Brentwood Borough Council

Strategic Housing Market Assessment
Part One

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1 INTRODUCTION

1.1 This study was commissioned by Brentwood Borough Council and undertaken by Peter Brett Associates (PBA) to provide an objective assessment of housing need (OAN). This work together with the Part 2 SHMA (affordable housing needs) covers the full objectively assessed housing need for Brentwood Borough.

Relationship to earlier housing needs work

1.2 This report follows a January 2018 PBA study which in turn updated earlier work for the Council[1]. Over the suite of evidence, we have tested a range of population and household projections, namely:

- 'Official' ONS population projections (2008, 2011, 2012 & 2014) and associated CLG household projections.
- Essex Planning Officer Association (EPOA) population and household projections (Phase 6), prepared by Edge Analytics on behalf of EPOA, and
- PBA projections, prepared by PBA to supplement or test other projections.
- GLA Household Projections

1.3 Our previous work concluded that an OAN around 360 - 380 dwellings per annum (dpa) for Brentwood could be supported.

1.4 Our last report (January 2018) increased the OAN from 360 upto 380 dpa to allow for slightly more 'headroom' over the then current 2014 based household projections. The 2014 based projections were higher than the previous projection rounds.

1.5 However in January we noted that our analysis (and that also provided by the GLA) suggested that the 2014 projections were abnormally high for Brentwood. We expected the 'demographic starting point' to fall on release of the 2016 based projections. This assertion has subsequently proved correct with the 2016 based population projections being much lower than the previous vintage. We discuss the 2016 based demographic data later in this report.

1.6 In our January 2018 work we also advised on the scale of the Market Signal uplift. There is no one correct way to estimate the scale of a market signal adjustment and the (old) Guidance strongly advised against trying to turn the exercise into a 'science'. Some have promoted various 'models' which may purport to be from academic institutions but on close examination are not supported by the institutions concerned. Others undertake extensive benchmarking exercises. In our analysis we recommended that a market signal increase of 'at least' 20% could be supported while noting that market signal uplifts tended not to exceed 30%. In our recommendations we increased the OAN by 36% over the demographic baseline; partly to respond to market signal pressures but also (pragmatically) to allow for a margin of error should newer data (demographic or otherwise) suggest the OAN may need to increase slightly.

[1] PBA (February 2015): Objectively Assessed Needs for Brentwood: Moving towards a housing target

1.7 This reflected the fact that while the Plan was still emerging, the greater risk was that the OAN (and so housing target) was too low and insufficient sites identified. Were the OAN to increase 'at the last minute' the Council may need to delay the plan while more sites are identified and assessed to meet the minimum need. Conversely; should the OAN fall, the Council has a number of options, including moving any 'surplus' into a higher than OAN 'policy on' target.

2016 Based Projections

1.8 Although we last reported in January 2018 since then a lot has changed resulting in an even more complicated picture than previously.

1.9 Of greatest significance is that the official household projections have moved onto a 2016 base. As noted above these are lower than the previous 2014 projections which has an implication for the Councils 'demographic starting point'. Also, the East of England Forecasting Model (EEFM), used to test the economic need for housing, has been updated.

1.10 Also of relevance is an independent demographic review (Neil McDonald report – appended). This report looked in detail at the 2016 based population projections and the 2017 MYE data which were published earlier this year. The independent report was commissioned because earlier PBA (and GLA) analysis, presented in our January 2018 report, suggested demographic need was falling. An independent review of PBAs findings was justified given the significance of the new data.

The Standard Method

1.11 In addition, the Government has recently released a new NPPF(2) and associated Guidance. This replaces the concept of Objectively Assessed Housing Need (OAN) with a new Standard Method (SM). This new (SM) method was proposed to simplify need assessments.

1.12 As a concept the Standard Method has its 'roots' in the Local Plan Expert Group recommendations. That group championed a simple and transparent alternative to OAN that was free of *'manipulation' or 'gaming'*. The concept of a simpler system was almost universally welcomed. But the LPEG method, and their proposed draft Planning Practice Guidance, was rejected by Government in favour of an alternative which takes the household projections and applies a single uplift based on published house price affordability data. Unlike the LPEG version, which provided no scope for Councils to depart from the published (estimated) ONS household and population data, the Standard Method allows councils, in exceptional circumstances, to depart from official data. This provides an important 'safety net' where there are known errors in the ONS estimates which result in data being too high, or in some cases too low. This is important for Councils such as Tendring where ONS data is recognised as being erroneously too high but also in cases, such as parts of Cambridgeshire, where both Councils land developers agree the data is too low[2].

1.13 The CLG alternative method was published as an 'indicative' calculation in late 2017 and is largely unchanged. For plan making the calculation needs to be updated with

[2] Note – there is no evidence so far that there are errors in the Brentwood data.

the most recent data available at the time an assessment is undertaken and this 'indicative' 2017 data carries no weight.

1.14 However, one extreme complication, and impediment to plan making, is that Government is consulting on a possible new method (with no firm timeline). It is much too early to speculate what this may mean for plan making and for individual Councils. There are simply too many variables 'in play'. However, this needs to kept under review.

1.15 It is understood that the Brentwood Plan will be submitted after 24th January 2019. This is outside the transition period and consequently the plan will be examined using the standard method - in whatever form it may take at the time.

Overview of this update report

1.16 So not to delay the preparation and submission of the emerging plan, in this report we look to 'future proof' the Councils housing number by considering both the OAN (using the old Guidance) and also the product of the published Standard Method – accepting this this is (unfortunately) still subject to review and may not be confirmed until the 'last minute'.

1.17 This report borrows extensively from our January 2018 report. This is because much of this analysis remains relevant to the assessment of OAN and a whole new assessment would not be propionate evidence. The data in this report is however updated to reflect the new 2016 based household projections and 2017 based house price affordability data. We also update the economic uplift analysis to consider the new EEFM.

Base date for the emerging plan

1.18 One significant shift between previous work for the Council and this report is that the Council has moved forward the base date for the new plan, from 2013 to 2016.

1.19 2013 was originally used because it aligned with the suite of EPOA demographic reports. The choice of 2013 was always slightly unusual because 2013 does not align with the ONS/CLG household projection schedule (alternate even years).

1.20 Using 2016 as the base date of the new development plan aligns with the most recent set of official population and household projections (2016 based). These should also be current at the time the development plan is examined with no new official projections expected until the end of 2019 at the earliest. Using 2016 also allows other evidence, such as economic evidence, to use a recent official data point (such job estimates from the BRES) as their base date.

1.21 Our opinion is that using a base date that aligns with the official population and household projection is a sensible and pragmatic choice.

1.22 For the purposes of OAN, which benefits from a base set aligned with the official projections, we note that following the current SM, as drafted, the housing need calculation starts with the '*current year*'. The current year is only fixed when the plan is submitted. Unmet need accumulated prior to the 'current year' appears to be 'wiped off'. Government, in previous consultation responses, suggested any

‘pressure’ from unmet need would be reflected in worsening affordability data which drives the single uplift in the SM. This is now echoed in paragraph 2a-017-20180913 of the new PPG that states past under-delivery, prior to the SM calculation being undertaken, is not required to be added to the SM number.

1.23 It is therefore possible that when submitting the development plan using the SM the Council could conceivably roll the plan housing targets forward to commence in the ‘current year’ However, in our minds Guidance is unclear, not yet tested and there is considerable uncertainly around what format the SM may take in 2019. Should the Council submit their plan under SM then further consideration needs to be given to any possible ‘backlog’ between 2016 and 2019.

Structure of this report

1.24 In the first section of the report we discuss the new Standard Method calculated using 2019 as the ‘current year’.

1.25 In the final sections of this report we discuss matters particularly related to the OAN, using the old Guidance. This starts by re-capping the Housing Market Area geography, the demographic starting point and the scale of any uplifts warranted.

2 THE STANDARD METHOD

Introduction

2.1 In September 2017 CLG announced a new consultation on replacing the OAN method.

2.2 This reflects widespread criticism that the current PPG is ambiguous and open to challenge, a view we whole heartedly agree with.

2.3 The alternative proposals aim to be simple and concise and the proposed approach is built around a single demographic starting point with a standardised market signal adjustment calibrated to affordability. No further adjustments are made – including converting household to dwellings.

2.4 To protect some Councils from excessive uplifts the new method is capped at 40% above adopted plans or the official projections (whichever is higher).

2019-based Standard Method for Brentwood

2.5 The publication of the revised NPPF on 24 July 2018 confirmed the standard methodology calculation which has been explained further in the National Planning Policy Guidance published in September 2018. The calculation is much the same as that originally consulted and uses a three stage approach as follows:

- Step 1: setting the baseline using the most recent projections (currently the 2016-based household projections) to calculate the projected annual household growth over a 10 years period. The PPG at para 004 (ref ID 2a-004-20180913) says that this should be 10 consecutive years, with the current year being the first year.
- Step 2: adjusting to take account of affordability using the most recent median workplace based affordability ratio (currently the 2017)
- Step 3: capping the level of any increase

2.6 The guidance requires the Standard Method to be updated to reflect new data, up to and including the day prior to submission. At which point the assessment is 'frozen'.

2.7 Assuming submission in February 2019 the current set of household projections (2016 based) and the latest affordability data (2017) should still be extant. The next set of affordability data is not expected until March 2019 and household projections at the end of 2019.

2.8 The table below calculates the Standard Method assuming 2019 is the 'current year' and takes average household growth over the 19-29 period – as required by the method. The data shows Brentwood 'uncapped' need at 365 homes per year, reduced the 350 once the 40% cap is applied.

2.9 This (350) is lower than our OAN discussed later in this report, even when the OAN is increased by 40%. This because in our OAN assessment we suggest using the slightly higher 2014 HRRs whereas there is no scope to do so within the Standard Method. Also, when devising the Standard Method, CLG chose to omit converting households to dwellings which results in a slightly lower number.

2.10 As noted this method may be reviewed following MHCLG consultation. But this has not yet commenced and it is too early to even speculate what, if anything changes.

Figure 2.1 Standard method for Brentwood

		2019 - 29	Source
Step 1	Average Household Growth	250	[2016 based official projections]
Step 2	Affordability uplift	1.461	[Table 5c - 11.38)
	Uncapped Need	365	[Household Growth x Affordability uplift]
Step3	Capped need	350	[40% cap applied]

Source: ONS, 2016-based projections and latest House price to workplace-base earnings ratio as applied using method in PPG (Reference ID: 2a-004-20180913)

2.11 To conclude we recommend that the starting point for considering the local housing need, using the standard methodology for the current year; 2019, is set at 350 dpa. However, given the uncertainty of its status and the considerable work that has been undertaken to understand the objectively assessed need, it is appropriate to consider all the issues in detail to enable an informed decision to be made. The rest of this report will consider local housing need in its widest sense, and relating to the old guidance. It considers the housing market area, demographic projections, future employment and market signals.

3 BRENTWOOD HOUSING MARKET AREA

Introduction

3.1 The NPPF recommends that where a housing market area (HMA) extends across more than one local authority, plan-makers should assess housing needs for the whole area rather than for each authority individually.

3.2 Brentwood commissioned David Couttie Associates (DCA) to define their HMA as part of a post NPPF SHMA and that work concluded in 2013 that Brentwood District was a self-contained housing market area.

3.3 DCA also recognised housing market links with Brentwood's neighbours, and the table below (3.4 from the 2013 SHMA) summarises these links.

Figure 3.1 2013 SHMA HMA links

Local Authority Area	Migration (Census 2001)	Travel to Work (APS 2011)	House Types (2011 Census)	Tenure (2011 Census)
Chelmsford	✓	✓		✓
London	✓	✓		
Basildon	✓	✓		
Braintree				
Colchester			✓	

Source: 2013 Brentwood SHMA

3.4 With the benefit of this SHMA, and the conclusion that Brentwood constitutes a self-contained HMA, no further joint evidence base documents have been commissioned, but work has continued with the other Essex Councils to commission shared demographic data (via the Essex Planning Officers Association) and more recently strategic work the South Essex Councils.

3.5 In previous rounds of consultation, as part of the draft Brentwood plan review, no objections were received to the finding that Brentwood is a self-contained HMA. However, a number of responses noted strong links to locations beyond the Borough including commuting flows into London. Some of these responses suggested that the data should be updated given the HMA findings predated the census.

Re-testing the links with Brentwood and its neighbours.

3.6 The 2013 SHMA was prepared without full sight of the 2011 Census data – and critically the Census commuting and migration data. Instead DCA based their review on the Annual Population Survey and 2001 Census.

3.7 This study has therefore re-tested these links in light of the published 2011 Census data.

3.8 We also look at published housing market area data from neighbouring authorities, to seek to establish if the available evidence continues to identify that Brentwood forms its own self-contained housing market area.

2011 Census commuting

3.9 Overall there were less workplace jobs than resident workers in Brentwood - 36,000 resident workers compared to 33,500 workplace jobs. However, this hides the very large commuting flows. 55% of resident workers commuted out of the Borough and 52% of Brentwood jobs are taken by inward commuters.

3.10 The largest outward flow of residents was towards London. Over 5,000 residents commute to London's commercial core' (Westminster, City and Tower Hamlets) with smaller outflows to many other London boroughs.

3.11 The worker inflows are mostly local Essex commuters.

3.12 However, there are no strong patterns or dominant links with particular Essex districts. The two main links are with Basildon and Chelmsford, but the Brentwood flows are very small given the size of these local authority districts. There are over 90,000 Chelmsford resident workers and the flows - 2,500 out to Brentwood, 1,500 in from Brentwood - are minor.

3.13 The 2011 Census data continues to support the view that Brentwood is a self-contained HMA.

2011 Census migration

3.14 The 2013 SHMA found that over 80% of **local** house moves were internal to Brentwood, and this was very strong evidence of self-containment, exceeding the CLG guideline that 'around 70% of all local house moves should be internal to the HMA.

3.15 The table below updates the migration analysis using 2011 Census data. The Borough total of 77% internal moves comfortably exceeds the 70% threshold, albeit in association with some other authorities a higher exceedance is achieved.

Table 3.1 Updated Self Containment

	Place of previous residence							
Current area of residence	**Brentwood**	**Braintree**	**Chelmsford**	**Colchester**	**Maldon**	**Epping Forest**	**Basildon**	**Row total**
Brentwood	2,727	41	237	41	33	158	290	3,527
Braintree	111	7,630	983	676	355	89	154	9,998
Chelmsford	409	585	8,943	255	474	161	679	11,506
Colchester	82	754	363	13,568	298	72	97	15,234
Maldon	51	286	520	201	2,297	24	153	3,532
Epping Forest	140	46	74	32	23	4,345	57	4,717
Basildon	405	75	530	87	81	64	8,883	10,125
Local moves %	77.3%	76.3%	77.7%	89.1%	65.0%	92.1%	87.7%	

Source: 2011 Census Table MM01CUK_ALL - Origin and destination of migrants by age (broad grouped) by sex

3.16 The 2011 Census migration data continues to support the view that Brentwood is a self-contained HMA.

Evidence from neighbouring councils

3.17 We have reviewed the neighbours' housing market evidence and none suggest that Brentwood forms part of their HMA. A number confirm that while there are strong links Brentwood is contextually different.

3.18 There are four HMAs in the County:

- A four district HMA to middle and north (Braintree, Chelmsford, Colchester, Tendring). This HMA could include Maldon, but that district considered itself a separate HMA – a point accepted by their plan Inspector and also the recent North Essex Examination
- A South Essex (Thames Gateway) HMA
- A West Essex (& Herts) HMA.
- A Brentwood HMA.

3.19 To the south of the County is London. The GLA maintain that London's HMA includes all 33 boroughs, but does not extend beyond these.

3.20 In conclusion the main message, explicit or implied, from each of these studies is that Brentwood is on the edge of a number of housing markets, but does not neatly form part of any HMA, endorsing Brentwood as a single district HMA.

Figure 3.2 Summary of Neighbouring HMAs

Summary of Neighbouring HMAs

Outer North East London Strategic Housing Market Assessment (2016)

The SHMA does not address the housing market beyond London's boundaries noting that it has long been established that London forms a single housing market – the Greater London Housing Market Area (GLHMA). The SHMA does not consider defining the housing market geography below the London level but acknowledges that London consists of smaller overlapping housing market areas. In the case of North East London, the four authorities of LB Barking and Dagenham, LB Havering, LB Newham and LB Redbridge are considered to be part of the same housing market area.

South Essex Strategic Housing Market Assessment (May 2016)

The SHMA defined the Thames Gateway South Essex HMA as Basildon, Castle Point, Rochford, Southend-on-Sea and Thurrock. The SHMA acknowledges that Brentwood has some links to the South Essex HMA most notably with Basildon. It was noted that the Basildon HMA extends into parts Bentwood and Chelmsford. The South Essex HMA boundary was not extended into Chelmsford or Basildon, instead matters of cross-boundary need and joint working would be addressed through Basildon's Duty-to-Cooperate.

Mid Essex Objectively Assessed Housing Needs Study (November 2016)

The SHMA assessed a HMA comprising of Braintree, Colchester, Chelmsford and Tendring was the most robust for assessing housing need. This is an update of an early SHMA which has been extensively tested at appeal and the HMA found sound.

As with the other neighbouring SHMAs there are strong links with Brentwood and its neighbours. In this case stretching up the A12 and Great Eastern Rail line. But contextually Brentwood is a very different market to most of the HMA; for example house prices are significantly higher in Brentwood district than the nearest Mid Essex neighbour (Chelmsford) with an even larger differentiation between Brentwood and the other HMA councils.

West Essex and East Hertfordshire Strategic Housing Market Assessment (September 2015)

The SHMA was underpinned by the Broad Rental Market Areas (BRMAs) boundaries defined by the VOA. The West Essex and East Hertfordshire HMA is defined as Epping Forest, Harlow, Uttlesford and East Hertfordshire. According to the VOA, Brentwood is split across three BRMAs with the SHMA concluding that Brentwood was most closely related to Chelmsford.

HMA Summary

3.21 Brentwood was defined in 2013 as a self-contained HMA by the DCA authored SHMA.

3.22 PBA have used 2011 Census data to test this finding and have also looked at neighbours plans and strategies. No neighbouring authority considers Brentwood to be part of their HMA, and the 2011 Census data re-confirms Brentwood as a self-contained HMA.

3.23 The data and the neighbouring SHMAs do suggest strong housing market links (particularly commuting flows into the Borough) with Brentwood and the neighbouring authorities.

3.24 While Brentwood does not share an HMA-wide OAN with its neighbours, as a policy-on adjustment, and via the DtC the Borough may need to consider whether it is a sustainable location for unmet cross boundary need. In this regard we understand that the Essex neighbours (Chelmsford and Epping Forest) both have plans submitted for examination that are not reliant on Brentwood accepting housing growth. There is ongoing DtC work with South Essex as part of a strategic growth study and participation in a Joint Strategic Plan.

3.25 Regarding London, this report has been informed by demographic modelling, provided by the GLA to align with the emerging London Plan evidence base.

4 OFFICIAL HOUSEHOLD PROJECTIONS

Introduction

4.1 Once the HMA is defined, national policy and guidance require that housing needs assessments start from the official household projections, which in turn are based on the ONS sub-national population projections. The official projection groups the projected population into households, applying a factor know as household formation rates (or alternatively as household representative rates or headship rates – HRRs for short). For an OAN assessment the housing need calculation turns the projected household numbers into numbers of dwellings, applying an adjustment for unoccupied dwellings (vacant and second homes). This final step is absent from the SM which uses households without any further adjustment when setting the need figure.

4.2 In our 2015 report the demographic data and projections were taken from the Greater Essex Demographic Forecasts produced by Edge Analytics for the Essex Planning Officers' Association (EPOA). Specifically, we used the Phase 6 of that study - ('the Edge Report') which, despite its title provides projections rather than forecasts. These were supplemented by PBA projections. These projections have now largely been superseded so here we focus on the last two rounds of 'official' projections (2014 and 2016) and also an independent round of projections provided by the GLA. The demographic modelling is supported by an independent review of data, appended to this report.

2014 based projections

Population projections

4.3 The 2014 based ONS population projections – published in May 2016 – are based on UK migration trends over the five years previous to the base year (2014) and international migration over the previous six years.

4.4 For England, there is an annual long-term net migration gain of 163,200 – including a cross-border loss of 6,300 to the rest of the UK. This compares to an overall long-term net gain of 143,500 in the ONS 2012 SNPP including a cross-border loss of 6,500. In general, the increased net international migration is spread amongst English local authorities according to the average distribution of the gross in and out flows over the previous six years.

4.5 This in most cases leads to an increased net inflow. The tables below compares the ONS 2012 and ONS 2014 projections of migration for Brentwood.

Table 4.1 Brentwood: Net Migration by Origin 2014-33. ONS 2012 SNPP and ONS 2014 SNPP

		2012 SNPP		2014 SNPP
2014-15	England	500		400
	Cross-border	0		0
	International	-100		100
	Total	**469**		**503**
2032-33	England	700		700
	Cross-border	0		0
	International	-100		0
	Total	**630**		**638**
2014-33	Total	**10,545**		**10,798**

4.6 The ONS 2014 SNPP shows just 253 more net migrants into Brentwood over the 19 years 2014 to 2033 and the total population at 2033 is now projected to be 1,871 more than in the ONS 2012 SNPP.

4.7 This is partly because the 2014 mid-year estimate is 749 more than the 2012 projection for 2014, which is due to very high net migration into Brentwood from the rest of the UK in 2013-14. Table 3.2 shows the components between 2014 and 2033.

Table 4.2 Brentwood: Population Change by Component 2014-33. ONS 2012 SNPP and ONS 2014 SNPP

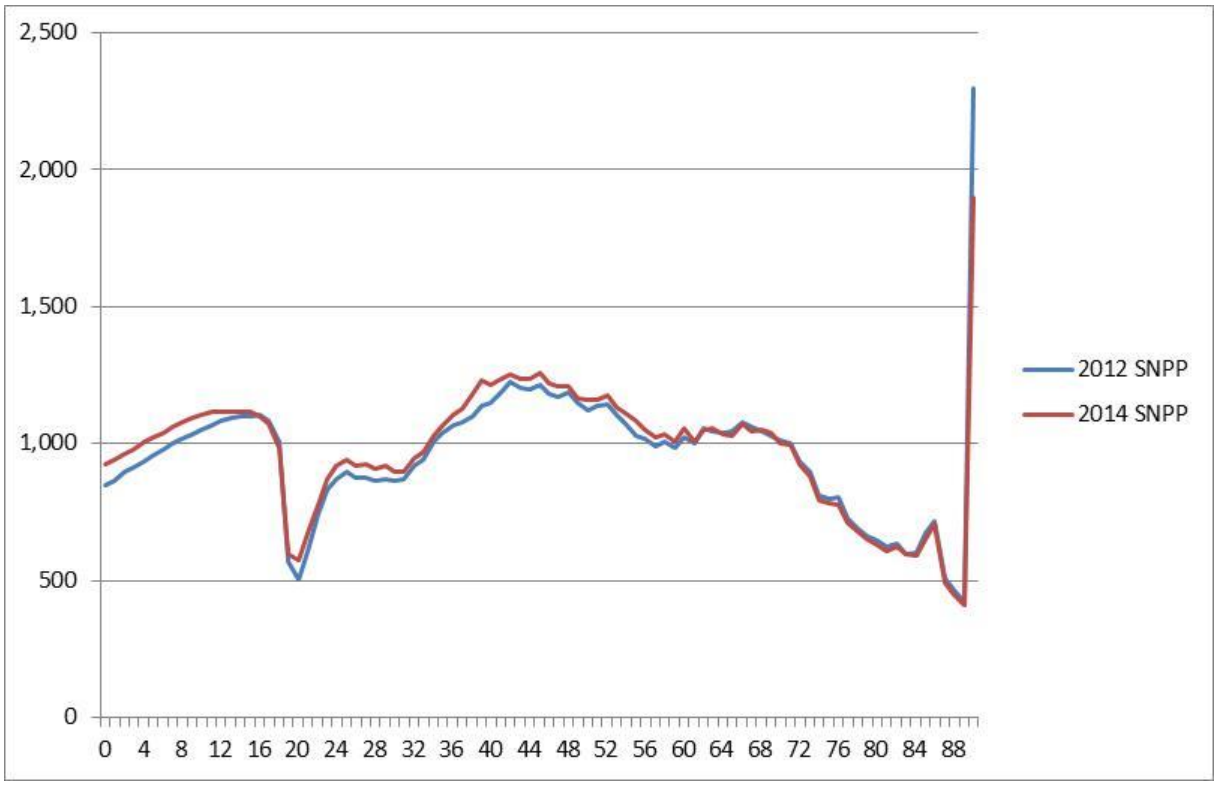
		2012 SNPP		2014 SNPP
2014	**Population**	**74,896**		**75,645**
2014-33	Births	15,819		17,218
	Deaths	14,140		14,670
	Natural Change	1,679		2,548
	Net Migration	10,545		10,798
	Total Change	12,224		13,346
2033	**Population**	**87,120**		**88,991**

4.8 Natural change 2014-33 was projected to be about 900 higher. This is due to projected increased birth rate (1,400 extra births) compared to a lower increase in deaths (+500).

4.9 Figure 3.1 below shows the effect of the changed components on the age structure at 2033. The most significant changes are more persons at most ages through to the early 60s age group, and the reduction in the projection of older persons particularly 90+. This reduction has a knock-on effect to the household projections as the elderly

living in private households have the highest overall household representative rates. This group also has a high likelihood of requiring residential care.

Figure 4.1 Brentwood: Age Structure 2033. ONS 2012 SNPP and ONS 2014 SNPP



CLG household projections

4.10 The 2014 based CLG projections were published in July 2016. Table 3.3 below compares the CLG 2012 and 2014 projections concentrating on the plan period 2013-33.

Table 4.3 : Brentwood: Household Projection by Age of Representative 2013-33.

		15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
2013	**CLG 2012**	44	568	1,465	2,052	2,469	2,939	3,420	3,243	2,644	2,438	2,687	1,954	1,946	1,705	1,620	**31,194**
	CLG 2014	46	558	1,457	2,024	2,494	2,941	3,393	3,279	2,682	2,434	2,702	1,941	1,954	1,711	1,593	**31,208**
2033	**CLG 2012**	54	584	1,569	2,214	3,086	3,417	3,326	3,137	2,866	3,054	3,164	2,981	2,365	2,152	3,384	**37,353**
	CLG 2014	53	625	1,653	2,253	3,257	3,540	3,448	3,265	2,996	3,083	3,157	2,964	2,330	2,132	3,093	**37,846**
2013-33	**CLG 2012**	10	16	104	162	617	478	-94	-106	222	616	477	1,027	419	447	1,764	**6,159**
	CLG 2014	7	67	196	229	763	599	55	-14	314	649	455	1,023	376	421	1,500	**6,638**
	Difference	-3	51	92	67	146	121	149	92	92	33	-22	-4	-43	-26	-264	**479**

Source: CLG 2012 and CLG 2014 Projections

4.11 The CLG 2014 projections imply growth in households 2014-33 that is nearly 500 more than the CLG 2012 projection. Increases occur mainly at ages 25-59 with a significant reduction at 85+. These changes are mainly due to the changes in the age structure of the ONS 2014 SNPP, although some would be due to the small amendments to the underlying household representative rates resulting from the availability of additional Labour Force Survey data.

4.12 In summary, the CLG 2014 household projections indicate average growth in households 2013-33 of 332 per annum. This compares with 308 in the CLG 2012 projections. In terms of average annual requirement, the CLG 2014 projections imply a rate of 348 net new homes per year compared to 322 from the CLG 2012 projections. Both calculations assume that the 2011 Census net vacancy/second homes level of 4.49 per cent persist

Testing the 2014 based projections

4.13 One significant shortcoming of the official projections is their reliance on very short (5 year) trend period for domestic migration. This means that the projection can be unduly influenced by short term trends, and not reflect true needs over a much longer plan period. So earlier in 2018, for our January 2018 report, PBA sought to test the projections using a set of new PBA derived projections supported by demographic work from the GLA.

4.14 We also tested the 2014 based headship rates because some suggest that these should be set aside because they embed the 'national housing crisis' that constrained household formation. However, as confirmed by Mr Clews at the recent North Essex examination, the OAN assessment should not be adjusted for national factors – these are a matter for national policy making. As with North Essex our testing showed no specific local factors that would warrant an adjustment here, so our testing used the 2014 based headship rates unadjusted.

4.15 As part of this testing we prepared several alternative projections, an updated 10-year projection (05-15) and two updated 5 year projections.

4.16 The 10-year projection used migration data spanning either side of the recession, and overcomes one of the main criticisms levelled at the official projections – the use of a very short (and so unstable) 5-year projection trend period[3].

4.17 The first of the 5-year trend projections was a 10-15 projection, which used the 2015 MYE to roll forward the last round of 'official' projections (09-14 based). The second 5 year trend projection was a 11-16 projection which uses both the 2015 and 2016 MYE.

4.18 The 11-16 projection was especially important because it provided an early view as to where we expected the next round of official projections to head (2016 based – discussed below).

4.19 When preparing these projections, we used the revised fertility and mortality rates used in the ONS 2014 SNPP and the 2014 headship rates. Both projections were based on the ONS mid-2015 estimates and the periods over which migration trends have been calculated are 2005-15 and 2010-15.

4.20 Table 3.5 summarises the results of the new projections and compares them to the earlier ONS/CLG projections. We don't show the superseded 2012 based projections in the table, but for reference these showed 322 dpa (13-33).

[3] Note – reference to 5 years is a widely recognised simplification and refers to the ONS trend period used for domestic migration. For international migration the ONS uses a 6 year period and 'natural change' a long term projection method.

Table 3.5 Updated Trends Projections

	ONS/CLG 2014	2005-15 Trends	2010-15 Trends	2011-16 Trends
Population				
2001	68.5	68.5	68.5	68.5
2011	73.8	73.8	73.8	73.8
2013	**74.5**	**74.5**	**74.5**	**74.5**
2016	76.7	76.7	76.7	76.4
2021	80.2	80.0	80.2	79.5
2026	83.8	83.8	84.2	83.0
2031	87.5	87.7	88.3	86.6
2033	**89.0**	**89.2**	**89.9**	**88.1**
2037	**91.8**	**92.2**	**93.0**	**90.9**
2001-11	5.4	5.4	5.4	5.4
2013-33	**14.5**	**14.7**	**15.4**	**13.6**
p.a.	**727**	**736**	**770**	**680**
2013-37	**17.4**	**17.8**	**18.5**	**16.4**
p.a.	**723**	**740**	**772**	**685**
Households				
2001	28.8	28.8	28.8	28.8
2011	30.8	30.8	30.8	30.8
2013	**31.2**	**31.2**	**31.2**	**31.2**
2016	32.2	32.1	32.1	32.0
2021	33.9	33.4	33.6	33.2
2026	35.5	34.9	35.2	34.5
2031	37.2	36.4	36.9	35.9
2033	**37.8**	**37.1**	**37.6**	**36.4**
2037	**39.2**	**38.4**	**39.0**	**37.6**
2001-11	2.0	2.0	2.0	2.0
2013-33	**6.6**	**5.9**	**6.4**	**5.2**
p.a.	**332**	**293**	**319**	**262**
2013-37	**8.0**	**7.2**	**7.8**	**6.4**
p.a.	**335**	**299**	**325**	**267**
Homes pa				
2013-33	**348**	**307**	**334**	**274**
2013-37	**351**	**313**	**340**	**280**

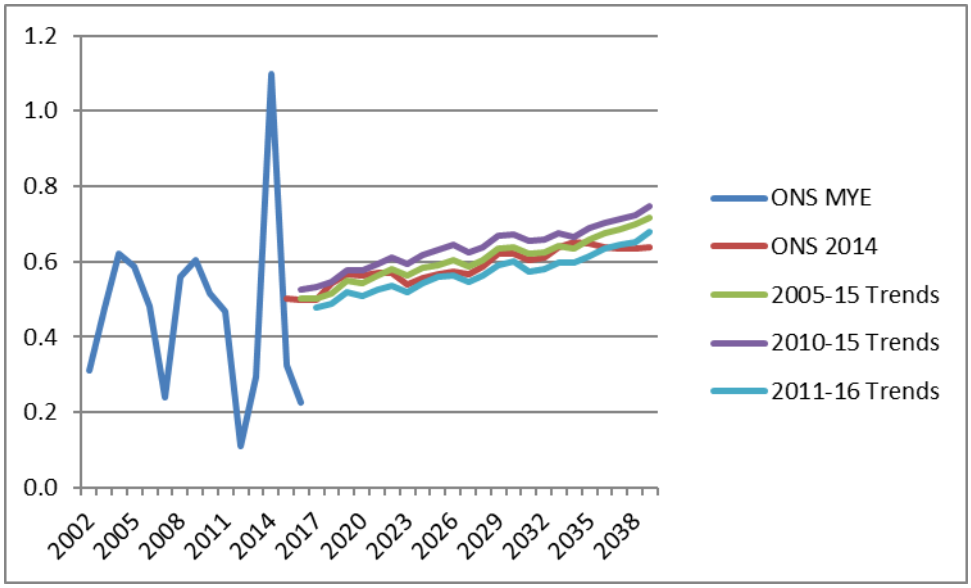
Source: PBA

4.21 In terms of total population two of the three trend projections are higher than the 2014 based official projections, but the latest (2011-16) projection is lower. However, all the projections demonstrate a lower number of households and homes over the time period, which is due to the changing population structure which is considered further below.

4.22 The chart below (**Error! Reference source not found.**) shows the net migration recorded in the past and projected forwards. One aspect to note is how unstable migration has been in the past and how the 2014 data point is abnormally high.

4.23 This helps explain why the 2014 based projections were higher than the previous (2012) based projection – they included this very high data point. The two new data points (post 2014) are much lower and in rough conformity (at the low end) with longer term trends. Therefore, the 2011-16 projection is lower than the 2014 projections. The high data point (2014) is 'diluted' by the low years proceeding and post-dating 2014.

Figure 4.2: Brentwood: Net Migration, estimates and projections compared 2001-39 (thousands)



Source: ONS, PBA

4.24 The second key influence on the number of homes needed is the profile of the population. Variations in the profile of two identically sized populations, even very slight differences in the age profile can result in differences in average household sizes and this cascades down to differences in the number of homes required.

4.25 The different age profiles of each of the projections being tested are shown in the chart below. Part of the reason that some of the trend projections show a higher population but lower number of households compared to the 2014s, is that the newer projections assume more children (who don't need / form households just yet).

Figure 4.3: Brentwood age profile

Source: ONS, PBA

4.26 In summary our testing, in early 2018, showed that there was reason to treat the 2014 based official population and household projections with some caution. There was evidence that the 2014 based projections were unusually high and other projections all reported a lower need.

GLA projections

4.27 In addition to PBA modelling we have also considered demographic evidence from the GLA. The GLA have made three new projections available – all using 2016 as their base.

- A short term (5 year) trend projection
- A medium term (10 year) trend projection
- A long term (15 year) trend projection

4.28 To convert population to households the GLA use 2014 HRRs.

Table 4.4 GLA household estimates

Projection	HH pa 13 - 33	HH pa 13 - 37
5 Year	264	267
10 Year	268	274
15 Year	254	257

Source: GLA

4.29 For Brentwood, the household projections are very similar to those discussed above. The GLA 5-year projection is identical to the PBA 2011-16 projection (+/- 2 hh pa) – as would be expected given they have the same trend base.

4.30 We do not have direct equivalents for the GLA 10 and 15-year projections. The new GLA 10-year projection is slightly lower than the 10-year PBA projection, but PBA used 2005-15 whereas the GLA use 2006-16 so only 8 of the 10 data points are shared between the two projections. The GLA 15-year projection is lower still.

4.31 All the GLA projections are much lower than the last round of official 2014 based projections.

Summary

4.32 The 2014 based projections show a need for around 350 dwellings per annum in Brentwood. This is higher than the previous round of projections (2012 based – 322 dpa). But testing of more recent data earlier this year showed that the 2014 based projection may be unusually high and all evidence suggested that demographic need was lower than suggested. However, until very recently the 2014 set was the 'official' projection and so could not be set aside lightly.

2016-based projections

Population projections

4.33 The 2016-based Sub-national Population Projections (2016 SNPP) were released in May 2018. For England as a whole for the next 10 years these show 17% less population growth than the 2014-based ones discussed above. For 44% of local authorities population growth is reduced by more than 20%. The reason is that ONS now expects less international migration to the UK, as well as higher death rates and lower birth rates.

4.34 One important feature is that the ONS 'backwards revised' earlier estimates of the population. The main changes affecting the estimates of international flows from individual authorities (within the same national totals). These were accompanied by revised estimates for the period 2011-16, which includes the trend periods used for the 2014 and 2016-based population projections.

4.35 The paper at Appendix A provides a more detailed commentary on the changes that have occurred including the methodological changes as well as the actual population recorded in the latest Mid Year Estimate which suggests a fall in Brentwood's population.

4.36 The effect of this revision is that estimated population growth in recent years is now reported a being lower than we expected in January 2018. In summary our January 2018 testing showed that demographic need was falling but this new data revision shows it falling even faster than we expected.

4.37 For Brentwood the 2016 based official population projection report a drop of 18% in the population growth for Brentwood. In the period 2016-2026 the projection has been revised to a growth of 5,781 compared to the previous figure of 7,091.

4.38 The components of change figures are set out in the table below. Some of the changes may appear small, for example the small reduction in 'internal in' but when coupled with an increase in 'internal out' the 'net' effect on internal migration is much greater. The largest percentage change relates to international migration although the scale of the flows remains small.

Table 3.4: Brentwood: components of change comparison 2014 and 2016-based projections

Table 2: The detailed differences in the new projections			
Main components of change 2016-	**2014 SNPP**	**2016 SNPP**	**Difference**
Births	9,089	9,073	0%
Deaths	7,545	8,054	7%
Internal in	44,849	44,777	0%
Internal out	39,361	40,733	3%
Cross border in	787	767	-3%
Cross border out	892	859	-4%
International in	2,413	2,546	5%
International out	2,294	1,765	-23%

Source: PBA Tool from ONS projections

Household projections

4.39 At the time of writing the 2016 based household projections had only very recently been released (20th September 2018). As would be expected given the lower population growth in the related 2016 based population projections the household projections show much less household growth in Brentwood.

4.40 At 2016 there were 31,679 households in Brentwood according to the 2016-based projections. These new projections expect there to be 35,944 households at 2033, which compares with the 2014-based figure of 37,846. This demonstrates that there is now projected to be 1,902 less households than the previous projections expected.

4.41 The per annum average rate differs slightly dependent on the period taken. The Standard Method takes the first 10 years of the projection only[4] whereas OAN assessments may take the plan period or even the average of the relevant household projection. For the 2016-26 period the 2014 based official projections reported 325 households per annum but the new 2016 based projections only 236. Over the proposed plan period (16-33) this increases slightly to 253 households per annum in the 2016 based projections[5].

4.42 As noted above, part of this reduction relates to lower population growth but coupled with this the ONS have revised the way they expect households to form in the future. The 2014 based household projections had been prepared by CLG but the 2016 by the ONS. On the 'handover' the ONS had some concerns about the robustness of

[4] As noted in the introduction there is some confusion over the 'current' year – which could be 2018 at the time of writing, but 2019 when the plan is submitted. Here we use 16-26 to align with the base date of the 2016 projections but this needs to be kept under review.

[5] These figures are different to those set out in Neil McDonalds paper at Appendix A due to the different time periods covered and vacancy/second homes rate applied.

the data used to derive the 2014 based HRRs and have sought to improve the method used.

4.43 It is fair to say that this new set of data, which shows households forming less readily compared to previous estimates, has caused some considerable commentary. Some criticising the ONS data and suggesting that 2016 based HRRs are not fit to use.

4.44 However, in context, many of these criticisms are unfair. The ONS have adopted a different method because their opinion is that the previous method, used to derive the 2014 HRRs cannot be supported going forward. But also because the ONS remit is to prepare an independent assessment of household growth. It is slightly ironic that many who championed Standard Method, because it was based on an impartial and independent set of data, free of local manipulation so readily challenge the fact the ONS have changed their view.

4.45 However, the main issue is that many of the criticisms made against the most recent set of household projections relate to 'policy on' issues about how national policy ought to provide new homes. At the time of writing Government is aware that the household projections are lower than previously expected - but has not (yet) changed planning guidance to require local assessments to depart from them. Instead a new round of consultation is expected although the timing for this is not yet clear.

4.46 Pending the Government Consultation on the 2016 based household projections, using 2016 HRRs, remain the 'official' projections. But ones we consider should be treated with care – because national policy may seek to change how these are used for plan making.

SNPP 2016 with 2014 HRRs

4.47 We note that in Neil McDonalds review of the 2016 population projections he estimates that using the 2014 based HRRs, applied to the 2016 population, around 273 dwellings are required (16-33) (figure 9).

4.48 This is not dissimilar to the ONS sensitivity test (table 429b) which applied 2014 HRRs to the SNPP 2016 for the period 2014-39. This longer period (14-39) showed a need for 260 households per annum which once an allowance for vacant homes is made is almost the same as Neild McDonalds number (267 dpa).

Alterative 2016 based projections

4.49 In Neil McDonalds note he also tested longer term (10 year) projections and also projections using the most recent (2017) MYE data. This testing all results in a need below that shown in the SNPP 2016. So we don't, report this testing here.

A Demographic Starting Point

4.50 The (old) PPG is clear that the official household projections should normally be used as the Demographic Starting Point for housing need. The official projections also underpin the SM. Departing from this official dataset is not something that should be done lightly.

4.51 In this case the latest set of official projections are very low compared to previous versions at 236 households per annum (16-26) increasing to 253 for the plan period (16-33).

4.52 The reasons are partly related to a revised view of the past, i.e. the ONS has revised its population data disproving the data underpinning the 2014 sets. It is tempting to 'hark back' to the 2014 set of population projections but, the ONS data no longer supports their use here.

4.53 Even before the release of the 'official' 2016 based population data our testing, and that of the GLA, demonstrated that the 2014 based population projections appeared to be normally high.

4.54 However; while the 2016 based population and household projections are the 'official demographic starting point' (as per old PPG) there remains considerable uncertainly around the use of the 2016 based HRRs for plan making. This uncertainly will remain until after the Governments expected consultation at the end of this year.

4.55 So, to progress the Brentwood Plan we would suggest that the Council considers setting the demographic baseline as a range – using the 2016 based population projections which are unlikely to change between now and the plan being submitted. But using the 2016 HRRs as the lower bound and the 2014 HRRs as the upper bound.

4.56 This results in a range between 260 and 275 dwellings per annum – allowing for 2.7% vacancy and second homes[6].

4.57 This finding – that the demographic starting point is (at most) around 275 dwellings per annum - is almost identical to our advice in January 2018. In January 2018 we adopted 280 dpa as the demographic stating point after testing the 2014 based projections.

[6] Council tax data – as per Neil McDonalds note.

5 FUTURE EMPLOYMENT

Introduction

5.1 This chapter examines whether an economic uplift to the OAN is needed. This has been a challenging area of evidence and the economic uplift is explicitly omitted from the Standard Method. However, for OAN, we still need to consider whether an uplift is needed to meet economic needs.

5.2 The underlying principle is that planning for housing, economic land uses and community facilities / services should be integrated[7], so that the demand for labour is fulfilled and there is no need for unsustainable commuting to find work.

5.3 We start from the EEFM, but cross check this analysis using Experian data.

5.4 Experian was used in 2015 by NLP to test the number of new homes needed to align jobs and houses in the Borough. Their testing indicated no need for an economic uplift to the OAN. But, since then Experian have revised their model to reflect the changed economic outlook; most obviously, the national decision to leave the EU, which will take place early in the plan period.

5.5 It is important to note, that following advice from both forecasting houses (EEFM maintained by Cambridge Econometrics and Experian), this analysis uses the Economic Activity Rates provided by the forecasters themselves. Both forecasting houses explicitly advise against applying any other Economic Activity Rates to their modelled job number[8]. Alternative rates should not be applied alongside the forecast job numbers – doing so invalidates the model output at both the local and national level. A worked example of this is shown in the recent EEFM guidance note, which was agreed with Cambridge Econometrics and published alongside the EEFM.

5.6 However, we also note that, at the moment, the economic forecasting houses have not yet revised their models to accommodate the lower national and local population growth in the SNPP 2016. So, in summary Experian still assume that the larger SNPP 2014 population is provided and the EEFM (which uses a different demographic model to the SNPP) has not been adjusted to reflect a possible updated view of migration.

5.7 Any adjusted population assumption not only affects the supply of labour but also the demand for jobs – a smaller population results in a lower demand for jobs and labour supply.

5.8 So, at the moment, we can only test the merits of an economic uplift with reference to the previously advice OAN of 360-380 from our January 2018 report.

5.9 In this report we considered whether to re-commission new work for Experian but the Standard Method explicitly excludes this type of adjustment. Given the plan is likely to

[7] NPPF paragraph 70

[8] See http://atlas.cambridgeshire.gov.uk/EEFM/EEFM_OAN-Note_13-04-2017.pdf and Appendix D to Experian's LPEG representations.

be submitted using the SM commissioning new work along this line would not be proportionate.

The EEFM

5.10 The model has its roots in Regional Planning, but is now managed by Cambridge Economics and Cambridge County Council on behalf of the East of England Councils; as an example of joint strategic working on an issue that crosses administrative boundaries.

5.11 Cambridge Economics have recently taken on the role of independent forecasting house, replacing Oxford Economics, but the mechanics of the model remain as designed by Oxford Economics.

5.12 The model is designed to:

"facilitate the setting of consistent housing and jobs targets, the EEFM provides a set of baseline forecasts prepared by a leading independent forecasting house for the East of England region and sub-regions (counties, unitaries and district authorities), the East Midlands and South East regions, and the Greater Cambridge Greater Peterborough, Hertfordshire, New Anglia, Northamptonshire, South East and South East Midlands LEP areas"

How the model works

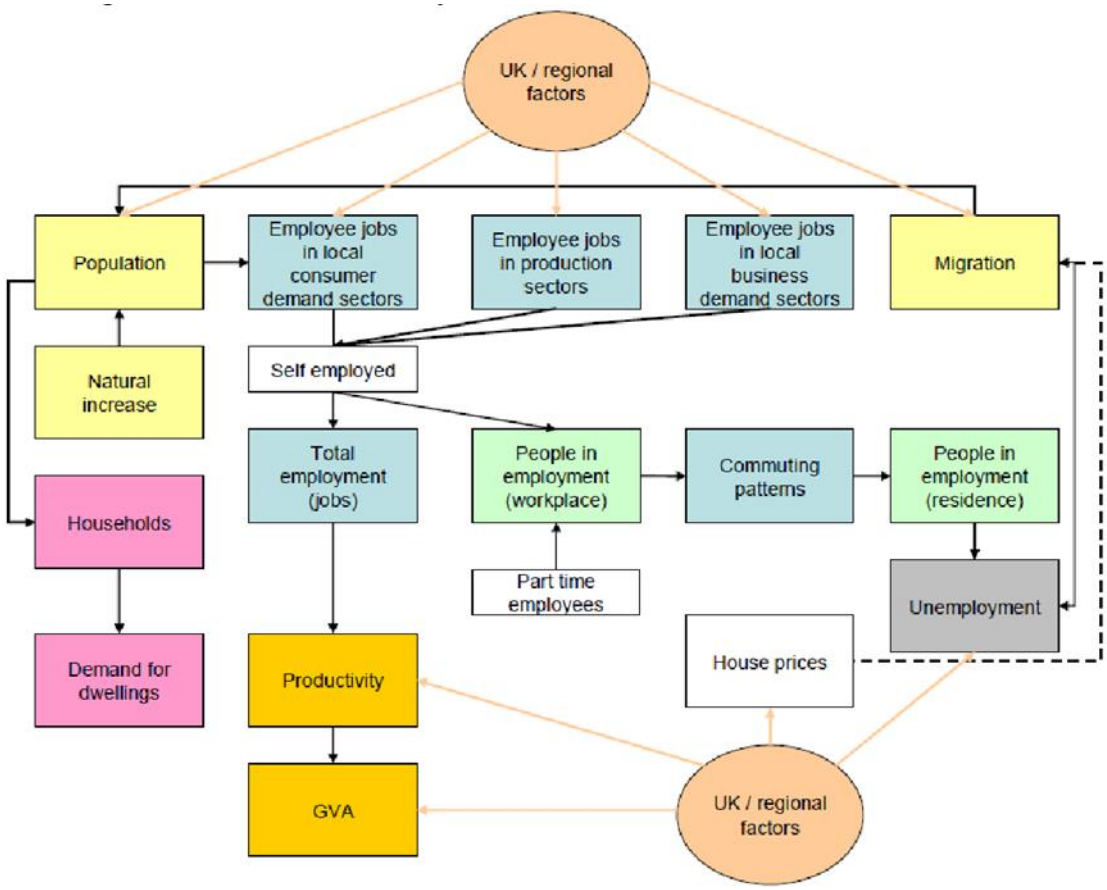
5.13 The model provides a consistent set of labour demand and labour supply numbers – all the variables are 'fully integrated' and fully interdependent.

5.14 In the EEFM, population change, and the resulting household change and housing demand, are partly driven by the demand for labour. For each local authority district:

- Labour demand, measured by the number of workplace jobs, depends partly on the size of the local population – because people's consumption of local services creates jobs in retail, leisure and so forth – and partly on wider national / global demand. Numbers of jobs are translated into resident workers through double-jobbing and commuting, and resident workers into resident population through activity rates.
- On the labour supply side, the future resident population is initially determined by natural change and trend-driven migration ('non-economic migrants') (the EEFM makes its own projections rather than using the official ONS ones).
- The model compares the resulting numbers of resident workers with the labour demand estimated earlier, to produce estimates of unemployment in each area. Places with low unemployment attract above-trend net migration ('economic migrants') as people move to places where there are more job opportunities. Hence the resident population in these places rises above the initial trend-driven number, while conversely in places where unemployment is high population falls below the trend-driven number.
- Finally, the resulting population is translated into household demand, again using Oxford Economics' the forecasters own method, using projections of persons per dwelling, rather than the CLG household forecast.

5.15 In short, EEFM uses 'economic migration' to balance the local relationship between jobs and labour. Its housing forecasts are job-led: providing estimates of the number of dwellings that would be required to meet housing demand, including the demand resulting from changing employment opportunities.

Figure 5.1 Main relationships between variables in the EEFM Model



Source: Oxford Economics, East of England Forecasting Model, Technical report: model description and data sources, 2013 (we understand this is unchanged in the 2016 version – despite the forecasting house changing)

Headlines

5.16 The new EEFM shows the number of jobs in Brentwood increasing from 41,400 in 2016 to 43,000 by 2033 and 43,300 by 2036.

5.17 This is lower than previous version of the EEFM but direct comparisons are complicated because over time the forecasting house has changed (was Oxford Economics, now Cambridge) and forecasters views of both the national and local economy changes over time.

5.18 In the model unemployment continues to be low, below the regional average. Outward commuting increases over the period.

5.19 Although unemployment is low, as noted above the EEFM allows for economic-led migration. Should labour availability be a constraint on the number of jobs in the area, the EEFM is designed to allow for economic-led migration to remedy this constraint.

5.20 The fact that outward commuting increases suggests that neighbouring economies (the EEFM does not say where) are stronger than the Brentwood economy, but the change is marginal and the effect small.

5.21 In the EEFM projection population grows to 81,700 persons by 2033, significantly less than the 2014 SNPP projection (89,000 persons) and the 2016 SNPP (86,600 persons).

5.22 Our analysis indicates that the EEFM shows no need for any economic uplift in Brentwood, despite unemployment remaining very low. The model, even allowing for economic led migration, results in a population size well below that provided should the Council only provide homes to meet the SNPP 2016 or SNPP 2014.

5.23 The increase in outward commuting (albeit marginal in scale) suggests any increase in local labour supply (over and above that needed by the EEFM) would result in increased outward commuting (or increased local unemployment).

Experian

5.24 The EEFM is an Oxford Economics (2014 EEFM) / Cambridge Economics (2015 & 17 EEFM) model. Experian is the third of the three national forecasting houses.

5.25 Some of our earlier work was informed by NLP (now Lichfields) who were working for the Council to determine the job number in the plan. NLP worked with Experian to test the demand for labour in the area. This included testing a number demographic scenarios.

5.26 As part of this work with NLP Experian confirmed that there was no labour market constraint in the area that would warrant an uplift to the OAN. But providing more new homes, will generate a larger supply of labour allowing the number of jobs in the local economy to be increased. So, as a policy-on choice, the Council could choose to promote a higher (than baseline) job target, and an associated higher housing target.

5.27 This work used a now superseded model run; using SNPP 2012 as the default population input to the Experian model. Below we briefly look at the new September 2016 Experian model run which uses SNPP 2014. As noted above work is ongoing to test the more recent 2016 SNPP with Experian.

5.28 The new Experian model run shows the number of jobs increasing from 40,500 in 2013 up to 49,600 in 2033 (455 jobs per annum). In the model, local unemployment is lower than the region or national rates. Commuting remains broadly stable between 2013 and 2033 with a 6,000 working resident (net outflow), unsurprising given proximity to Central London.

5.29 The question asked of Experian was - does the SNPP 2014 population provide enough supply of labour to meet economic needs?

5.30 Because Experian use a fixed population assumption (which does not allow for economic-led migration) there are occasions where the Experian model fails to balance the supply of labour in an area. The true '*demand for jobs'* exceeds the supply of labour, and the model leaves a residual (or 'excess jobs' as referred to by

Experian). Where excess jobs are observed, there is merit in increasing the size of the resident workforce thereby removing the labour constraint.

5.31 This *'demand for jobs'* and associated '*excess jobs'* is not a product of the normal 'off the shelf' Experian forecasts, and requires a bespoke answer.

5.32 Based on Experian's latest September 2016 model run the full '*demand for jobs´* can be met should the SNPP 2014 be delivered in full (i.e. CLG 2014 households). There are no *'excess'* or unfilled jobs in the model. In summary, Experian's bespoke assessment shows the number of jobs aligns with the supply of labour. As noted above this conclusion is reached using their economic activity rates because their stated opinion is that the use of others invalidates their model.

5.33 Experian's view is that there is no need for an economic uplift to the OAN – proving the SNPP 2014 population is provided but, until they have rebuilt their model to reflect the SNPP 2016 we cannot yet form a view.

5.34 As with earlier work the Council could, as a policy choice seek to promote more new jobs and associated new homes than the model suggests.

Summary

5.35 In this chapter, we have considered data from all three of the main economic forecasting houses. In line with advice from the forecasters we have examined the labour market balance using the modellers own assumptions.

5.36 Each forecasting house reaches a view as to the number of jobs (and sectors) in the Brentwood economy. The forecasts also have different time horizons and differing bases depending on population age. Two of the houses inform the EEFM and neither suggest more new homes are needed to meet the economic needs of Brentwood.

5.37 Experian have confirmed that the labour market will balance should the SNPP 2014 be delivered in full. A similar conclusion was reached using an older model run which was also tested by NLP in 2015. Further work is needed to test the SNPP 2016 with Experian.

5.38 So, we conclude that should the SNPP 2014 population (CLG 2014 households) be delivered at the very least, the evidence from all three of the forecasting houses suggests that the labour market will balance. Commuting, economic activity rates and unemployment will all adjust over the forecast period, but this is a simple reflection of the 'policy off' market demand for labour in the local area. The EEFM suggests that there would be no constraint should many fewer homes be provided.

5.39 It is important to note that this analysis does not inform the Council's (policy-on) jobs target. The Economic Futures work by Lichfields may adopt different assumptions about the labour market balance and the number of jobs to be provided.

5.40 As noted above we have not updated this analysis to reflect the now lower 2016 based projections. This is because it would require new economic forecasts and analysis from the forecasting houses. But also because pragmatically we still recommend a OAN in the range as previously tested.

6 MARKET SIGNALS

Introduction

6.1 In this section, we update the market signals analysis for Brentwood. The method remains largely the same as previous reports for the Borough with one exception. In the past, it was common to benchmark with County, Regional and National data. But the comparator regional data is no longer available.

6.2 So, for this update we have looked to compare Brentwood with its ONS family group of similar Councils. The ONS provides a list of grouped authorities "per key characteristics common to the population in that grouping". In addition to the Essex Councils this basket includes Tandridge, Sevenoaks and Mid Sussex. Using this grouping reflects the instruction in the PPG to compare with Councils similar in economic or demographic profile.

6.3 For some elements of this data more recent data is available, including 2017 data points. However, for our purposes, looking at the merits of uplifting the OAN, more recent data is of little help because it falls outside the 'trend period' used in the demographic projections. There is no relationship between a 2017 data point and the underlying demographic data informing the demographic projection we are testing.

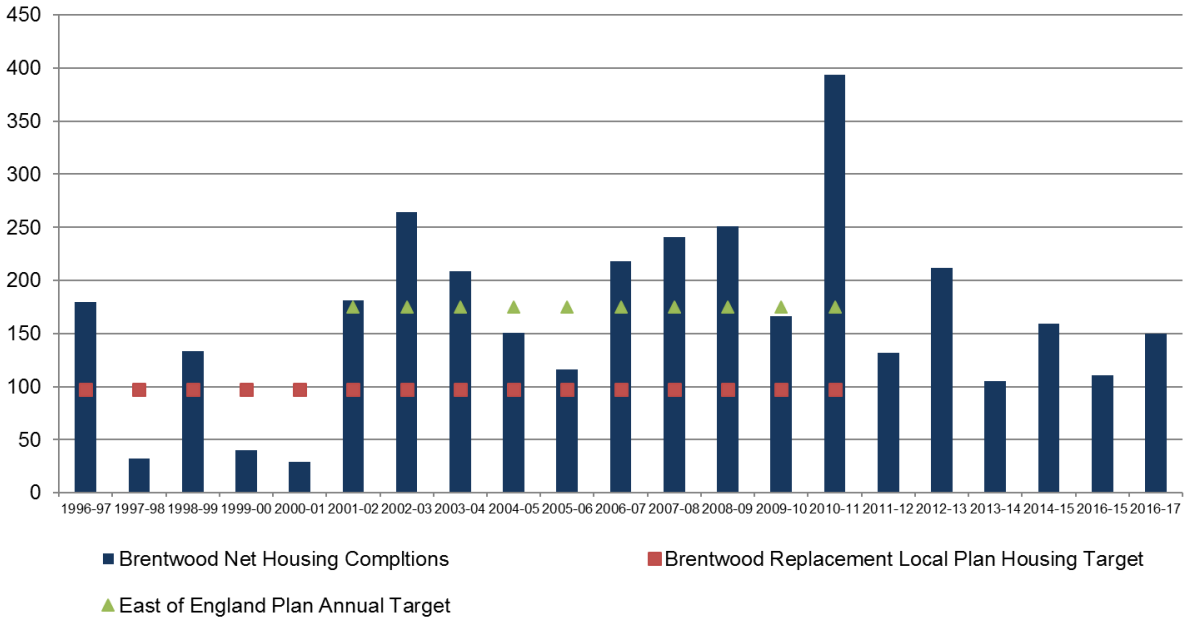
Past provision and market signals

6.4 The table below shows the profile of past delivery of new homes in Brentwood compared to past plan targets. Delivery to plan targets is not a direct market signal cited in the PPG, but understanding the profile of delivery is important context. This is because, should the demographic trend period be 'contaminated' by one-off events then the PPG suggests a departure from the projection may be warranted.

6.5 In Brentwood, the recent completions generally follow expectations. A peak running up to 2008 followed by a decline, and then recovery. But, there is a counter-cyclical peak in completions in 2010/11 that is related to the completion of schemes committed before the recession took hold, most noticeably the 300 units on the former Warley Hospital Site. If we ignore the 2010/11 spike due to the Warley Hospital redevelopment, the profile is much more normal.

6.6 Any migration associated with these new homes will be inside the most recent official population projections, and the updated 5-year trends projection we have prepared.

Figure 6.1 Past Housing Delivery



Source: BBC

House prices

6.7 ONS house price data is the most robust available[9].

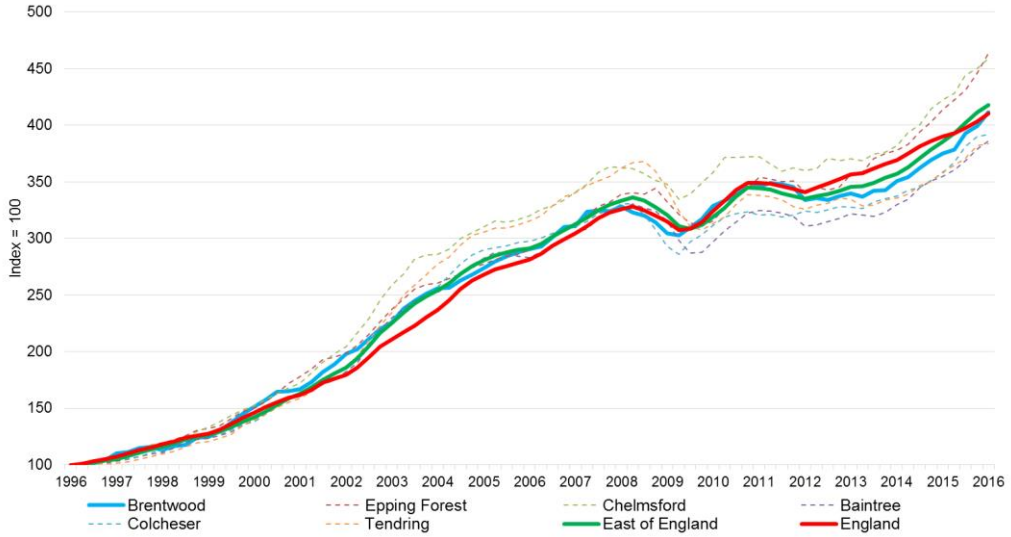
6.8 The premise behind this indicator is that if the housing market has been unduly constrained, this may be reflected in house prices rising relative to national and regional and neighbouring benchmarks.

6.9 In 2016[10], the base year for the most recent population projections, Brentwood was one of the most expensive districts in Essex, and also one of the most expensive of the ONS comparator districts. In Essex only Epping Forest has higher house prices (mean £473,000 in Epping Forest & £418,000 in Brentwood). But this is a very long-term trend. For this analysis absolute prices tell us little. Prices vary between local authority areas due to relative attraction and prosperity, and the type of housing varies between areas. Therefore, as noted in the PPG, a more useful indicator of the demand-supply balance is the rate of change in house prices.

[9] Dataset 12, House Price Statistics for Small Areas (HPSSAs), ONS.

[10] 1st Quater

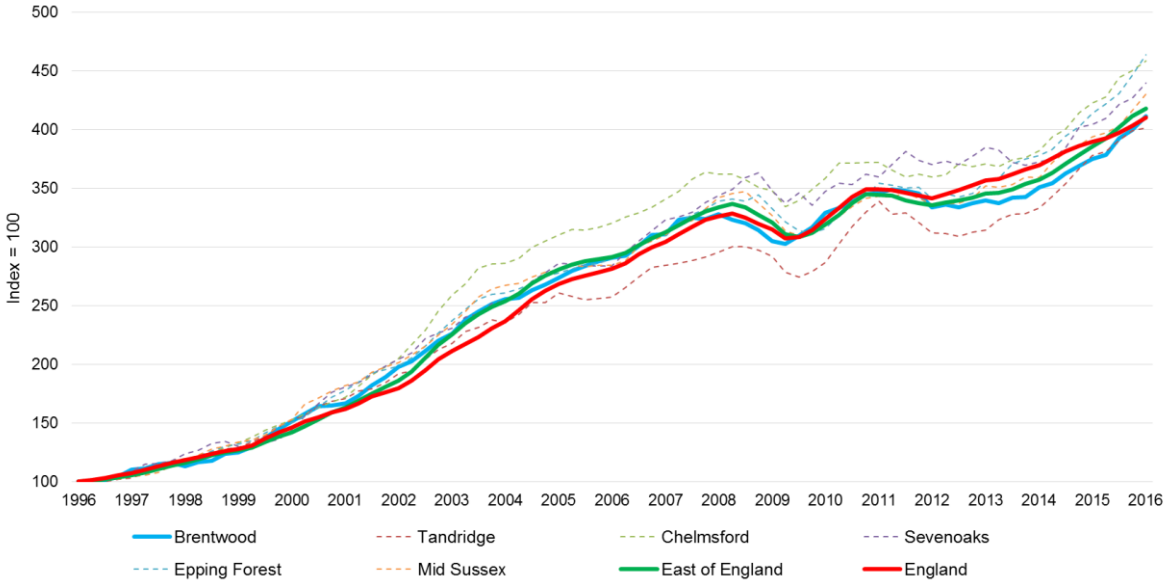
Figure 6.2 House price change (indexed), Essex, region and national



Source: ONS

6.10 The data shows that over the period Brentwood broadly tracked the national position, and increases in Brentwood in recent years were lower than England and the East of England. A similar pattern is seen when Brentwood is compared to the ONS family group. There is no suggestion in the data that Brentwood's housing market has been unduly constrained.

Figure 6.3 House price change (indexed) comparator authorities, plus region and national



Affordability

6.11 CLG define affordability as multiplier of local house prices to workplace earnings (median). Our opinion is that this is a slightly odd choice which distorts the data where there are commuting flows to high wage economies. However, this measure is now carried into the Guidance and drives the Standard Method.

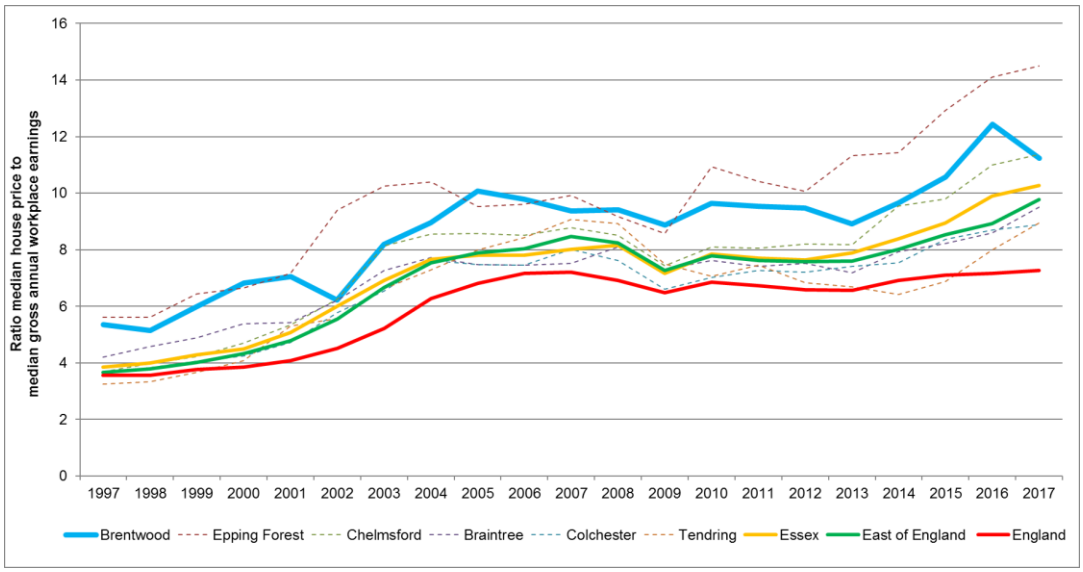
6.12 The chart below shows how Brentwood compares with the Council areas. As shown in the chart great care is needed when looking at individual data points – because the data is very unstable between years. This is very clear over the 2015, 16 & 17 data points where affordability worsened between 2015/16 and then improved between 16/17. It is not robust to compare single year 'snapshots' but instead a view of the prevailing trend in needed.

6.13 Looking at the general trend the 'gap' between Brentwood and the comparators in Essex the 'gap' is well established and generally tracks the Eastern Region, excepting the 2002 and 2016 data points where one is much lower and the other much higher.

6.14 Compared to the ONS 'comparator Councils Brentwood is actually more affordable and has remained so for a long time.

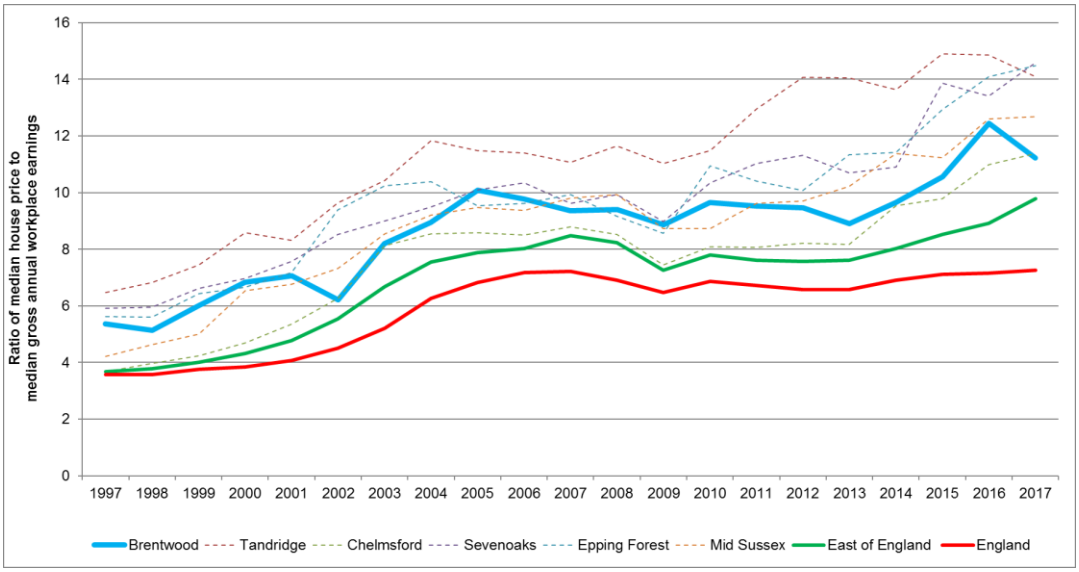
6.15 However, as noted above this type of data can be presented in many different ways, using different start and end points to present different scales of increase. But the main message from the prevailing trend is clear – Brentwood is one of the least affordable housing markets in Essex and affordability has worsened in recent years. Compared to the ONS comparator Councils Brentwood is not as unaffordable but there is no escaping the clear fact that all data suggests a strong market signal increase is warranted.

Figure 6.4 Affordability – Compared to Essex



Source: ONS Tables 1c, 3c and 5c Ratio of median house price to median gross annual (where available) workplace-based earnings by local authority district, county and England, 1997 to 2017, release 26th April 2018

Figure 6.5 Affordability – ONS comparator Councils



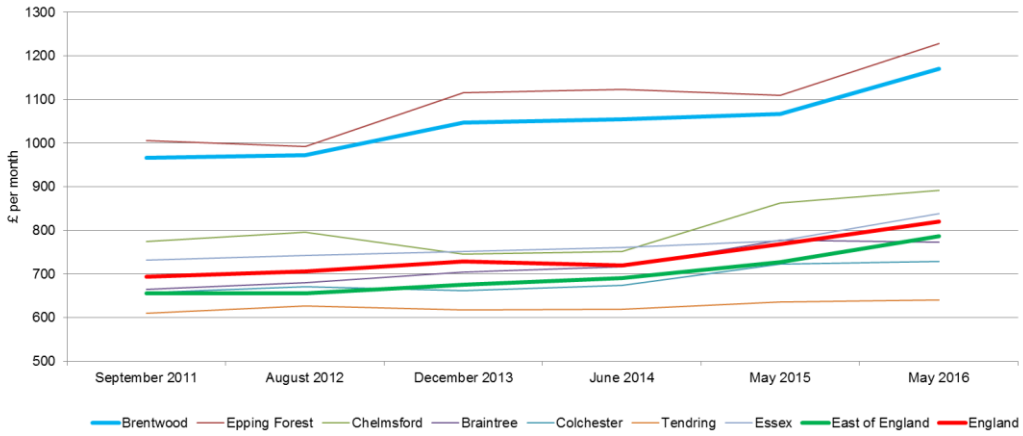
Source: ONS Tables 1c, 3c and 5c Ratio of median house price to median gross annual (where available) workplace-based earnings by local authority district, county and England, 1997 to 2017, release 26th April 2018

Market rents

6.16 The VOA market rents dataset is reasonably recent, and data is only available from September 2011.

6.17 As shown in the chart below rents in Braintree and Colchester are close to the regional average, whilst those for Chelmsford are consistently higher, generally exceeding the average for the county. Tendring records the lowest rents, consistently lower than any benchmark. Brentwood is the second most expensive district behind Epping Forest.

Figure 6.6 Average monthly market rents, 2011-2016



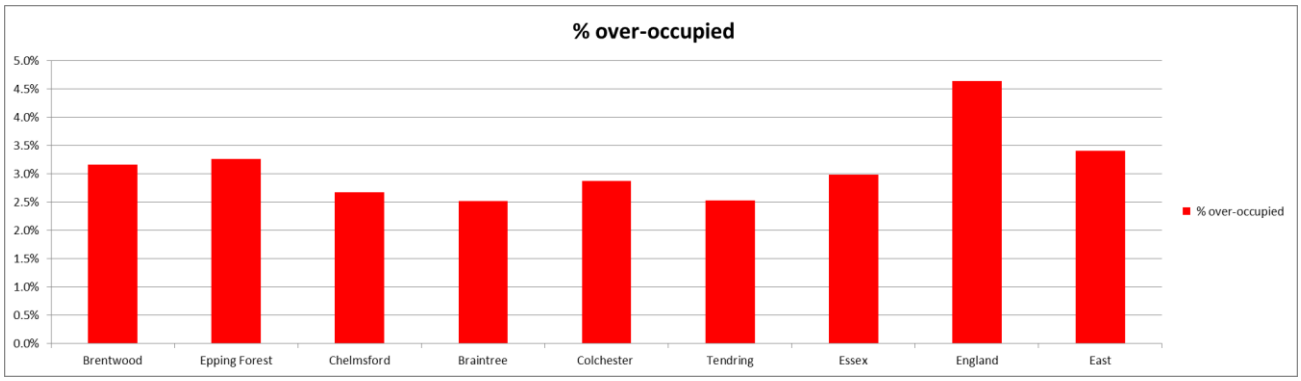
Source: VOA Private Rental Market Statistics

Overcrowding and concealed households

6.18 The PPG suggests that an above-average incidence of overcrowding may indicate under supply. Figure 6.7 below uses 2011 Census data to show occupancy rates (based on the ONS definition - numbers of bedrooms occupied).

6.19 Overcrowding in all the Essex authorities is comparatively low at between 2.5-3%, and below the average for county, region and England, suggesting that in these districts there has been no shortage of supply against demand.

Figure 6.7 Overcrowding and under-occupation



Source: 2011 Census Table QS412EW - Occupancy rating (bedrooms)

6.20 A further indicator is the number of concealed families. A concealed family is one living in a multi-family household who is not the primary family in that household. The definition includes couples with or without dependent children and lone parents of dependent children, but it excludes single people. An abnormally large number of concealed households can also be a sign of market pressure.

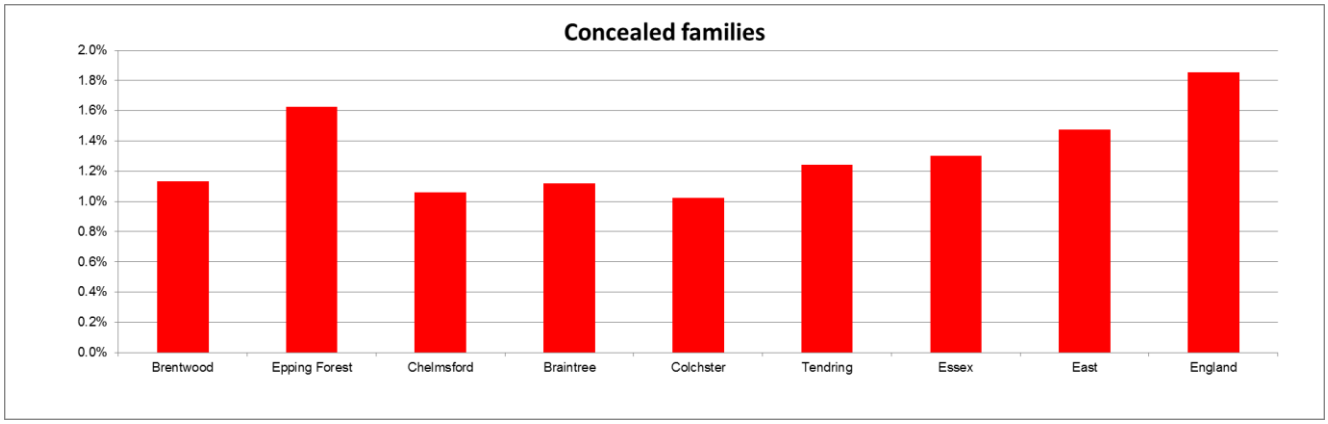
6.21 In common with the statistics for overcrowding, as shown in the chart below, numbers of concealed families are comparatively low, and more so in Brentwood than elsewhere. The 2011 Census reported that concealed families accounted for just 1.1% of all families in the Borough, approximately half the 1.9% national average[11]. Comparing the propensity for concealed families between the two most recent Censuses shows the number and proportions have increased marginally since 2001, when the proportion of concealed families was 0.7% in the HMA and 1.1% in England[12]. The main reasons for the increase is likely to be the long-term fall in national housing formation rates and the impact of the financial crisis[13]). In conclusion the number of concealed families in Brentwood remain low and the rate of increase has been slower than the county, region or national change.

[11] Source: Census Table LC1110EW

[12] Source: Census table CAS 011

[13] A caveat to bear in mind with concealment data is that due to reasons of confidentiality the ONS randomize the local data, which questions its reliability 2011 Census table LC1110EW has the following footnote: 'Figures have been randomly adjusted to avoid the release of confidential data.'

Figure 6.8 Concealed families



Source: 2011 Census table LC1110EW - Concealed family status by family type by dependent children by age of Family Reference Person (FRP)

Conclusions

6.22 Brentwood is an expensive district for housing compared to the national average. Homes are less affordable than the national average. But in context Brentwood is no different to most of the wider South East of England. It is more affordable than the ONS family comparator group of authorities.

6.23 The affordability ratio in Brentwood has worsened slightly over the past 10 years and homes are now less affordable than at the peak of the last housing boom. This is a different pattern to most of Essex where the ratio has not yet recovered; but this is a pattern shared with Brentwood's family group. Rents in Brentwood have also become more expensive in the last few years.

6.24 Much of the data used to consider the need for a market signal adjustment are unstable, cover relatively short time periods and are vulnerable to differing interpretations and analysis (for example looking over different time periods and different comparators can produce very different indices). So any market signals adjustment requires a large degree of judgement.

6.25 Our judgement is that some adjustment is warranted; compared to most of Essex the district is much less affordable (this being perhaps the key indicator), homes are much more expensive and now less affordable than in the last housing boom. But this is balanced against the ONS comparators; which share similar demographic and economic characteristics to Brentwood.

6.26 Once a market signal issue has been identified the (old) PPG does not specify how the demographic starting point should be adjusted:

> *'Market signals are affected by a number of economic factors, and plan makers should not attempt to estimate the precise impact of an increase in housing supply. Rather they should increase planned supply by an amount that, on reasonable assumptions and consistent with principles of sustainable*

development, could be expected to improve affordability, and monitor the response of the market over the plan period."[14]

6.27 There is no fixed empirical or statistical approach to arrive at the level of adjustment to address market signals. Based on the PPG requirements, Inspectors' decisions approached the matter as an exercise of judgement.

6.28 There are a number of 'benchmark' decisions that have pointed to a range of 'reasonable' adjustments – between zero and 30%. Uttlesford, Eastleigh and Canterbury are often cited as the key benchmark decisions. But these have now been joined my many others where the judgement arrives at an uplift within this range[15]. One unusual Inspectors judgement was found in Maidstone, where the Inspector removed a 5% upwards adjustment on the grounds that it was unlikely to deliver any improvement in affordability. This cautions against small adjustments, but too high, or aggressive upwards adjustments run the risk of not being deliverable – the upward adjusted housing must be delivered and have evidence of occupier demand.

6.29 From looking at the numerous post NPPF Inspectors decisions it is clear that in reaching a judgement no one indicator has been used. In all cases Inspectors have arrived at the scale of the uplift 'in the round' which often includes factors outside the strict market signals. This reflects the fact that we cannot attribute any uplift to any one reason – we don't control how the uplifted new homes may be occupied.

6.30 Looking at the Councils nearest neighbours both Chelmsford (to the north) and Epping Forest (to the west) have been advised to adopt a 20% market signal uplift in their respective SHMAs.

6.31 For Brentwood, our opinion is that an adjustment towards the top end of the range commonly used to uplift demographic need would appear justified. So within the range of 20-30% above demographic need. We return to this when concluding on the OAN for Brentwood.

[14] Reference ID: 2a-020-20140306

[15] Care is needed with any direct comparisons because many uplifts are addressed 'in the round' and cannot be attributed only to market signals. So, for example the recent 20-25% uplift advised to Aylesbury Vale by their inspectors addresses a range of uplifts including elements for the MK-Cam corridor. In other cases the market signal uplift overlaps with any headship rate pressure – as is the recent case in North Essex.

7 AFFORDABLE NEED

7.1 In determining the OAN we are required to consider the need for affordable homes. This calculation, flowing from later paragraphs of the PPG only once the '*overall housing need figure'* has been established. It is not directly compatible with the assessment of demographic need, market signals and other uplifts as discussed above.

7.2 However, the affordable need figure has a bearing on the full OAN for the Borough, although there is no requirement that it be met in full. The demographic need is sometimes too low to meet all the affordable need given the likely percentage yield through the affordable housing policies. But, increasing the OAN to a level where all affordable housing needs can be met, can result in total implausible results – well in excess of the demographic OAN and requiring policy interventions to deliver.

7.3 In this case the Council's affordable need was updated in June 2016 and published as a Part 2 document to be read alongside the main assessment of housing need. This is so the SHMA fully addresses the Borough's housing need.

7.4 That document identified the affordable need to be 107 dpa; which was 30.6% of the (then) demographic need flowing from the 2014 household projections.

7.5 Given this figure is no need to increase the OAN to address affordable needs and should the SHMA Pt 2 conclusions relating to affordable housing policy be carried forwards then no need for a policy adjustment either. But the Council is still required, under the PPG (2a 29) to consider whether the target in the development plan should be increased further to address affordable housing needs.

8 SETTING THE OAN

Introduction

8.1 As noted in the introduction this report needs to future proof the emerging plan housing numbers because we don't know whether the plan will be submitted within the transition period.

8.2 So here we conclude on what the OAN should be using the most recent demographic data available before looking, in the next chapter at the Standard Method.

The Demographic Starting Point

8.3 We have tested a number of different demographic projections.

8.4 Today the official household projections (2016 based) suggest the demographic starting point should be around 236 households per annum when calculated over a ten year period and around 250[16] over the plan period (2016-33).

8.5 This is a significant decrease from a 2014 based number. But PBA testing of the 2014 based projections early in 2018 fully expected demographic need to fall. This was because much of the data used to drive the 2016 based projections were already available. We, along with the GLA, had identified that the 2014 demographic projections appeared unusually high.

8.6 Back in January 2018 we advised the Council to plan for a demographic starting point below that shown in the (then) official projections. At that time we suggested 280 dpa as the demographic starting point.

8.7 This advice appears to have been validated with the official 2016 population projections being much lower than the 2014s. But what was not known at the time was that ONS would revise their HRRs assumptions reducing housing growth even further.

8.8 At the time of writing these new HRRs have only been out for a couple of weeks. There is no Inspector precedent validating their use and we know that CLG are about to launch a consultation which is relevant and *may* conclude that they should not be applied to set housing policy. So we suggest that the Council considers a range for their demographic starting point. At the lower end SNPP 2016 using 2016 HRRs and at the upper the SNPP 2016 using 2014 HRRs.

8.9 We recommend that the demographic starting point is set at 260-275 dpa (2016 - 2033).

8.10 This is far from perfect because, as noted above the new 2016 based HRRs effectively invalidate the 2014s and replace the 2014s with a (in the opinion of the ONS) more robust view. But identifying the OAN 'is not a science' and we need to be pragmatic. Hopefully MHCLG will, as part of their consultation, provide further Guidance on the use of the 2016 HRRs.

[16] Rounded down from 253

Uplifts

Demographic

8.11 We have tested different demographic projections, including differing trend periods. While the 2016 based SNPP are lower than previous this was not unexpected and largely related to national trends.

8.12 In previous work, including January 2018, we tested the local (2014) headship rates. Following the PPG there is no suggestion from the data that an adjustment to 2014 based headship rates is warranted here. Brentwood largely follows national trends and the PPG is explicit that the national projections are the best estimate of housing need; so we should depart from their assumptions only sparingly based on robust local evidence.

8.13 As noted above we are cautious about the use of the brand new 2016 headship rates and so recommend a range which (at the upper end) uses the 2014 version.

Jobs

8.14 The forecasts all suggest a buoyant resident local economy; with low unemployment. Some of the data suggest outward commuting will increase over the plan period which is most likely a demand side effect from London.

8.15 Following guidance issued by the respective forecasting houses neither of the forecasts suggest that the local employment market is constrained by a lack of labour which would warrant an uplift to the OAN.

8.16 Further work is needed with Experian because their model is being rebuilt to accommodate the new 2016 population and household data. This could suggest the SNPP 2016 population is too low, but we know from previous work that at 348 dpa (the 2014 based number) access to labour was not a constraint to growth. Given this step is excluded from the SM commissioning new work now, when the recommended OAN remains the same as previously tested, does not appear proportionate.

8.17 As a 'policy on' adjustment the Council may consider providing more new homes and land for more new jobs. But a 'policy on' adjustment is very likely to have implications on nearby labour markets which need to be considered as part of the Duty to Cooperate.

Affordable Need

8.18 The SHMA is required to consider affordable housing need because it has a bearing on the full OAN. However case law has also confirmed that when setting the OAN affordable need does not need to be met in full[17].

[17] Borough of Kings Lynn & West Norfolk v SSCLG
[2015] EWHC 2464.
Jelson Limited- and - Secretary of State for Communities and Local Government Hinckley and Bosworth Borough Council **[2016] EWHC 2979**

8.19 The affordable need calculations for Brentwood are presented in a separate Pt 2 document. This is mainly because the methods used to calculate the affordable need are not directly compatible with the assessment, following earlier paragraphs of the PPG, and addressed above.

8.20 In this case the affordable need has been calculated at 109 dpa; below the demographic OAN and our recommend (uplifted) OAN.

8.21 Following the Planning Practice Guidance (paragraph 2a 29) the Council needs to consider whether to adopt a higher target in the development plan to deliver more affordable homes:

"in the context of its likely delivery as a proportion of mixed market and affordable housing developments, given the probable percentage of affordable housing to be delivered by market housing led developments. An increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes"

London

8.22 As noted above this work has been informed by the GLAs own demography – a demographic stating point of between 260-275 dpa is compatible with both their own short term and long term projections.

8.23 As a 'policy off' assessment this work does not take into account any unmet housing need from London that may emerge because London cannot meet its demographic need. This adjustment, between HMAs, is outside the OAN and a matter for the DtC.

Market Signals

8.24 **In our view Brentwood warrants a reasonably sizable market signal uplift – at least 20% and possibly 30%. However, in reaching this conclusion we need to recognise that the Market Signal uplift is normally viewed 'in the round' and addresses more than just the market signal pressures alone**. An increase in housing need for market signals can also include any increase for economic or other reasons.

The OAN

8.25 OAN is not a science and it is inevitable that others will reach different opinion, even using the same data.

8.26 At the time of writing we have two possible demographic starting points both using the SNPP 2016 as a starting point. We find good reason to apply an upward adjustment upto 30% - the upper range of what is generally considered reasonable under OAN.

8.27 Combined they suggest an OAN of between 338 dpa and 357 dpa. Should MHCLG consultation, due later this year, endorse the use of the 2016 HRRs then the lower number is preferred. But at the moment we would, in the interests of positive planning, favour the upper number.

8.28 Our assessment of Objectively Assessed Housing need for Brentwood, following the PPG and NPPF(1), recommends that the OAN for the proposed plan period is between 338 – 357 dpa.

Should the Council depart from 380dpa as the preferred OAN?

8.29 In January 2018 we advised that the Council consider increasing the OAN from 360 dpa, as recommended in earlier PBA work, to 380 dpa when preparing the draft plan.

8.30 360 dpa had been based on earlier work using the 2012 household projection. The 2014s considered in January 2018 were higher, eroding any 'headroom' between the demographic starting point and the former 360 number.

8.31 For reasons set out above, specifically the lower 2016 population projection, there is merit in departing from 380 dpa and applying our 357 dpa. So essentially returning to a 360 dpa OAN. But the Council may still consider maintaining 380 dpa to allow or added contingency within the estimate of need.

8.32 We note that while OAN uplifts don't tend to exceed 30% the Standard Method applies 40% as its maximum uplift and is what the Government considers reasonable for the SM approach. Applied to our upper demographic starting point a 40% uplift results in 385 dpa – the 5 dpa difference is not material given the huge uncertainties we are working with. So while the OAN assessment would support a lower than 380 dpa OAN still applying 380 dpa is at the very upper bounds of what could be considered a reasonable adjustment.

9 CONCLUSIONS

9.1 In this report we have sought to 'future proof' the emerging plan. We have calculated the Standard Method number for Brentwood for the 2019-29 period following the current guidance. However, we have also updated a suite of previous OAN evidence for Brentwood. This includes work published in January 2018 and earlier reports.

9.2 The standard method number is 350 dpa calculated using the annual average growth over years 2019-2029. Following the letter of the guidance today this should be the Councils housing number given the plan is expected to be submitted in February 2019.

9.3 But in view of the revised household projections and the imminent, but as yet unconfirmed timetable for the Standard Method consultation, it is appropriate to consider the wider context of housing need as set out in this updated report. Should the plan move to 350 dpa today it is at risk of the number being 'uplifted' at the last minute should MHCLG adjust the Method.

9.4 In January 2018 we advised the Council to use 380 dpa as the OAN to inform the draft plan. In this report we still find that 380 can be supported as a number the Council should consider meeting in the draft plan. Strictly, 380 is higher than that which we consider should be the upper range of the OAN. It is also above the Standard Method. But a number of factors still weigh in its favour for consideration in the Plan making process.

- Firstly there is no 'science' to what is a 'reasonable' uplift (for OAN) and we note that the SM 'caps' at 40% above demographic need. This scale of uplift could suggest a OAN around 385 dpa,
- Secondly there is merit in trying to keep the housing number stable and not 'jumping' every time new data suggests it may have shifted slightly. The (old) PPG noted that changes are only needed where there has been a material shift in the housing position.

9.5 So pragmatically we still suggest the Council still plans for at least 380 dpa.

9.6 This will need reviewing just before the plan is submitted[18].

9.7 As noted in the introduction the Standard Method, as opposed to OAN, does not carry forward 'backlog'. The calculation starts from the 'current year' (i.e. 2019).

9.8 Finally; we note that the Council is proposing to make additional land allocations over and above 'need' (20% above our 380 number). Such an approach, for flexibility or other local reasons is supported in the guidance and should more generally be welcomed. In this case overprovision compared to the minimum need should provide additional flexibility in the supply and delivery of sites. It also provides an even greater 'buffer' should the Standard Method increase above 380.

[18] The SM number is only 'fixed' at the time the plan is submitted. So any changes in guidance (or data) between now and plan being submitted needs to be reflected in the final plan.

9.9 In making this over provision the Council needs to be careful to express this as either additional supply to meet the minimum need – or present the housing number as a range with the lower number used for 5 year land supply and delivery test purposes (as per the current guidance). Care is needed in drafting to ensure that over provision for flexibility is not mistaken as a higher housing target.

APPENDIX A NEIL MACDONALD REVIEW

UPDATING THE DEMOGRAPHIC STARTING POINT FOR ESTIMATING BRENTWOOD'S HOUSING NEED

Introduction

1. The PBA report, "Strategic Housing Market Assessment: Part One" for Brentwood Borough Council of January 2018 noted that the latest official household projections (the 2014-based set- the "2014 SNHP") implied a need for 348 homes a year (2013-33). It concluded, however, that there was a basket of evidence suggesting that those projections were unusually high. This included projections that used longer trend periods and later data than had been available to the compilers of the 2014-based projections, amongst which was an estimate that 2016-based projections would imply a need for 280 homes a year (2013-33). The report concluded that 280 homes a year should be taken as the demographic starting point.

2. The 2016-based Sub-national Population Projections (2016 SNPP) were released in May and in June the ONS published its population estimates for mid-year 2017 and for births, deaths and migration flows in the year 2016-17 (the 2017 MYE). Both involve methodological changes compared with the population projections which underpin the 2014 SNHP. Assumptions about future birth and mortality rates have also been changed as have the national projections for international migration flows. As a consequence, both new data sets have implications for household projections and hence the number of homes needed compared with the figures based on the 2014 SNHP. For some authorities the changes implied are substantial.

3. This note updates PBA's January 2018 analysis of the demographic starting point to reflect the latest data and population projections. It also considers what the impact would be of adjusting the start date of plan period to either 2016 or 2017, whilst retaining 2033 as the end date.

4. It should be noted that the ONS's are due to produce the official 2016-based household projections in September. These will use a different method to convert the 2016-based population projections (2016 SNPP) into households from that previously used by the DCLG so the estimate of the homes needed that they will imply is likely to be different from the that calculated in this report based on the 2016 SNPP and the household formation rates from the 2014-based DCLG household projections. It is not currently clear how significant that difference is likely to be.

1.

The changing historical datasets and assumptions

5. The Office for National Statistics (ONS) produces population estimates for each local authority each year, approximately a year in arrears. These include both their estimates of the population in each authority and the factors which have driven the changes in those populations over the previous year – the "components of change", primarily births, deaths and migration flows. The ONS refer to these figures as

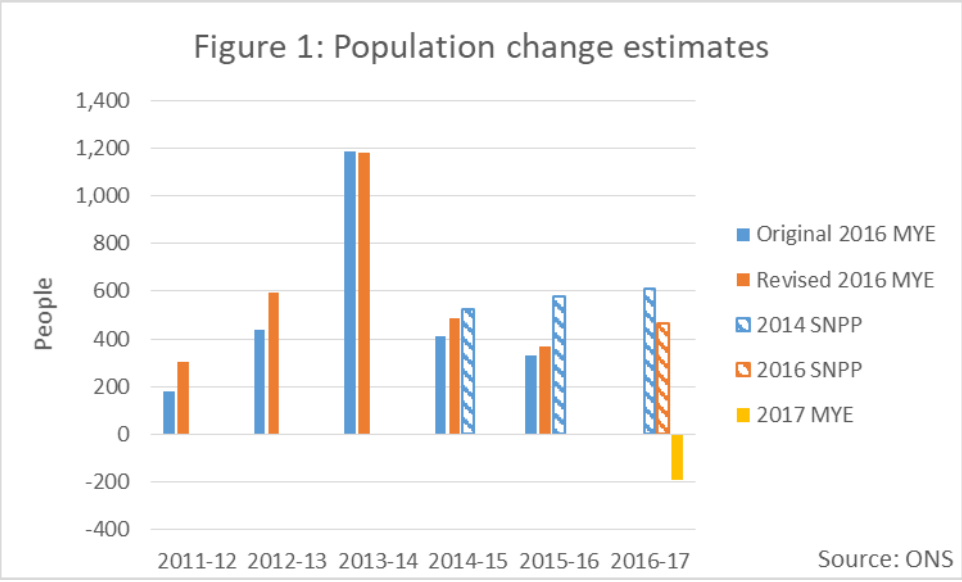
"estimates" for the very good reason that they are not exact or wholly reliable: they are based on a range of data sources, some of which are subject to substantial margins of error. The ONS expend considerable effort in to make their estimates as accurate as possible and in the process improve their methods from time to time. Two significant sets of changes have been made since the 2014-based population projections were produced (on which the 2014 SNHP were based):

a. The mid-year population estimates for the period 2012-16 were revised in March 2018[19], the main changes affecting the estimates of international flows from individual authorities (within the same national totals). These were accompanied by revised estimates for the period 2011-16, which includes the trend periods used for the 2014 and 2016-based population projections.

b. In June 2017 the ONS published the population estimates for 2016-17 (the '2017 MYE'). These used new methods to estimate aspects of the internal migration flows, including the "Higher Education Leavers Methodology" (HELM). This sought to address long-recognised problems with accurately recording the movements of students after they have completed their studies. No back series has been prepared for these changes even though for some authorities the changes are substantial.

6. An indication of the impact of these changes can be gained by looking at how they have affected the estimates made of the change in Brentwood's population in each year since 2011. Figure 1 shows the data.

2.



7. The blue bars (labelled "Original 2016 MYE") show the ONS's initial estimates of population change: these were the figures that fed into the 2014 SNPP, the first three years of which are shown as blue striped bars. The orange bars are the revised mid-year estimates, which fed into the 2016 SNPP. Note that they show larger population increases in all years apart from 2013-14. Finally, and most dramatically, the yellow

[19] Revised population estimates for England and Wales: mid-2012 to mid-2016, ONS, 22 March. See: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2012tomid2016

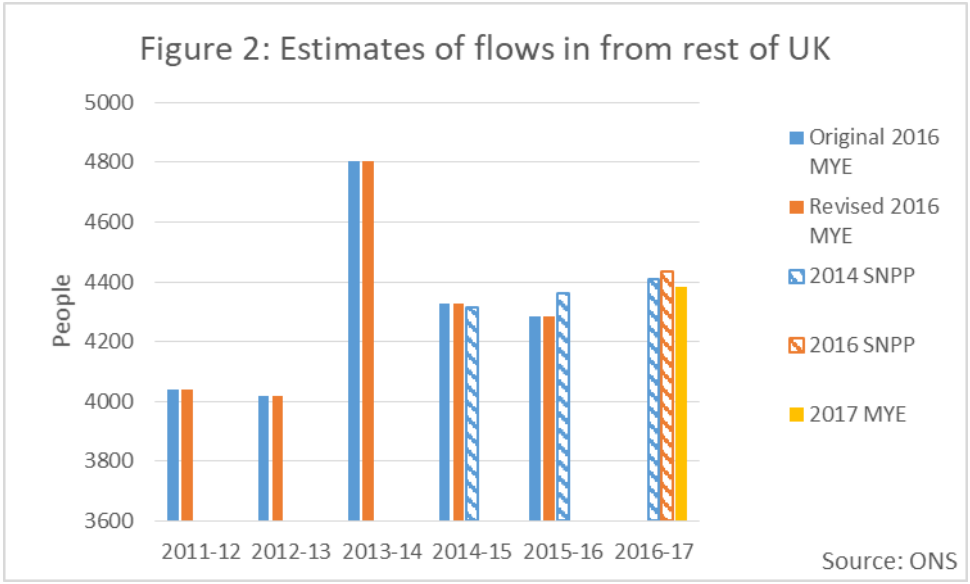
bar is the population change for 2016-17 from the 2017 MYE. Unlike all previous years shown, this suggests a reduction in Brentwood's population. To understand these change (particularly the last) it is necessary to look at the individual components of change and how the estimates of them have changed.

8. The estimates of births and death have not changed significantly: the changes are in the figures for the migration flows.

9. Figure 2 shows the estimates of the flows from the rest of the UK. There are no changes in the figures for the years 2011-12 to 2015-16, and the 2017 MYE estimate for 2016-17, although slightly higher than the previous years, is not noticeably different. Note, however, that the flows in in 2013-14 in both the original and revised estimates are high compared with the previous and subsequent years. This was part of the reason that the earlier PBA report concluded that the 2014 SNHP was unusually high.

10. Updating the projection to a 2017 base involves moving the trend period forward from 2011-16 to 2012-17, with 2011-12 leaving the trend period and 2016-17 joining it. As the estimated flow in in 2016-17 was higher than that 2011-12, the updated projection will suggest a larger inflow as the average inflow rate over the updated trend period will be higher.

3. Figure 2: Estimates of flows in from rest of UK

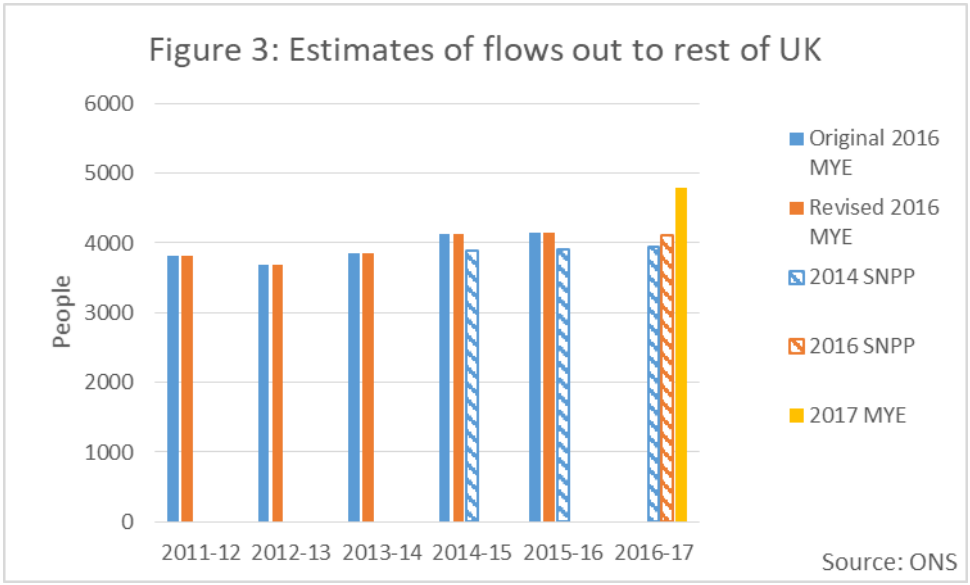


11. As Figure 3 shows, the position on flows out to the rest of the UK is slightly different: the flows for the period 2011-16 are reasonably consistent, albeit on a slight rising trend, but the 2017 MYE figure is noticeably higher and outside the range of the preceding 5 years. The 2016-17 figure is also higher than both the 2014 and 2016 SNPP numbers.

12. The ONS's new Higher Education Leavers Methodology (which affects many authorities without major higher education establishments) is responsible for about 30% of the difference between the 2016 SNPP projection for 2016-17 and the 2017 MYE figure. This suggest that ordinary year to year fluctuations are the cause of the majority of the difference.

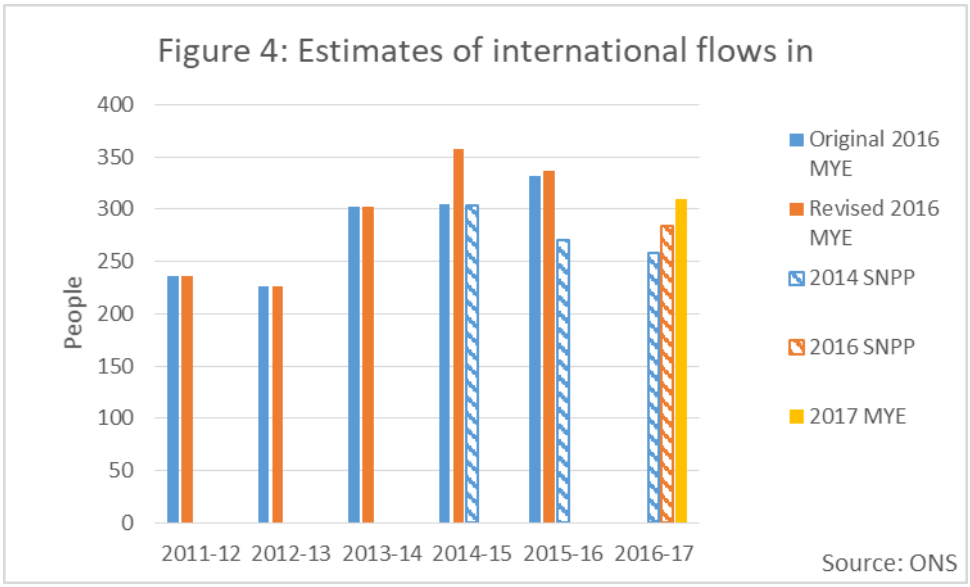
13. Again, as the 2016-17 flow estimate is larger than the 2011-12 estimate, the effect of moving the trend period forward one year as part of updating to a 2017 base date produce a larger projected outflow. As the increase in the outflow is larger than the increase in the inflow, the net effect is to reduce the projected population increase and this is the main reason why the updated projection is lower than the 2016 SNPP. The increased outflow estimate for 2016-17 will also have contributed to the population fall in that year suggested by the 2017 MYEs.

4.



14. Figure 4 shows that there are not major changes in the international inflow estimates: the 2016 Revised MYEs suggested a larger inflow for 2014-15 but the 2017 MYE figure for 2016-16 was not out of line with earlier years.

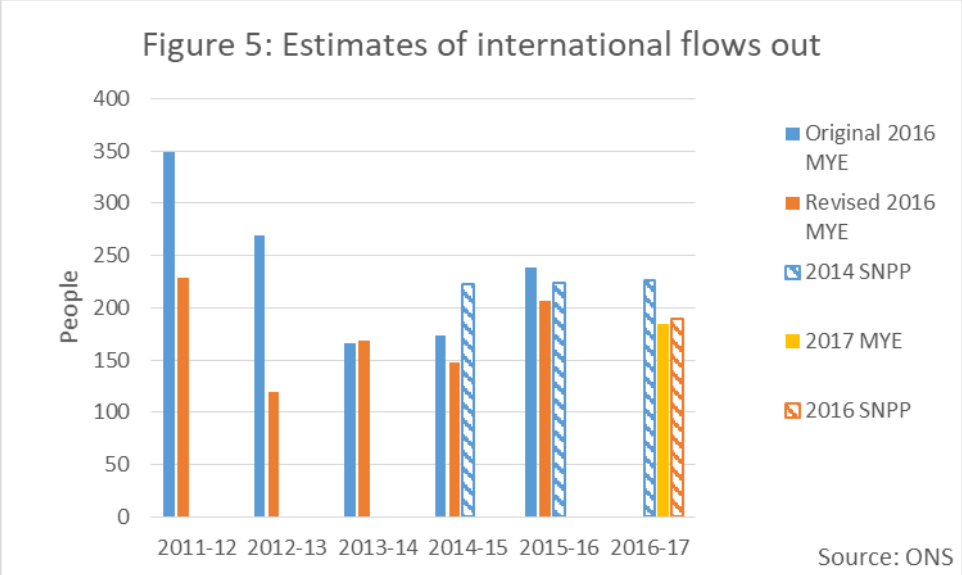
5.



15. In contrast, for international outflows, the 2016 Revised MYEs suggested noticeably lower outflows from Brentwood in 2011-12 and 2012-13. This will have affected the trend period for the 2016 SNPP and caused the projected international outflow to be significantly smaller than it was in the 2014 SNPP.

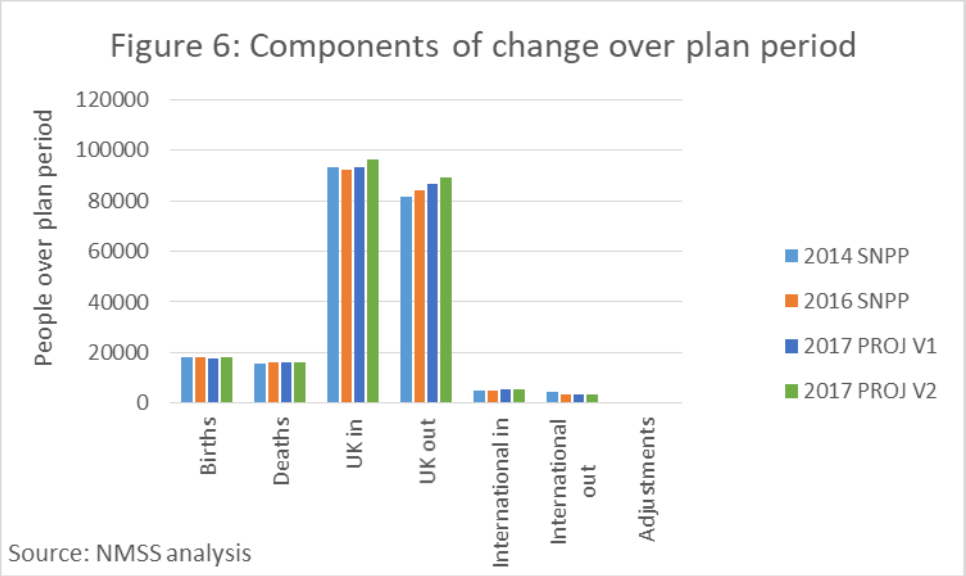
16. As with the flows to and from the rest of the UK, updating to a 2017 based date means moving the trend period forward, and the impact on the projection depends on the relative size of the new data point in the trend period (2016-17) compared with the data point that drops out of the trend period[20]. However, as the international flows are very much smaller than the flows to and from the rest of the UK, it is the changes in those flows that determine whether the updated projection is higher or lower than the 2016 SNPP.

6.



17. Figure 6 shows how these changes to the historical datasets (and the changes that the ONS have made to their fertility and mortality rates and international migration assumptions) have affected the components of change in the plan period between the 2014 SNPP, the 2016 SNPP and two different approaches to updating the 2016 SNPP to reflect the 2017 MYEs (on which see below).

7.



[20] Strictly speaking it is how the flows compare with the England national flow that determines the impact on the projection.

18. As discussed, Figure 6 confirms that it is the changes in the flows from and to the rest of the UK that are the most significant. It is the changes in these that drive the reduction in the projected population growth from the 2014 SNPP to the 2016 SNPP and then further in the update to reflect the 2017 MYE.

Calculating the impact of the 2017 MYE

19. There are two fairly obvious approaches to using the 2017 MYEs to update the 2016 SNPP.

    a. **Version 1 (2017 V1):** Ignore any impact which the revised methods used to calculate migration flows in the year 2016-17 would have had on earlier years and use the 2016-17 flows to calculate trend rates for the period 2012-17 – the trend period that the ONS would use if they were to produce a 2017 SNPP.

    b. **Version 2(2017 V2):** Adjust the published figures for internal migration flows for the period 2011-16 to reflect as far as possible the ONS's new methodology. The ONS has published with the 2017 MYE tables showing what the internal migration flows would have been had they not introduced their new 'Higher Education Levers Methodology' (HELM) – the main change in the way in which internal migration flows have been estimated for 2016-17. Those figures can be used to calculate the differences made by HELM in each year of age and sex group for each authority. Those differences can then be used to adjust the published internal migration flows for 2012-16.

20. Version 1 potentially underestimates the impact of the changes made in the 2017 MYEs. Version 2 assumes that the correction made in earlier years would have been the same as in 2016-17. This might be an exaggeration (although there is no obvious reason why the corrections in those years would not have been as large or even larger).

21. In both cases the MHCLG's 2014-based household formation rates continue to be used to turn a population projection into a household projection.

22. Figure 7 shows the result obtained for the different projections. In all cases 2.67% empty and second homes have been assumed (based on the average figures from the 2014-16 Council Tax data). This is different for the assumption used in the January 2018 PBA report which was based on census data and explains why the figure shown below for the 2014 SNPP is 341 homes a year rather than 348.

Figure 7: Housing implications of the different projections

	Total change	Average change per year	Homes a year
2014 SNPP	6639	332	341
2016 SNPP	5359	268	275
2017 PROJ V1	5338	267	274
2017 PROJ V2	5004	250	257

8.

23. The big difference is between the 2014-based projections and the later versions which show markedly lower housing need figures. The difference between the 2016 and 2017-based projections is small and certainly within the margins of error for this

type of calculation. Rounding to avoid suggesting spurious accuracy suggests a range of 260-280 homes year over the period 2013-33.

24. The impact of using 10-year trend periods for UK flows has also been explored for both the 2016-based projection and the second version of the 2017-based projection. As Figure 8 shows, the changes are relatively small – just 5 homes a year. The only difference the 10-year projections make is that they suggest that the range should be widened to 250-280 homes a year.

Figure 8: Impact of using 10 year trend periods in calculating housing need over plan period

	Total change	Average change per year	Homes a year
2016 SNPP	5359	268	275
2016 SNHP 10YR	5457	273	280
2017 PROJ V2	5004	250	257
2017 PROJ V2 10YR	4896	245	252

9.

25. Finally, the impact of changing the plan period start date from 2013 to 2016 or 2017 has been run in the NMSS model. As Figure 9 shows, the impact is negligible:

Figure 9: Impact of adopting a later plan start date

Homes needed	2013-33	2016-33	2017-33
2016 SNPP	275	273	274
2017 PROJ V1	274	271	273
2017 PROJ V2	257	251	253

10.

Conclusions

26. Since the 2014 SNPP and 2014 SNHP were published there have been:

a. significant changes in the ONS's methodologies for estimating migration flows;

b. changes in the ONS's assumptions about future fertility and mortality rates and a revised view on net international migration at the England level; and,

c. additional years of data.

27. All of these have combined to reduce the estimate of housing need based on the 2014 SNHP from 341 homes a year to 250-280 homes a year 2013-33.

28. Using 10-year trend periods instead of the 5-years used by the ONS for flows within the UK has relatively little effect on both the 2016 and 2017-based projections, moving the estimates of housing need by only 5 homes a year.

29. Similarly, the impact of adopting a later start date for the plan period (2016 or 2017) whilst retaining the same end date (2033) is negligible.

NMSS

18 July 2018