorporate links between employment, unemployment and migration. For example, if employment is forecast to grow, reducing unemployment below the regional rate, working age people will be assumed to migrate into the local area. Commuting patterns are also

included in the model but are fixed at the rates recorded by the 2011 Census. These play an important role because the forecast jobs are distributed according to the strength of the link between one area and another.

The above is a summary of the main features of the EEFM and illustrate how the demographic forecasts reflect labour market trends and migration (and natural change indirectly). This structure allows scenarios which test the impact of variables upon each other – for example, the impact of housing supply on economic variables.



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